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The Socialisation of Underrepresented International Doctoral Students in the Field of Education in Australia

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Dedicated to my Family

Manouchehr, Masoumeh, Elaheh, Arash &

My grandma

ABSTRACT

There has been a significant shift in the demographics of the students who join PhD programs over the last decades and, alongside this, a shift in the goals of these students. This qualitative case study aimed at a deeper understanding of students' engagement in a doctoral program in an Australian research-intensive university. Informed by the Graduate and Professional Student Socialisation framework (Weidman et al., 2001), experiences of international students were analysed before, during and towards the end of the program across four interactive socialisation stages: pre-entry, formal, informal and personal. The study specifically focused on the transformation of the students' primary values, aspirations and expectations towards the end of the program. It also identified the Knowledge, Skills and Dispositions (KSDs) that students acquired throughout the program due to their engagement in supervision, professional development (PD) activities and peer interaction.

The study sample comprised six full-time international doctoral students who were non-traditional based on their demographics and presented they were the only representative of their ethnicity at the Faculty. A combination of individual interviews, focus groups, observations, and policy document analysis was used to collect rich data over an extended period, approximately one and a half years. To better understand the supervision experiences, a dyadic analysis of students and supervisors was conducted and analysed by drawing on Lee's (2020) conceptualisation of approaches to supervision.

Findings indicated that students' transformation was mainly related to their pre-entry socialisation influences, such as their professional experiences and the global forces that resulted in adopting safer and more flexible options. Moreover, students' engagement with supervision practices was key to their transformation, unlike peer interaction and PD activities. Students supervised by more senior academics who promoted interdependence and were directly engaged in enhancing their persistence and theoretical knowledge had more satisfactory experiences. The study concluded that it was very useful to view socialisation as a situated interaction between the underrepresented students, with their attendant background and aspirations, and what was offered by the university. The approach gave insight into the kinds of tensions and misinterpretations arising in these interactions.

DECLARATION

This thesis is an original work of my research and contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signature: ……

Print Name: …….

Date: …….

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LIST OF ACRONYMS

HE	Higher Education
HEI	Higher Education Institution
Go8	Group of Eight
OECD	Organisation for Economic Co-operation and Development
PhD	Doctor of Philosophy
KSD	Knowledge, Skills, and Dispositions
PD	Professional Development
UK	United Kingdom
US	United States of America

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CHAPTER 1. INTRODUCTION

1.1. Internationalisation of higher education in Australia

An increasing number of international students opt for graduate programs overseas to enhance their academic and life experiences. This has contributed to the internationalisation and globalisation of higher education institutions as these individuals bring a multitude of languages, cultures, and experiences. Such students have become the norm in Higher Education (HE) courses in many countries, including Australia (Harman, 2006).

The number of international students attending Australian universities has risen over 1000% since 1994. The Australian government, particularly the Commonwealth Government, contributed a lot to the internationalisation of HE through shifts in policies to include a broader vision of international education. As stated by Education Minister:

> The Government recognises that international education is an increasingly important part of Australia's international relations. It uniquely spans the cultural, economic and interpersonal dimensions of international relations, and enhances the cultural understanding of all parties involved. It enriches Australia's education and training systems and the wider Australian society with a more international outlook (Beazley, 1992)

In Australia, international students' enrolments increased from below 100,000 in 1994 to over 700,000 in 2016 (Department of Education, Skills and Employment, 2021). This has made Australia the world's third-largest education provider for international students after the US and the UK since 2016 (International Higher Education Students Flows, 2019). This figure comprises the international students enrolled in Higher Education, Australian Vocational Education and Training (VET), school, English Language Intensive Courses for Overseas Students (ELICOS), and non-award degrees. The highest percentage of international students are enrolled in HE. The enrolments indicate a steady increase over the years – for instance, 349,102, in 2017, 398,091 in 2018 and 440,667 in 2019 (Ferguson & Spinks, 2021). A growing number of these students stay in Australia and seek post-study pathways in the host country. There were approximately 71,000 temporary graduate visa holders in Australia in June 2018; the figure jumped to about 92,000 in 2019, with a 29% increase. Also, 16% of overall 1.6 million overseas students in all education sectors who were granted a visa between 2000-2001

and 2013-2014 transitioned to a permanent residency visa at some stage after arriving in Australia. Between 2019 and 2020, 16,588 permanent residency visas were granted to international students (Ferguson & Spinks, 2021, April 22).

In the context of globalisation, education is now an international affair, and the emergence of the knowledge-based economy has affected the character and functions of the HE. Undertaking HE in another country has contributions beyond academia or research; it also contributes to students' understanding of global cultures and improves their career prospects in the current globalised labour market (Organisation for Economic Cooperation and Development (OECD), 2013). The substantial economic benefit from the international education sector and increased demand for study in Australia by international students have derived the Australian government and universities from focusing on this market. This can improve the country's revenues and recruit highly skilled immigrants as part of the strategic plan (Organisation for Economic Cooperation and Development, 2013). Universities contributed 35.8 billion dollars to Australia's economy and supported almost 260,000 full-time jobs in 2018 (Australian Bureau of Statistics (ABS), 2022, January), a 16% rise from the previous year. The contribution was 37.6 billion dollars in the following year and supported 240,000 jobs (Australian Bureau of Statistics, 2022, January).

Despite the great benefit of international students to the Australian economy, as indicated in the above figures, the dependence of the country's economy on the export of education also made it vulnerable. This concern eventually occurred with the arrival of the COVID-19 pandemic that substantially hit Australian universities and, subsequently, the economy. The number of commencing international students fell by 22% in 2020 from 165,041 in 2019 to 129,248 in 2020 and 98,719 in 2021 as many international students could not enter the country due to travel bans, closed borders, and extensive lockdowns (Department of Education, Skills and Employment, 2021). Following this great hit, the Student Experience Survey (SES) showed that off-campus studies decreased students' satisfaction significantly from 78% in 2019 to 69% in 2020 (SES, 2020). Therefore, the Council for International Education released a set of prioritised strategies to improve the sustainability of the universities for the next decade. These strategies were a) diversification by not focusing on a few markets such as China and recruiting students from more markets; b) meeting Australia's skill needs to be aligned with Australia's workforce; c) putting students at the center by promoting students' sense of belonging and

engagement; and d) growth and global competitiveness: by sustaining quality education (Department of Education, Skills and Employment, n.d.)[1].

In addition to these strategies, educational institutions need to continue to improve their understanding of the international student experience to recruit them back to the universities and increase their satisfaction. Although postgraduate students comprise a small portion of international students overall, there has been a steady growth in their enrolment as an essential source of revenue. They included 52% of the total number of postgraduate students in 2019.

1.2. Doctoral training in Australia versus other countries

International differences between doctoral degrees can be related to entry requirements, completion time, coursework, the structural organisation of PhD training (from single supervisor to doctoral training centres), the assessment of the dissertation process, and consideration of the broader competencies of the candidate. Having a (two-year) master's qualification is an entry requirement to the doctoral program in many countries. In Australia, local students are admitted upon completing a first-class Honour's degree (usually a one-year program). PhD education across the world has traditionally been of two broad forms. First is the German apprenticeship model, whereby a student conducted extensive research supervised by an academic. This model is popular in the UK, Australia and New Zealand because HE in these countries, especially at the PhD level, is highly research-oriented. Second, the North American model of PhD whereby a student is obliged to complete some requirements, including 1-2 years of coursework where the content is delivered to the students in several core units, (qualifying) examinations, and a supervised research project. The coursework serves as preparation to help students cross over into a discipline in which they are not yet embedded.

By contrast, students in Australian research-intensive doctoral programs are not required to take coursework, take exams, and defend their thesis since engagement in comprehensive research is the main requirement. In the absence of this preparation, the transition from an undergraduate or a graduate degree by coursework to a PhD degree by research may be challenging, particularly for students without prior research experience. Unlike in other countries, in an Australian PhD, students' performance in workshops or course work is not assessed (there is no qualifying exam). Students' sole assessment is related to presenting their thesis in a completion seminar (Group of Eight (Go8), 2013). The reliance on dissertation

[1] The number of HE international students is not disaggregated in national statistics.

assessment and lack of student assessment created some concerns. Moreover, professional editing services may enable students to complete their thesis. Examination of the thesis lacks any student assessment to indicate if they had developed the piece of writing (as well as other) skills to a level expected of a PhD student (Group of Eight, 2013). This model of doctoral training has also been found to be too limited to equip graduates with competencies of the twenty-first century that independent researchers are expected to have (e.g., Flores & Nerad, 2012; Park, 2005).

In addition, PhD programs across different countries should be similar "because PhD graduates are often highly mobile and willing to move to different countries to take up relevant opportunities to work with the best people in their field, wherever they might be" (Group of Eight, 2013, p. 13). Organisations offering doctoral programs are required to maintain international standards by establishing and following a set of quality criteria. According to the Australian Qualification Framework (AQF), the award of a Doctoral Degree (Research) "requires the candidate to have made a significant and original contribution to knowledge and to have a systematic and critical understanding of a complex field of learning and critical research skills for the advancement of learning" (Group of Eight, 2013, p. 11). The arguments related to the necessity of the PhD for responding to the demands of the modern world, such as multidisciplinary research approaches, commercial links between business and education, and the potential diverse career paths, eventually led to proposals on reframing the doctoral programs in Australia (Group of Eight, 2013).

The ongoing conversation regarding the Australian PhD has maintained that research should be at the heart of the PhD, and the entire learning experience should be an exercise in curriculum design (Barrie, 2018). Moreover, the notion of 'stewardship' (Golde, 2006) introduced by the Carnegie Foundation was suggested to be used to sustain the current doctoral framework. Stewardship proposes a set of learning experiences that modify the objectives, structure, pedagogy and outcomes of doctoral education. To this end, "the core learning activities and experiences that constitute the PhD curriculum – (1) the research project, (2) its supervision, (3) teaching and research skills development and (4) the disciplinary community the doctorate occurs in – must also become reframed by the integrated nature of disciplinary stewardship" (cited in Barrie, 2018, p. v).

1.3. The modern PhD

Since HE institutions need to keep pace with global economic, social and political changes, the nature of doctoral programs is changing fast. In addition, the diversity of doctoral candidates in terms of their demographics, values, expectations and motivation has led HEIs in some countries to offer different types of doctoral degrees. Halse and Levy (2014) provided an account of PhD degrees in countries across the world. The US and UK currently offer over 24 and 30 types of doctoral awards, respectively. These degrees include PhD by publication, Taught doctorates and Professional doctorates. The goal of these PhDs is to ensure the return of investments in research as represented in policy frameworks implemented in countries such as Australia, the Netherlands and Canada. Notably, a PhD is still the only type of award in Japan, China, the Netherlands, Mexico, Denmark, Germany, India and South Africa (Halse & Levy, 2014).

Supervision is one of the core activities in doctoral education, which involves "supporting the PhD student to develop as a researcher, using the research project as a vehicle for that learning and development" (Barrie, 2018, p. 9). In reframed doctoral programs, referred to as the 'Professional Development mode of PhD', known as the modern PhD, throughout this thesis, graduate candidates in some Australian universities undertake independent research under the supervision of a supervisory team, usually two supervisors. Development of interdisciplinary projects that may require a broader range of expertise than a single supervisor is one of the main reasons for the recent popularity of team supervision (Akerlind & McAlpine, 2017; Johansen, Olsen, Overby, Garred & Enoksen, 2019; Manathunga, 2012b; Watts, 2010).

Another feature of the modern PhD program is the program's normative context that is understood in terms of a Milestone or Review structure. The milestone structure has different variations across universities in Australia. For example, some universities have three milestones, whereas some other programs incorporate four milestones. In the three-milestone structure, the reviews take place after the first, second and third year of students' candidature, respectively, but in the four-milestone structure, the reviews are staggered differently over the three years to allow for the extra milestone. Each review takes place before a panel of academics and includes specific requirements defined according to the student's research stage and specified by the requirements of their discipline. The milestones are designed to guide and support students' progress toward submitting their thesis and allow them to receive structured feedback from academics outside their supervisory team. To be more precise, the first

milestone centres on planning and preparing the student for their doctoral trajectory. The focus of the second milestone may be engagement with the disciplinary and intellectual community. The third and the last milestone can center on the PhD outcomes (Barrie, 2018). Milestones also function as a means of quality assurance for universities and a way of providing more support and reducing the risk of non-completion (Barrie, 2018, p. 2). For Barrie (2018), milestones constitute a "*de facto* 'curriculum' because:

> (1) they focus universities' resources and efforts on what is important for the student to engage with to be successful or to progress to the next stage of their candidature; (2) they 'can' signal to students what is important for the development of the research and researcher, or in our case, the development of a disciplinary steward; and (3) like assessment, they provide a means of monitoring and assuring students' progress. (p. 19)

Milestones are currently re-visited to check how they respond to the primary intention of the PhD – the employability of PhD holders and to avoid students and supervisors viewing milestones only as bureaucratic exercises that are not entirely relevant to meaningful learning. In this sense, students and supervisors are currently encouraged to re-design milestones so that the doctoral learning experience becomes a blueprint of employability and leads to "knowledge networking in Australia" (Barrie, 2018, p. vii).

The most distinguishing feature of the modern PhD is the addition of Professional Development (PD) activities to make students more competent. PD activities that instruct generic skills can "promote flexibility and an ability to respond to new situations (Group of Eight, 2013, p. 43). Moreover, "competency implies more than just the acquisition of knowledge and skills; it involves the mobilisation of knowledge, skills, attitudes and values to meet complex demands" (Organisation for Economic Co-operation and Development (OECD), 2018, p. 5). It is hoped that improving the competencies of the research students can enable them to join industry or other non-academic sectors. This can solve the employment issues encountered by doctoral graduates and benefit businesses by providing the knowledge and expertise they need (Department of Education, 2014). There have been many PD initiatives in Australian universities over the last decade across a variety of disciplines mainly through engagement with industry, interaction within disciplines and training courses. For instance, the Research Oriented School Engaged Teacher-researcher Education (ROSETE) partnership between University of Western Sydney and the Ningbo Municipal Education Bureau in China, provided PhD and Masters by Research students from China with the opportunity to combine academic work with practical teaching experience whilst undertaking their research projects at the

University of Western Sydney and teaching Chinese to primary and secondary school students at schools (See Department of Education, 2014). However, some universities in Australia have adopted PD in a series of workshops on research and career-related topics.

1.4. International, non-traditional, and underrepresented students

Along with the internationalisation of HE and considerable growth in the number of doctoral degree-granting institutions, a dramatic shift has been observed in the demographics of students attending doctoral programs over the last few decades. Looking back fifty to one hundred years ago, traditional students were typically young (20-30 years old) white, single males who were prepared to become scholars and often worked in assistant roles during their studies (Gardner, 2009a). Today, students attending doctoral programs are diverse, increasingly female, over thirty years old, self-funded, married, (might) have children, and have careers outside of the study (Offerman, 2011). For instance, the higher education enrolment summary indicates that in 2014, 46% of domestic and 56% of the overseas' students enrolled in graduate research degrees were females. It also showed that a majority of domestic postgraduate research students were between 30-39 years old (Department of Education, Skills, and Employment, 2021).

Similarly, the Council of Australian Postgraduate Associations (CAPA, 2017) asserts that postgraduate students in Australia do not have a uniform composition. Indeed, "postgraduate students are spread across a wide variety of age groups, socioeconomic backgrounds, nationalities, and family living situations. This diversifying postgraduate student body makes it difficult to identify a 'typical' postgraduate student and makes it particularly challenging to model the impact of legislative or policy changes on such students" (p. 6). Students with quite diverse demographics who are referred to as 'non-traditional' students henceforth, also have a variety of purposes for undertaking a doctoral degree, which are not still fully known to researchers (e.g., Twale, Weidman, & Bethea, 2016).

Change in students' demographics has been consistent with shifts occurring to the goals of doctoral studies, from the preparation of graduates to become scholars or academics to work across different sectors and engagement in a variety of professional activities (Offerman, 2011). Non-traditional students follow doctoral studies for various reasons. Offerman (2011) argues that non-traditional students "are not likely to be preparing to serve as full-time researchers, whether inside or outside of higher education. Instead, they are seeking the degree most often to enhance an existing career or to transition to a different career" (p. 27). Better job prospects and creative endeavours (Baik, Naylor, & Arkoudis, 2015), developing

knowledge and new learning experience (McCall, Western, & Petrakis, 2020) were the top motives for non-traditional students' decisions to further their studies. Non-traditional students and their goals and demands have essential implications for tertiary institutions that admit them. This entails more flexibility in pursuing a doctorate (part-time courses) to balance the demands of career, study and family, institutional services to support the needs of this student group and designing doctoral programs suitable for them (e.g., fostering cohort learning).

Furthermore, the presence of a group of students called 'international students' has become the norm in many universities worldwide. In Australia, students studying on a student visa are called 'international students', although the Australian Government uses 'overseas students' to refer to this group of people. On the other hand, Australian universities specify that students are considered *domestic* if they are citizens of Australia and New Zealand or have permanent residency in Australia. Still, they are regarded as *international* if they are temporary residents of Australia, citizens of any country other than Australia, a permanent resident of New Zealand (the University of Adelaide, n.d.).

There have been debates surrounding the label 'international students' because of a tendency to associate students with academic and cultural bias; for instance, international students can be described as less competent writers or speakers and less assertive (e.g., Fotovatian, 2012). However, it is known that both international and domestic students experience similar challenges during their studies, which affect their success and progress. These include, but are not limited to, engagement in a healthy supervisor-supervisee relationship, investment and effort to gain knowledge of the field, and develop research and advanced writing skills. Therefore, using the term 'international students' with stereotyping and homogenising implications while ignoring individual differences and experiences can be pretty misleading. The term 'international students' is adopted in this study to represent how Australian universities refer to non-domestic students, but no presumption is made related to their individual characteristics and experiences.

Finally, it is important to clarify which students are considered 'underrepresented'. The makeup of international students at a university or a Faculty may represent some dominant groups. The proximity of students' countries to the host country, particular agreements or exchange programs between the two countries are two factors attracting students to a certain country. For example, in Australian universities, international students from particular countries like China (37.3%) or India (20.5%) are considered dominant because they comprise

the largest population of international students (Ferguson & Spinks, 2021). Conversely, students whose ethnic makeup represents a very low proportion relative to all student populations are considered underrepresented. These students may feel alienated and marginalised, and this requires programs to pay more attention to the needs of these students.

1.5. Statement of the problem

A growing body of literature concerning doctoral education has emerged during the last two decades, suggesting widespread acknowledgement of several challenges. Many researchers have documented the international doctoral students' academic experiences in an overseas program during the first year of their candidature. The findings of these studies tend to be negative as international students pursuing a higher degree program hold certain predispositions, perceptions and expectations from an overseas experience, which may contravene the new institution's normative context and its pertinent sociocultural and academic practices (Casanave, 2004; Inouye & McAlpine, 2017; Kim, 2018; Walsh, Seldon, Hargreaves, Alpay, & Morley, 2010). As a result, they may struggle or even resist new values and expectations in their effort to succeed in the unfamiliar academic context.

The epistemological and pedagogical differences inherent in different modes of doctoral programs have also been evidenced in scholarship. The PhD research as we know it today commenced at the University of Berlin in Germany during the first decade of the 1800s (Wyatt, 1998). It then extended to Britain and America during the 19th century and afterwards to Canada and Australia (Simpson, 1983). In some countries, such as the UK, PhD by research remained the most prominent form of doctoral training, which was also viewed as an apprenticeship to research (Park, 2005). Following the UK tradition, in countries such as Australia and New Zealand, where undertaking extensive supervised research is a major requirement of a PhD, there has been a growing emphasis on quality of supervision (Park, 2005). Hence, the experiences of doctoral students have been researched mainly by focusing on supervision pedagogies (e.g., Grant, 2003; Manathunga, 2012b), post-structuralist and postmodern theories, such as conceptualisation of transnational identity (e.g., Rizvi, 2010), institutional identity (Fotovatian, 2012), and a post-colonial approach to understanding supervision (Manathunga, 2012a). Also, much attention has been paid to the export of education, education markets and characteristics of students, specifically from the Asian countries who are the main consumers of the Australian HE (Harman, 2006).

The North American models of PhD training have conceptualised doctoral education and developed doctoral programs differently. Challenging characteristics have been attributed to these programs by researchers, including students' lack of understanding about doctoral study processes, the mismatch between the purpose of doctoral education and the aspirations of the students, and provision of necessary academic knowledge before the start of the research project (Barnett, Harris, & Mulvany, 2017; Golde & Dore, 2001). Therefore, instead of too much focus on the PhD thesis or the product of the PhD, scholars stressed paying attention to the learning process in the PhD (Kensington-Miller, Knewstubb, Longley, & Gilbert, 2018; Park, 2005). Generally, the North American doctoral training model includes coursework requirements in the program's first two years, followed by a qualification exam that evaluates' students' disciplinary knowledge. After that, students engage in doctoral research that takes three years or more. The course work typically provides more opportunities for students to adopt academic values and integrate into disciplinary communities (Acker & Haque, 2015). Socialisation has been the most dominant perspective in examining doctoral students' experiences in the North American context (e.g., Austin, 2002; Weidman et al., 2001). Socialisation, in broad terms, refers to "the process by which persons acquire the knowledge, skills, and dispositions that make them more or less effective members of their society" (Brim, 1966, p. 3).

Scholars have recently strived to clarify that socialisation is not merely the transformation of a novice to a professional and give equal weight to the student's agency in shaping their future (Organisation for Economic Co-operation and Development, 2018; Pyhältö, Vekkaila & Keskinen, 2015). Nevertheless, the common conception of socialisation represents a series of institutional activities that lead to the internalisation of norms and values and research skills that consequently bring about a change in students' identity (Gardner & Mendoza, 2010). It can be challenging for approaches with a narrow or top-down focus to provide a holistic understanding of what students experience during their candidature because doctoral education for international students involves engagement with processes related to personal, academic and professional life (Anderson, 2017). Importantly, multilingual and multicultural students engaging in intellectual discourse at the graduate level constitute a population with particular needs as they have to "adapt smoothly to the linguistic and social milieu of their host environment and the culture of their academic departments and institutions" (Braine, 2002, p. 60).

The high attrition rate in doctoral studies worldwide, including in Australia, has long been a reason to study doctoral student experiences. Attrition generates substantial economic and emotional damage to individuals, institutions and governments (Golde, 2005; Gardner, 2008a; Harman, 2006; Tertiary Education Quality and Standards Agency (TEQSA), 2017). Numerous studies have reported negative socialisation as a significant cause of high doctoral student attrition (Gardner, 2007; Golde, 1998). The attrition rate is higher in Humanities and Social Science programmes than in Natural Sciences (Golde, 2005). Although many institutions provide many doctoral students with financial support, some students drop out of their programs because they fail to socialise into the social and cultural practices of the university and even the culture of the host country (Gardner, 2008a). Hence, understanding the mechanisms through which institutional students socialise into new academic, disciplinary, and social contexts and contribute to persistence and retention is very important.

Finally, students' experiences and engagement in doctoral programs in the field of Education have not been the subject of many inquiries by researchers. The focus of available studies has been on the socialisation of doctoral students into the teaching role (e.g., Akerlind & McAlpine, 2010; Gardner, 2006; Grim, Kim, Morton, & DeMonbrun, 2021; McDaniels, 2010; Saddler, 2008), whereas most of these students do not end up in a teaching career (Austin, 2002). Several studies have explored the socialisation of doctoral students into applied sciences such as nursing, health, chemistry, physical education, engineering, and history (Beck-Jones & Perryman, 2015; Deem & Brehony, 2000; Gardner, 2007; Gardner, 2008a, 2008b; Saddler, 2008). The findings of these studies highlight the differences that exist among disciplines. Overall, these studies provide evidence that doing a PhD is a relatively "socially isolating" task for social science research students as it engages them with "a one-to-one relationship with their supervisors, whilst developing their own critical thinking" (Deem & Brehony, 2000, p. 150). The *marginalisation* of social science research students may also include "lack of office space, limited access to facilities, actual or perceived exclusion from department seminars, failure to establish social relations with staff and exclusion from academic networks" (Deem & Brehony, 2000, p. 156). Therefore, in addition to personal, administrative and institutional characteristics, variables such as students' engagement with the HE experience and their social integration should be considered. Many scholars suggest membership in the disciplinary community is the outcome of socialisation (Golde, 2010). Moreover, the rigid disciplinary cultures of the disciplines make them challenging to embrace new perspectives from other fields (Golde, 2010).

In sum, although Australian universities are often highly ranked for their international education and research, little investigation has been undertaken to examine how international graduate students in Education are socialised into the culture of their discipline. Only a few dimensions of this process have been explored, such as the development of professional identity by the graduate students, inadequate freedom to develop as an independent researcher, supervisor-student relationship, and academic socialisation through writing practices (e.g., Cotterall, 2011a; Inouye & McAlpine, 2017; Kim, 2018; van Rooij, Fokkens-Bruinsma, & Jansen, 2021). These studies help provide a picture of the complexity of doctoral student experiences, but a deeper understanding of students' engagement in doctoral programs in the field of Education is required. Hence, some scholars call for studies to go beyond disciplinary content knowledge, such as the attributes and skills of the graduate students (e.g., Barrie, 2006; Kensington-Miller et al., 2018; Rockinson-Szapkiw, Spoulding, & Bade, 2014). In light of these discussions, the experiences of international doctoral students who undertake a PhD program in Education in Australia warrant investigation.

1.6. Objectives of the study and research questions

This study was designed to explore how international students engaged with the doctoral culture in an Australian research-intensive university. It also aimed to present a longitudinal (2-year) case study of international doctoral students' socialisation throughout their candidature. This study closely followed the participants' development along different stages of their doctoral journey. This study incorporated Weidman et al.'s (2001) Graduate and Professional Student Socialisation Theory which conceives socialisation as a process formed by personal, institutional and professional influences, to answer the following overarching question:

> *How do international doctoral students socialise into the norms and values of a research PhD program in Education in Australia throughout their candidature?*

Weidman et al. (2001) incorporate four components of institution, students' background, students' interaction with personal and professional communities, and outcomes of socialisation represented as the gained knowledge, skills, and dispositions (KSD). These components inform the four proposed sub-questions of the study:

> (1) What values, expectations, and aspirations do doctoral students have as they begin their study?

(2) How do supervisors influence doctoral students' knowledge, skills, and dispositions throughout their candidature?

(3) How do professional development activities and peers influence doctoral students' knowledge, skills, and dispositions throughout their candidature?

(4) What values, expectations and aspirations do doctoral students have towards the end of their candidature?

1.7. Researcher positioning

Positionality "reflects the position that the researcher has chosen to adopt within a given research study" (Savin-Baden & Major, 2013, p. 71). The position of the researcher is reflected in (1) the subject under investigation, (2) the participants, and (3) the research context and process (Savin-Baden & Major, 2013). Motivated by what she had left behind during her personal and academic life trajectories, the researcher of this study intended to investigate the experiences (subject) of international students (participants) in a study abroad context (research context), hoping that the insights from this research can provide more satisfactory experiences for students who seek higher mobility by following a PhD degree in a developed country.

To further elaborate on the researcher's role, she was a mature-age female of Iranian ethnicity who spoke English as a foreign language. She had ten years of professional experience in TEFL and ELT. For three years, she also attended a self-funded course-based doctoral program in an international context. However, the high instability and decline of Iran's economy, which made paying for the fee a challenge, along with an absence of any support in the host country, such as the unavailability of part-time jobs for graduate students and lack of any scholarship, obliged the researcher to leave the program in the fourth year of her candidature. She then sought a scholarship-funded position and moved to Australia upon receiving admission from a Go8 university. Transition to the new PhD was not easy since the new program was a research-based PhD with a PD component that was entirely new to the researcher. As a PhD candidate, the researcher shared a similar student role with the participants and was engaged in the entire research process. Her personal histories were influential in selecting the research topic and her positioning in the study. For instance, due to her background and exposure to North American course-based models of doctoral education that are also practiced in most Asian and Middle-eastern countries, the researcher adopted *Graduate and Professional Student Socialisation* (Weidman et al., 2001) to inform her inquiry.

The researcher's history and her academic and professional background positioned her both as an insider to the large international student community and an outsider in the Australian society. The researcher's experiences of communicating across diverse cultures and the phenomena under study led to adopting a social constructivist paradigm (Berger & Luckman, 1966; Cromby & Nightingale, 1999; Nightingale & Cromby, 1999). This orientation affected her decision making concerning the design and implementation of the research. Being a qualitative researcher requires being reflective both before and during the research process to consider their own biases, standpoints, and worldviews and clearly articulate them throughout the study (e.g., Merriam, 1998). To this end, reflexivity was approached from epistemological and personal perspectives that informed each other (Cromby & Nightingale, 1999). Epistemological reflexivity, or the researcher's reflections on theoretical assumptions, indicated how the research could accomplish differently if limitations caused by the research design were absent.

To fully comprehend the norms and values of the context – necessary to undertake research and analyse the data – the researcher maximised her involvement in particular roles and activities of the Faculty as the context of the study. Some roles fulfilled by the researcher during her candidature included a general ambassador in Orientation programs, a member of the Faculty of Education research community association, an academic facilitator in leadership and advanced research course, an English academic facilitator at the university's English center, student academic success (SAS) facilitator during the COVID-19 pandemic, and a teaching associate for an undergraduate course at the Faculty.

1.8. Contribution and significance of this research

Current scholarship on socialisation theory suffers from a paucity of research that examines the experiences of non-traditional, and at the same time, underrepresented student populations. This study is a timely endeavour to address this gap and increase an understanding of obstacles that underrepresented doctoral students may experience during the program. It also offers suggestions to remove them so that equally satisfying PhD experience can be provided for all higher degree students. Moreover, a better understanding of the socialisation frameworks that have long been criticised for not accounting for students' experiences with specific profiles can be obtained (Offerman, 2011).

In general, there is a dearth of research on understanding the experiences of underrepresented international doctoral students in Australia, particularly from the socialisation perspective. To

date, researchers have examined different dimensions of doctoral students' experiences in the Australian context by applying diverse social and post-modernist theories (e.g., Fotovatian, 2012; Manathunga, 2012a; Rizvi, 2010). However, in the North American context, scholars such as Weidman et al. (2001) have theorised frameworks based on prior conceptualisations of HE students' experiences and data obtained from large-scale empirical studies conducted across the US (e.g., Bragg, 1976; Thornton & Nardi, 1975; Weidman, 1989). Similar to studies conducted in the North American context, this study incorporates a framework specifically designed to address a multitude of personal, academic and professional experiences graduate students engage with throughout their candidature. Some key differences exist in structure, requirements, and length between the course-based North American model and the German research-based model of PhD, which could have limited the application of the socialisation framework in a different context. However, the modern PhD enacted since 2015 in Australian HEIs appears to take a middle stance between the two aforementioned dominant PhD models. The modern PhD shares some features of the North American model; it is highly structured, incorporates educational and professional workshops called PD activities, and applies an alternative supervision model called team or cohort supervision. The application of the socialisation framework potentially brings new insights into understanding the experiences of international students in Australia.

A further contribution of this research lies in its longitudinal nature and following the process of change and transformation over one and a half years. Literature demonstrates that students' experiences have been addressed at a specific point during their candidature – often in the first year (Inouye & McAlpine, 2017; Kim, 2018; Walsh et al., 2010). Nevertheless, socialisation is a longitudinal process that requires students to juggle multiple interactive stages that can give us a fuller picture of students' gradual transformation into a scholar and their transition into a professional career (e.g., Thornton & Nardi, 1975). Longitudinal research enables us to understand "what the present relationships are among variables in a given situation and to account for changes occurring in those relationships over time" (Cohen, Manion, & Morison, 2007, p. 205).

1.9. Structure of the thesis

This thesis comprises nine chapters. Chapter One is an introduction to the study. Chapter Two is devoted to theoretical literature pertinent to the study. It first conceptualises what 'socialisation' – the key concept of this study – entails and then outlines and critiques the

existing theories developed by scholars to examine students' experiences in graduate programs. After focusing on the strengths and weak points of the reviewed theoretical frameworks, the Graduate and Professional Doctoral Student Socialisation model proposed by Weidman et al. (2001) is adopted for this study given its potential to address the problems raised in this study (Weidman et al., 2001). The chapter details the adopted framework's origin, components, and core elements. Also, the analytical stages of the socialisation process – pre-entry, formal, informal and personal stages – that allow examination of the entire students' trajectory in the course of the program are explicated. This involves a description of KSDs, supervision and a framework adopted by Lee (2008, 2019) to examine supervisory experiences and engagement with processes of peer interaction and PD activities. The chapter moves on to narrow down the application of socialisation to international students in the field of Education, which are the focus of this study.

Chapter Three reviews empirical literature pertinent to the study. To this end, the first section focuses on the role of disciplines in shaping the students' experiences and then focuses specifically on the field of Education to indicate the disciplinary culture of this field. The second section reviews studies that focused on the effect of the institutional environment on students' experiences. A review of research related to doctoral student supervision in the context of Australia is the third section of the chapter. The chapter concludes by highlighting the gaps in the literature.

Chapter Four presents the research design and methods applied in this study. It describes the qualitative case study design used in the study, using the Education doctoral program in an anonymous Australian research-intensive university as the case. Then, an account of the recruitment process and the profile of the participants are provided. After that, the study draws on a triangulated data set obtained from interviews, focus groups, observations of the six student participants, and individual interviews with the supervisors of the doctoral students (n=10). Then, thematic analysis as the main data analysis method is described. Finally, the trustworthiness and ethical considerations of the study are discussed.

Chapters Five to Eight present the answers to the four research questions and discuss the findings. The four findings chapters correspond with international doctoral students' experiences in the pre-entry, formal and informal, and personal stages of socialisation, respectively. To be more specific, Chapter Five deals with international students' values, expectations, and aspirations before they begin the program. Chapter Six revolves around the

KSDs that international doctoral students develop through interaction with their supervisors. Chapter Seven focuses on the KSDs that international doctoral students develop through engagement with two important structures: PD activities and peer interaction. Chapter Eight re-examines the international students' values, expectations, and aspirations towards the end of the program.

Chapter Nine is the main discussion chapter. The first section of the chapter summarises the study's main findings in four subsections. The second section represents the main insights drawn from the study under three subsections: the underrepresented student population and their challenges, interdependence as the main goal of doctoral education, and revisiting socialisation into doctoral education. Section three outlines the theoretical and empirical implications of the study. Section four describes the study's limitations and offers future directions. Section five ends the chapter with a brief conclusion.

CHAPTER 2. THEORETICAL LITERATURE REVIEW

2.0. Introduction

This chapter provides background on theoretical perspectives of socialisation into doctoral education. Socialisation generally maintains that newcomers can change their status from an outsider to an insider by acquiring and internalising the attitudes, norms, and values of a given community (Bullis & Bach, 1989). However, Weidman et al. (2001) argued that "competing sociali[s]ing agents and the novice's personal needs or interpretation of the context may alter the sociali[s]ing experience as well as its impact". In this way, they proposed that socialisation can be examined both at the institutional and individual levels (p. 34). This study was interested in this view and the reciprocal and dialogical relationship between students and institutions. The institutional and individual dimensions of socialisation are complementary because students need to draw on their internal resources to discover the institutional implied expectations and model certain behaviours to be successful (Anderson, 2017). Also, attention to individual factors such as students' values, aspirations and expectations makes it possible to investigate students' experiences from a bottom-up perspective. That is why the researcher avoided drawing on the equally strong concept of Community of Practice (CoP) that has been extensively used to explain membership in different communities and multiple identities that the students develop by participating in different academic and disciplinary communities (Wenger, 1998). CoP refers to relations built as a result of engagement in a joint enterprise. Legitimate Peripheral Participation theory (LPP), another pertinent concept, shows the gradual fuller participation and legitimisation of new students in a new community (Lave & Wenger, 1991). CoP and LPP concepts have frequent usage and contribution, especially to Sociology and Education, where social theories have the most application. Nevertheless, they have been critiqued for depicting a community as a self-standing entity that is not subject to conflict and change (Østerlund & Carlile, 2003) and paying minimal attention to imbalanced power dynamics within a community (Fox, 2000).

Some scholars advocated the notion of 'network' rather than 'community' to refine these constructs. Following this refinement, more specific concepts such as 'networks of practice' (NoP) (Brown & Duguid, 2001) and 'individual network of practice' (Zappa-Hollman, 2007a)

were proposed to provide a thorough account of individuals' interactional landscape. The essence of network theories is that individuals typically network together and invest in them for their own (rather than mutual) interest and progression. Hence, they may move in and out of networks depending on the extent to which they benefit from participating in them. Accordingly, social networking with personal and professional groups outside of institutions was rapidly given consideration as a mechanism that facilitated the acquisition and flow of knowledge (e.g., Anderson, 2017; Gardner & Barnes, 2007; Gardner, 2008b). The constructs explained above are occupied with the processes through which one becomes a community member, mainly through the institutional factors; this mistakenly implicates that all postgraduate students in a program undergo similar socialisation processes and experience them in the same way.

Therefore, by identifying the shortcomings of the CoP and LLP constructs, the researcher perceived graduate student socialisation as a multidirectional process where individuals and institutions affect or are affected by one another and may selectively draw on other resources outside of the institution to achieve their goals. Of the theoretical frameworks reviewed, Weidman et al.'s (2001) appeared to consider both internal and external factors in socialisation processes, thus was selected as a theoretical tool guiding the present study.

The first three sections of this chapter present background on socialisation theories proposed by scholars to study the experiences of graduate students. The first section discusses key conceptualisations of the term 'socialisation'. The second section chronologically reviews the theoretical models of student socialisation into higher education institutions. Analysing the differences and similarities among these frameworks sheds light on the developments made to date in this area of enquiry. Also, it helps show how the choice of theoretical framework in the study – Weidman et al. (2001) model of Graduate and Professional Student Socialisation – aligns with the study's objectives. Section three describes Weidman et al.'s (2001) framework, which incorporates influences on graduate student socialisation. These elements are individual characteristics (e.g., personal values, dispositions, academic background, etc.), institutional characteristics (e.g., the environment or climate of the institution, attributes of different academic disciplines), and program structures (e.g., supervision, PD activities, peer interaction) (See Weidman & Stein, 2003).

Due to the importance of post-entry experiences in the socialisation of international students, section four provides a more detailed account of these structures in two sub-sections. The first

sub-section focuses on doctoral student supervision – one of the most dominant means of socialising students into the norms and values of their disciplines. The second sub-section explains the set-up and atmosphere of PhD and academic spaces and peer interactions embedded in them that have been found to have a crucial effect on the socialisation of doctoral students (Weidman & Stein, 2003). Given that the holistic approach to socialisation is studied both at the institutional and individual levels, section five focuses on how the characteristics and experiences of international students might be different from those of other student groups such as the local students. Section six addresses Education as the disciplinary context of the present study and outlines some potential challenges particular to the socialisation of Education students. Finally, the chapter ends with a conclusion.

2.1. Conceptualisation of socialisation

This research project draws on a sociological understanding of socialisation. Generally, *socialisation* refers to the development of essential characteristics through which young people integrate into society. The classic definition of socialisation in sociology is "the process by which persons acquire the knowledge, skills, and dispositions that make them more or less effective members of their society" (Brim, 1966, p. 3). Other scholars have provided a similar characterisation of this concept. For example, Bragg (1976) defines socialisation as "a learning process through which the individual acquires the knowledge and skills, the values and attitudes, and the habits and modes of thought of the society to which he/she belongs" (p. 3). *Socialising* is a term sometimes mistakenly aligned with socialisation, which refers to social interactions embedded in socialisation processes. The meaning of socialisation may overlap with two related terms in anthropology: enculturation and acculturation. *Enculturation* refers to processes in which a child first learns and maintains the beliefs and values of their own culture, whereas *acculturation* refers to processes of adapting the beliefs and values of a new culture (Berry, 1992).

One of the main concerns of sociology is how institutions work and influence the behaviour of individuals in a particular institution through an established set of norms, values and beliefs. Societies are composed of five major institutions: the family, education, politics, economics, and religion (Harper, Jones & Watson, 2012). Institutions are established to fulfil the needs of individuals and have their own set of goals and functions. For example, family is the first institution where children learn social behaviour. Education is an institution in which individuals learn specialised knowledge and skills. Individuals experience different forms of

socialisation in the context of each institution (Harper et al., 2012). In his book *Sociology*, Ian Robertson (1981) specifies four types of socialisation that show a person's development through her/his lifetime. *Primary socialisation* is the most basic type of socialisation in the early years of a child's life and provides a foundation for development for the rest of one's life. It concentrates on learning and internalising language, cogitative skills, and cultural norms and values. *Anticipatory socialisation* happens when adolescents try to become independent and learn the culture of the groups which they anticipate joining in the future. *Developmental socialisation* is built on already acquired knowledge, skills and values as the adult moves to new situations of an adulthood life such as marriage and career. These require taking on new roles, social status, obligations and prospects. This is when the old knowledge is merged with new learning in the course of development. Finally, *re-socialisation* may take place when a social role is fundamentally changed. In this process, a person needs to abandon their old beliefs and values and adopt those of a new group.

The conceptualisations of socialisation mentioned above have been the rationale for scholars seeking to theorise and explain the socialisation processes across different disciplines. Socialisation is one of the most important constructs used to conceptualise the developmental processes that HE students undergo in an effort to integrate into the culture of the institution or the university. Inspired by the work of sociologists, some scholars in the field of Education have proposed slightly different versions of the developmental stages to explain how new students entering a HEI learn and adopt the dispositions, norms, values, knowledge and skills of their disciplinary communities (e.g., Thornton & Nardi, 1975; Weidman, 1974; Weidman et al., 2001). These conceptualisations of socialisation inform this study of doctoral education in the Australian HE context. Given that thesis production under the supervision of an academic used to be the most dominant form of doctoral training in the Australian context, investigating the experiences of graduate students has been predominantly addressed through supervision models (e.g., Grant, 2010; Lee, 2008). However, with the rise of the knowledge economy and the emergence of new forms of PhD training which incorporate different coursework elements or professional development seminars as an integral part of the doctoral training, socialisation frameworks can provide a more comprehensive picture of doctoral students' experiences.

2.2. Theoretical frameworks of doctoral student socialisation

To date, several frameworks have been proposed to examine socialisation processes. These theoretical frameworks have been proposed between the 1950s and 2000s. Since then, most

scholars have been trying to develop models that view doctoral education processes in global sociocultural contexts by proposing concepts, such as ‘global village’ (Nerad, 2012). Table 2.1. summarises these frameworks. Some scholars explored the socialisation processes of undergraduate students; however, due to the significance of their findings in understanding graduate students’ socialisation, their frameworks are reviewed in this section. Understanding the similarities and nuances among these frameworks was essential to highlight the key assumptions underlying them and the elements that they found important. Linear or one-way models of socialisation focus on how institutions mould students to their norms and values; thus, they appear to negate the agency of individuals. By contrast, the more recent and two-way socialisation models consider the reciprocal relationships between the institution and individuals, thus demonstrating the multi-layered dimensions of students’ socialisation. Since the present study looks into socialisation at the individual level, interactive and two-way socialisation models are more relevant to the research questions. The existing models of socialisation are reviewed in what follows.

2.2.1. Linear socialisation models

Contemporary knowledge about the socialisation processes originates from the seminal work of Robert Merton and colleagues (1957) in their effort to understand musical students’ transition into the medical profession. This work became a basis for understanding the socialisation processes and defined socialisation as “the process through which individuals are inducted into their culture. It involves the acquisition of attitudes and values, skills and behaviour patterns that mak up social roles established in the social structure” (pp. 40-41). In this sense, to perform their roles in a professional and socially acceptable manner, individuals need to apply the profession's knowledge and skills, attitudes, and values (Merton, Reader, & Kendall, 1957). Building on this initiative effort, several scholars put forward a variety of models for delineating the socialisation experiences of doctoral students (Ali & Kohun, 2007; Austin, 2002; Baird, 1992; Bragg, 1976; Golde, 1998; Merton et al., 1957; Tinto, 1993, 1997; Weidman et al., 2001).

Bragg (1976) was specifically focused on the socialisation of students into a profession, proposed the notion of professional socialisation, and emphasised that achieving professional goals by graduate students strongly depended on their learning in the institution and the program. She contended that “It is the socialisation process that allows education to achieve its goals. Through the sociological process, the individual acquires the knowledge and skills, the

values and attitudes, and the habits and modes of thought of the society to which he[she] belongs" (p. 1). The findings of her study with undergraduate students yielded a five-step developmental process of socialisation. These included (a) observation of the role model(s) behavior; (b) imitation of the role model(s) behavior; (c) feedback on the behavior practiced; (d) modification of the behavior; and (e) internalisation of the role model's values. She added senior students could be the main role models for new students. Although her model appears to be more inclusive because 'groups' imply socialisation agents other than supervisors, such as peers, it presents a linear and unidirectional transfer of knowledge from the advisor to the student. The most prominent analytical flaw of this proposal is the presumption that socialisation outcomes are known and predictable (Antony, 2002).

Baird's (1992) study was the first attempt to conceptualise socialisation in progressive phases corresponding to doctoral students' position in the program. Doctoral students at any stage of their candidature (beginning, mid-course and advanced) were found to have different characteristics in terms of socialisation. To clarify, students in the beginning position were completing their courses, whereas students in the advanced position were writing their thesis; thus, they were further along the socialisation processes. For instance, advanced students were supposed to have more access to the faculty, peer interaction relationships with their supervisors, and friendlier relationship with their supervisors.

For some scholars, the integration of students into academic communities is central to their socialisation (Tinto, 1993). Tinto developed a 'Model of Institutional Departure' and the related 'Integration Model' in his investigation of African American undergraduate students. This three-phase model contributes to understanding "the longitudinal process of student persistence in college" (Tinto, 1993, p. 94). In the first phase, students have to 'separate' themselves from their old communities to facilitate taking up the norms and behaviour of the new communities. In the second phase, students 'transit' to new communities. In the third phase, students are able to 'incorporate' and adjust to the norms and behaviours of their new communities, a process known as 'academic and social integration'. In other words, to persist, students need to integrate into academic systems including academic requirements such as PD activities as well as social systems including interaction with peers and colleagues.

2.2.2. Interactive socialisation models

Golde's (1998) conceptualisation of the socialisation process as a dynamic and reciprocal process was a significant shift to proposing interactive models of socialisation. Her theoretical

Table 2.1. *Summary of the proposed socialisation frameworks*

Scholar(s)	Origin of the theory	Socialisation model/framework
Merton et al. (1957)	Empirical study with medical student	Knowledge, skills, attitude, and values combine in the developing student as they transition to professionals.
Bragg (1976)	Empirical study with college students	Socialisation is a five-step process: (a) observation of the role model behaviour; (b) imitation of the role model behaviour; (c) feedback on the behaviour practised; (d) modification of the behaviour; and (e) internalisation of the role model's values.
Baird (1992)	Empirical study with 596 doctoral students at one university	Doctoral students are in three stages: (1) beginning, (2) mid-course, and (3) advanced. Socialisation experiences increase (e.g., interactions with faculty) as they progress through the stages.
Tinto (1993)	Empirical study with African American undergraduate students	Model of Institutional Departure' and 'Integration' Phase I: 'Separation' from the old communities Phase II: 'Transition' to new communities Phase III: 'Incorporation' of new norms
Golde (1998)	Empirical study with 58 doctoral students in four departments	Socialisation is a process with four tasks: (1) cognitive, (2) everyday tasks, (3) professional, and (4) integration into the department
Weidman, Twale, & Stein (2001)*	Empirical study with 50 graduate students in one university	Interactive and dynamic stages of socialisation: (1) anticipatory, (2) formal, (3) informal, and (4) personal - interactions in and out of the University setting
Lovitts (2001)	Empirical study with 816 students in nine departments at three universities	Causes of doctoral attrition: (1) the absence of community, (2) the advisor-advisee relationship, and (3) negative learning experiences
Austin (2002)	Empirical study with 99 graduate students seeking faculty careers	Nonlinear socialisation involving (1) observation, (2) listening, and (3) interactions in and out of the University setting
Nettles & Millet (2006)	Empirical study with 9,036 doctoral students in the USA	Conceptual Model of Doctoral Student Experiences Five variables influence doctoral students' outcomes: (1) type of funding, (2) socialisation, (3) research productivity, (4) satisfaction and stopping out of a doctoral program, & (5) doctoral degree completion
Ali & Kohun (2007)	Literature review of doctoral students	Socialisation model aimed to reduce social isolation at 4 stages of students' candidature: Stage I: the preadmission to enrolment Stage II: the first year of the program Stage III: the second year through candidacy Stage IV: the dissertation stage
Gardner (2008a)	Empirical study with 40 doctoral students in two departments at two universities	Socialisation is a three-phase process: Phase I: admission to the program Phase II: social integration Phase III: candidacy
Nerad (2012)	Theoretical conceptualisation by analysing common doctoral supervision pedagogies	Interactions can occur at the: (1) institution, (2) Faculty, (3) department, (4) formal and informal activities, and finally (5) 'global village' levels

framework of the doctoral socialisation process specified “four general tasks of transition”. First is the cognitive task of mastery over the content of the chosen field through formal coursework or fieldwork. The second is living everyday life as a graduate student. The third is learning about a profession that the student will be practicing after graduation. The fourth task is assimilation into the department of the chosen field and people embedded in that context, including faculty, staff and peers. Golde’s theorisation introduced two-fold socialisation. As she put it, “The sociali[s]ation of graduate students is unusual double socialisation. New students are simultaneously directly sociali[s]ed into the role of graduate student and are given preparatory socialisation into graduate student life and the future career common to most doctoral students” (p. 56). From this perspective, doctoral students’ roles in graduate programs are twofold: the ‘student role’ and the ‘professional role’. The student role is the traditional role of any individual who studies at an HEI. However, the adoption of a professional role, particularly at the graduate level, gives equal weight to the development of professional characteristics by the individual. Golde (1998) emphasised a bidirectional exchange between the faculty and the student through immersion into a collaborative community.

Weidman et al. (2001) proposed a model based on his early effort in formulating a structural-functional model of undergraduate socialisation (Weidman, 1974). The earlier model depicted socialisation as a linear process with relatively fixed institutional boundaries, whereby undergraduate students eventually conformed to the program's requirements. However, the subsequent model developed for application to graduate students acknowledged socialisation as an iterative process with permeable boundaries that included stakeholders external to the institution. Weidman also incorporated career socialisation – experiences during college that shape students’ choices of careers (1984) – and introduced a new framework known as Graduate and Professional Student Socialisation (Weidman et al., 2001).

This model described socialisation in four interactive stages – anticipatory, formal, informal, and personal – previously identified by Thornton and Nardi (1975) in their description of role acquisition in social settings. The first stage is called anticipatory because when students enter the program, they anticipate what may occur based on their previous experience and predispositions. The formal stage is characterised by encountering normative influences and efforts to learn about the cognitive aspects of their discipline by formal instruction and interacting with the faculty. In the informal stage, students gain awareness about informal role expectations, which are not explicitly transmitted to them. The informal knowledge is attained by observing acceptable behaviours and interacting with senior students. The personal stage is

the time when the graduate student's "individual and social roles, personalities and social structures become fused and the role is internali[s]ed" (Weidman et al., 2001, p. 14). Additionally, Weidman et al. (2001) emphasised the interactive and dynamic nature of the socialisation stages in that these stages can be experienced in any phase of the student's candidature based on individual developmental processes and experiences.

Austin (2002), similar to Weidman et al. (2001), hypothesised that socialisation is a collateral process influenced by newcomers who bring experiences, values, and attitudes to the institution. Students who have an active role in their socialisation engage in three processes: observing, listening, and interacting with faculty and peers and with groups external to the institution, such as family and friends. In this sense, graduate students who seek faculty positions are "expected to be keen listeners and observers" (p. 104), who pay careful attention to the advisors' conversations, departmental policies, and faculty members' behaviours. She stressed quality teaching strategies such as scaffolding, coaching or mentorship for the socialisation of students into Faculty roles. She warned that lack of or inconsistent mentorship prevents students from getting a thorough understanding of the breadth of faculty roles, responsibilities, and expectations of their profession. In a similar way, "assistantship roles sometimes are structured more to serve institutional and faculty needs than to ensure a high-quality learning experience" (p. 95).

Similar to some of the reviewed models, in a well-known large-scale study, *Leaving the Ivory Tower,* Lovitts (2001) identified the main reasons for student attrition in nine departments at two universities. These included the absence of a community, the advisor–advisee relationship, negative learning experiences, and a lack of 'fit' between the student and the program. Moreover, the students' participation and subsequent integration into the community were strongly influenced by their access to resources. Their satisfaction with learning experiences was affected by the extent to which the students engaged in interactions with peers, the faculty, and social interactions outside the academic environment. Overall, doctoral attrition was associated with institutional factors related to inadequate understanding of graduate procedures, policies and expectations rather than academic challenges or deficiencies.

In another large-scale study with more than 9000 doctoral students across the United States, Nettles and Millet (2006) introduced a three-stage model called the Conceptual Model of Doctoral Student Experiences. This model proposes five variables that influence doctoral students' outcomes. These variables are the type of funding, socialisation, research

productivity, satisfaction and stepping out of a doctoral program, and doctoral degree completion. Like some other frameworks (e.g., Weidman et al.'s), this framework suggested that "personal and academic backgrounds, along with other acquired benefits, contribute to the quality of students' experiences and outcomes" (p. 27). For instance, the older students were less likely to receive assistantships.

Ali and Kohun (2007) proposed a four-stage theoretical model for reducing social isolation among doctoral students being the central focus. Stage I is the pre-admission to enrolment stage when the new student confronts "negotiating the system" or inadequate information on procedures and requirements of completing the tasks. Stage II, which coincides with the first year of the program, is when the new student recognises the pervasive adjustment difficulties caused by different intellectual and psychological demands of the doctoral program. Stage III is the second year of candidacy when the new student should undertake two challenging tasks of taking the examinations and defending the thesis proposal. Stage IV is the dissertation stage when the new student is under time constraints and stress completing the thesis and attaining the doctoral degree successfully. Challenges peculiar to stages denote that different types of support are required to help students at each stage of their socialisation.

By drawing on Weidman et al. (2001), Gardner (2008a, 2010) developed a three-phase model of socialisation that considered the programmatic requirements of the program, such as coursework and thesis and the evolving interpersonal relationships between students and other stakeholders. Phase I is admission to the program and starting the coursework when the first encounter with the program, requirements, environment and peers occurs; thus, this phase is recognised as an 'integral' part of socialisation. Phase II is related to social integration, preparation for exams, or assistantship experience. Phase III is when students have passed the examinations and attained the candidacy status. Students' personal and interpersonal relationships with faculty members and peers in this phase change toward a "more professionally-minded self" (Gardner, 2010, p. 65).

Considering globalisation and its worldwide consequences, such as higher participation of non-traditional students in HE and involvement of multiple actors such as universities, industry, and business, Nerad (2012) questioned the conceptual approaches to doctoral education, including one-to-one approaches (apprenticeship model), top-down models (professional socialisation models), and individualistic approaches (supervisor mentoring). She introduced Global Village, an approach to doctoral education that prompts "coordinated efforts at many

levels among universities, national and international funding agencies, and learning communities" (Nerad, 2012, p. 65). She argued that many traditional supervisor responsibilities can be passed on to students by extending processes, such as peer interactions at the institution, Faculty, department, formal and informal activities and finally, the 'global village' levels. She exemplifies how peer learning may occur at each level to support the idea. For instance, the department's new set-up of students' spaces, such as the dedication of shared workspace to doctoral students, can encourage more interaction and peer learning among them as colleagues. However, the students' professional socialisation and community building can extend beyond the boundaries of a single academic institution through national and international programs, collaborations, conferences and joint degree programs.

2.2.3. Comparing theories of socialisation

The theoretical frameworks of socialisation reviewed in the previous section share some similarities and differences (Table 2.1). The majority of the socialisation frameworks point to the developmental nature of socialisation and represent it as a process comprising several phases or stages (e.g., Ali & Kohun, 2007; Baird, 1993; Gardner, 2007, 2008b; Weidman et al., 2001). In most of these frameworks, socialisation has a chronological order along which the doctoral students progress (e.g., Ali & Kohun, 2007; Baird, 1992). Most of the theoretical frameworks, specifically the earlier ones, disregard individual differences (e.g., age, gender, race, etc.) among the students and assume that all of them were socialised in the same way (Merton, 1957). Moreover, they presuppose that successful socialisation eventually takes place and students manage to assimilate into their institutions if they navigate through the suggested stages or phases properly (e.g., Merton, 1957; Bragg, 1976; Tinto, 1993). This indicates the heavy reliance of these frameworks on homogenising assumptions, while the findings of studies with some student populations indicate their resistance to the norms and values of the new institution (e.g., Gardner, 2008b).

On the other hand, more recent theoretical frameworks are cognisant of the doctoral students' perceptions and roles in their own socialisation (e.g., Austin, 2002; Gardner, 2007, 2008; Nettles & Millette, 2006; Weidman et al., 2001). They emphasise the bidirectional nature of socialisation where students and the institution affect or are affected by one another. This means that doctoral students choose to embrace, refuse or modify the institutional norms, values and behaviours; thus, students experience socialisation quite differently. In most of the reviewed theoretical frameworks, supervisors and faculty are primary socialisation agents.

Most of these frameworks maintain that socialisation agents, especially supervisors, transfer the acceptable norms, values, and behaviours to the newcomers. In the meantime, all these scholars give heed to the prominent role of peers in postgraduate socialisation. However, Weidman et al. (2001), Austin (2002) and Nerad (2012) acknowledged the role of agents external to the institution in the socialisation of graduate students. This recognition came from individual differences found among the students in research conducted by these scholars, who reported their parents, spouses and friends as the primary reference groups. This suggests that they can be considered the primary socialising agents because they make networks that may be unknown to the universities. Nerad (2012), in particular, focuses on networks and collaborations that take place among individuals in diverse disciplines across institutions and programs in different countries.

Eventually, regarding socialisation outcomes, in most of the reviewed theoretical frameworks, degree completion was equated with successful socialisation and the final outcome of socialisation (e.g., Gardner, 2010; Lovitts, 2001, Tinto, 1993). However, some other frameworks took degree completion as the entrance to the professional world (e.g., Weidman et al., 2001). In this sense, the doctoral program is the point of departure for socialising students to their preferred job to follow after their graduation. Nerad (2012) emphasises the acquisition of translational skills acquired during the PhD that can be transferred to non-academic settings. Of all the frameworks reviewed, Weidman et al.'s (2001) appears to be the most comprehensive and widely accepted conceptual framework for understanding graduate and professional student socialisation in the US (e.g., Feldman, Smart, & Ethington, 2004) that until recently has had minimal application outside the US context[2].

2.3. Weidman, Twale and Stein's model of graduate and professional socialisation

Weidman et al.'s (2001) Graduate and Professional Student Socialisation provides a conceptual framework for this study. It provides a systematic and multidimensional account of doctoral student socialisation at both individual and institutional levels. Figure 2.1 is a visual representation of Weidman et al.'s (2001) framework, which incorporates a few elements of the Organisational Socialisation model (Weidman, 2006) to meticulously address the research questions proposed in this study. Developmental frameworks of socialisation are more

[2] It is worth acknowledging that, in addition to focusing on the notion of socialisation, a paradigm shift has led to framing studies on experiences of doctoral students around the notions of identity and CoP.

considerate of individual characteristics, but college impact frameworks pay more heed to institutional characteristics. For instance, the college impact models incorporate characteristics of the environment such as the institution's academic, social, and political climate (Weidman, 2006). Therefore, a slightly modified version of Weidman et al.'s (2001) original model that incorporates a few elements of the Weidman's (2006) Organisational Socialisation Model was adopted for this study. The additional elements, highlighted in blue in Figure 2.1, are addressed when discussing different components of the model.

The contemporary thinking about socialisation as an interactive and dynamic process and identification of the elements that contributed to this process was initiated by Weidman et al. (2001). These scholars defined socialisation in graduate school as "the processes through which individuals gain the knowledge, skills, and values necessary for successful entry into a professional career requiring an advanced level of specialized knowledge and skills" (Weidman et al., 2001, p. 4). They also argued that socialisation into HE could be examined at both organisational and individual levels. The organisational (or institutional) level explains how novice students integrate into professional communities and fulfil their expectations by adopting the culture of the community. On the other hand, the individual level indicates how expectations may evolve because of individuals reshaping their personal and professional roles, which can also reform the community's original culture and expectations. Hence, "socialisation is not merely the transfer from one group to another in a static social structure, but the active creation of a new identity through a personal definition of the situation" (Reinharz, 1979, p. 374). The individual dimension of socialisation thus explains why the socialisation experience differs from one student to the next (Weidman et al., 2001). Students might be directed by their own values, aspirations, and expectations and have the most influential role in socialisation. The following subsections provide a detailed account of the different constituents of the model.

2.3.1. The main components of the Weidman et al.'s model

As indicated in Fig. 2.1, *university* or *higher education institution* is located at the center (the inner circle) and includes exposure to the *institutional culture* in which formal structures (academic program) and informal structures (peer climate) are embedded. In the organisational model of socialisation, Weidman (2006) referred to this component as the *normative context* and added a further constituent – (academic) major – representing a given discipline. It is important to define 'norm' to clearly understand a normative context. A common understanding of *norms* across different fields is a "behaviour that is collectively approved or

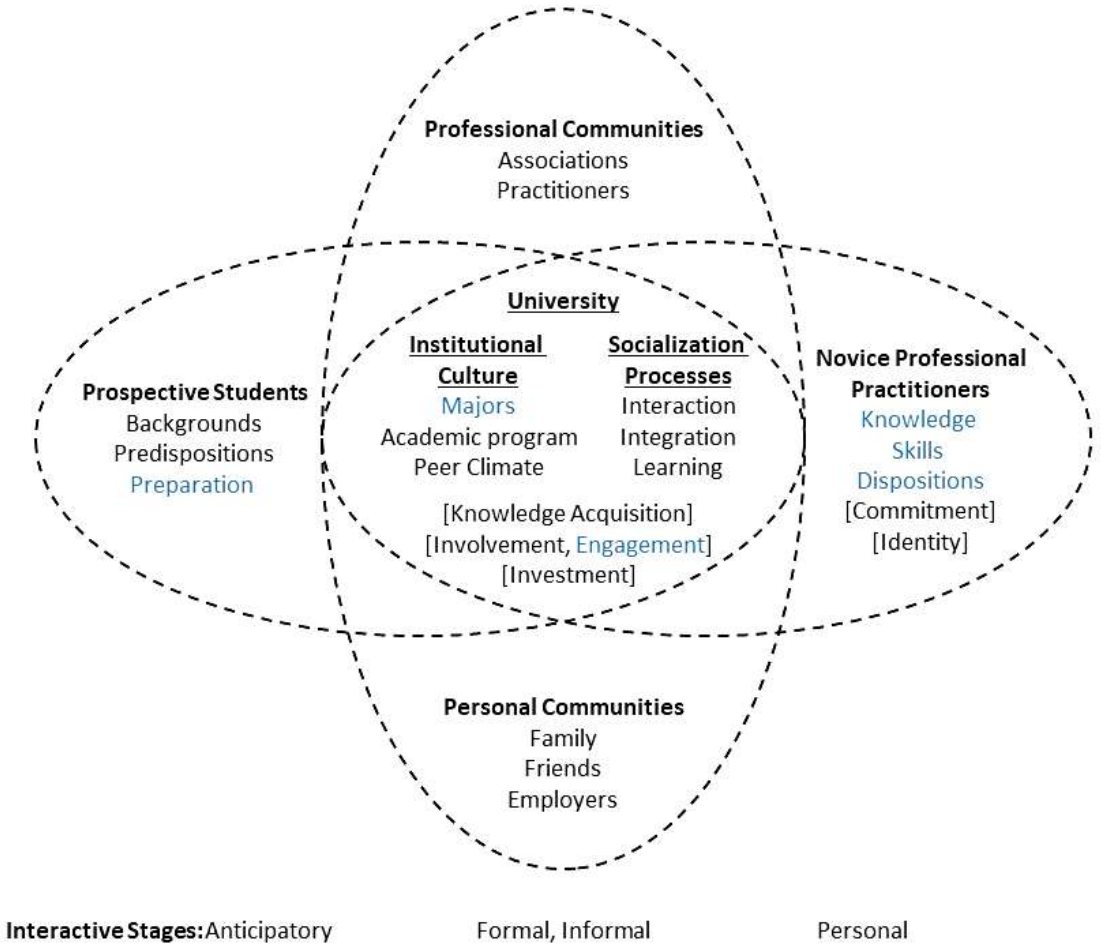
disapproved in a group or population and is enforced by sanctions" (Bicchieri, 2014, p. 3). Understanding these sanctions requires interaction with individuals who adhere to those norms (Bicchieri, 2014). During the period of doctoral enrolment, graduate students encounter an environment in which norms and requirements are transmitted to them formally, in addition to the tacit knowledge encountered informally, mainly through interaction with colleagues and peers. Hence, "personal and professional communities often provide strong normative contexts for human social behaviours" (Weidman, 2006, p. 258). Compliance with the normative context is required for social integration. Universities have control over the institution's culture only (Weidman et al., 2001). The faculty develops the norms and standards of teaching, research, and relationship among academics and curriculum within the boundaries of the broader disciplinary community and its practices. However, as individuals who enter college are adults, their participation becomes voluntary (Weidman, 1989). Therefore, they continue to personalise their experiences by adapting, modifying, maintaining, or rejecting them. This has important implications for socialisation. For example, students who deny the institution's norms might not obtain a legitimate position in their academic communities.

The theorised model proposes four other components surrounding the central part, which are external to higher education institutions: student background, personal communities, disciplinary/professional communities, and career/life cycle development. Weidman et al. (2001) argued that students could select these of their own accord. *Student background* includes the attributes of the entering students at enrolment (preparation, predispositions, aptitude, agency, socioeconomic status (SES), race/ethnicity, gender identity), and prior academic preparation. Students' entrance to all disciplines and professions depends on programs and institutions, which dictate certain requirements and exercise exclusion criteria.

The next two components are two types of communities that Weidman et al. (2001) consider external to higher education institutions. *Personal communities* consist of family and friends (on and off-campus) and employers outside academic circles whose expectations may or may not be in line with those of the students in the doctoral programme. The socialising influence of family and friends is longitudinal, as it starts before entry into higher education and continues throughout college and beyond. *Disciplinary* and/or *professional communities* are prospective communities for which the students prepare themselves during their studies. These communities include practitioners who serve as role models for the students and associates responsible for developing admission, academic and professional standards. Moreover, they

significantly affect the curriculum by endorsing standards for professional practice and licensure (Austin & McDaniels, 2006).

Figure 2.1. *Graduate and Professional Socialisation Model (Adapted from Weidman et al., 2001; Widman, 2006)*



SOURCE: Adapted from Weidman, Twale, & Stein, *Socialisation of Graduate and Professional Students in Higher Education: A Perilous Passage?* ASHE–ERIC Higher Education. © 2001. Reprinted with permission of John Wiley & Sons, Inc.
* Elements of the Weidman's (2006) Organisational Socialisation Model are indicated in blue colour.

The last component of the model representing socialisation outcomes is referred to as *novice professional practitioners*, which signifies "graduates move into the novice professional phase of their career development" (p. 38). In this phase, graduate students' socialisation is characterised by their "commitment to and identification with the chosen professional career" (pp. 38-39). Weidman et al. (2001) emphasise that social roles cannot be transferred, but a commitment to a role that has been oriented both normatively and individually can shape the individual's identity. In his conceptualisation of organisational socialisation, Weidman (2006) made the socialisation outcomes more explicit and defined them as knowledge, skills, and dispositions, including a commitment to the institution or a career and other personal values and orientations that shape one's identity. Although he did not define the terms knowledge, skills and dispositions, he referred to the two former terms as technical and the latter as moral dimensions of socialisation.

Weidman et al. (2001) summarised the socialisation processes in four phases that corresponded to the four stages of socialisation developed by Thornton and Nardi (1975) (explained in Section 2.2). They defined socialisation as a process whereby the novice student:

(1) enters the graduate educational program with values, beliefs, and attitudes about self and anticipated professional practice;

(2) is exposed to various sociali[s]ing influences while pursuing a graduate degree, including normative pressures exerted by institutional culture through faculty and peers as well as by society, professional organisations, professional practice, and personal reference groups;

(3) assesses the salience of the various normative pressures for attaining personal and professional goals; and

(4) assumes, changes, or maintains those values, aspirations, identity, and personal commitments that were held at the onset of the sociali[s]ing experience. (p. 36).

These stages correspond to the interactive anticipatory, formal & informal and personal stages of socialisation that were used in this study to frame the research questions and investigate the experiences of international students throughout their candidature. Weidman et al. (2001) also proposed socialisation processes, including interaction, integration and learning, at the center of the model. These three processes state that "graduate students coming into the academic

program experience its culture and are sociali[s]ed into their chosen professional fields through learning, interaction with faculty and peers, and integration into its activities" (p. 38).

2.3.2. The core elements of the Weidman et al.'s model

Weidman et al. (2001) depicted socialisation as "'an upward-moving spiral' carrying the neophyte through recurring processes toward the goal of professionalization" (p. 5). In their view, achieving this goal is assisted by four core elements: knowledge acquisition, investment, engagement and involvement.

Knowledge acquisition refers to the attainment of both cognitive and affective knowledge. Cognitive knowledge is a kind of formal knowledge tending to be "written, listed, stated directly and explicitly" (Thornton & Nardi, 1975, p. 876) and related to program and course requirements. Affective knowledge, expressed less formally, contains an awareness of normative expectations related to professional roles, and a realistic evaluation of personal capabilities to perform professional roles effectively. During socialisation, the knowledge gained by novice graduate students moves from general to more specialised. The acquired knowledge is thought to lead to identification with the professional role.

Investment is related to the development of role identity and commitment. According to Weidman et al. (2002), "to invest in a role is to commit something of personal value such as time, alternative career choices, self-esteem, social status, or reputation to some aspect of a professional role or preparation for it" (p. 17). Similar to knowledge acquisition, whose accuracy determines its value, the value determines the effect of the investment process that the novice places on the investment action. Relationships with academics and community members in the program and commitment to the program's goal are critical to investment.

Engagement is a component adopted from Weidman's (2006) Organisational Socialisation Model. Engagement is present in the four developmental stages of socialisation. At every stage, engagement through the core elements of socialisation results in the incremental acquisition of knowledge, investment and involvement in the faculty's culture and program, especially through mentoring and supervision of graduate students' work (Weidman et al., 2001). Engagement indicates attachment (or sense of belonging) and integration into HEIs' social and academic spheres (Tinto, 1993).

Involvement relates to students' level of involvement or immersion in their collegial environment and programs' formal and informal structures and their desire to try on

professional roles. By interacting with academics and colleagues, novices are exposed to professional attitudes and ideologies (Weidman et al., 2001). Then, professional role identification occurs as they are more involved in the role and ponder the meaning of their participation. This suggests that although mentors or faculty members might be role models for the novices initially, "they have the power and potential to modify the standard socialisation process as they evaluate their progression through it" (Weidman et al., 2001, p. 18).

These four elements helped describe the doctoral students' experiences and facilitate the discussion of findings from socialisation perspectives.

2.4. Socialisation of international students into doctoral education

This study examines the socialisation of international students, and their sociocultural background is assumed to affect their experiences during the program. As explained in chapter one, with the rise of globalisation, many students sought graduate studies across national boundaries (e.g., Nerad, 2010). Soon, the presence of international students in HEIs, specifically in English-speaking countries, became the norm.

Regardless of nationality, the socialisation of doctoral students is a complex and multi-layered process. However, there might be additional layers of complexity when dealing with the socialisation of international students. Lee (2019) contends that successful socialisation or enculturation occurs when students are able to feel and work comfortably on three levels: the discipline, the working milieu (for example, the academic department and the university), and the culture of the wider society. For international students, socialisation into the culture of the new society might be a long process requiring re-socialisation or adjustment to new norms, values, and behaviours. Some of the norms, values and behaviours are tacit and cultural. They are difficult to observe and verbalise because they reside in the human mind, relations, and actions; therefore, understanding them requires assimilation and integration into the host culture (Weidman et al., 2001).

The immediate socialisation into the linguistic, social, and cultural milieu of the host country is particularly critical at the doctoral level, where there is a strong emphasis on academic and social interaction across various spaces and over time (e.g., Casanave & Li, 2008). Since international students frequently complete their degree in an additional language, usually English, an important strand of inquiry has placed *language* at the heart of the socialisation process (e.g. Duff, 2010; Schieffelin & Ochs, 1986). This has led to the establishment of the Second Language Socialisation theory stemming from the over-arching socialisation theory,

derived from the pioneering work of Schieffelin and Ochs (1986). This theory has the widest application in the field of Second Language Education, where the main subject of inquiry is language. Hence, this is not used as the main framework in this study; however, the cultural and linguistic factors will be considered if they contribute to a better understanding of international students' experiences in an English-speaking country.

Casanave and Li (2008) argued that when exploring the socialisation experiences of international students, the two-fold socialisation proposed by Golde (1998) should contain an additional layer. By proposing the term "triple socialisation", they explained international students socialise into "(i) the role of graduate students), (ii) a profession, and (iii) a language and culture that their mainstream peers have been immersed in for a lifetime" (p. 3). Likewise, other scholars have stressed the consideration of language and communication elements (Li & Collins, 2014) as well as cultural differences (e.g., Gardner, 2008a) as a distinguishing feature of different groups of students. These factors might affect the overall socialisation experiences of international students.

In addition to the characteristics of international students, there are also influential characteristics of universities. An increase in the population of non-traditional students (e.g., married students, students of different ethnicities, etc.) in higher education institutions has increased the need for accounting individualistic and unique characteristics of the students and the potential effect of these characteristics on their overall experiences. Therefore, socialisation models which aim to celebrate diversity and contribute to the development of equal socio-cultural settings for doctoral students should account for students' various linguistic and cultural backgrounds.

2.5. Conceptualisation of socialisation in Education

Socialisation of doctoral students is typically associated with a disciplinary culture because, norms, values and behaviours to which students should socialise, vary from discipline to discipline. The culture of the discipline should not be mistaken for the institution's culture because the latter is a collective culture that provides a point of reference for interpreting behaviours on and off-campus (Wang, 2007). By contrast, the disciplinary culture is an amalgamation of individuals and their practices in every department, which produces a distinctive local culture (Golde, 1996, 2005). Conceiving Education as a discipline helps investigate the socialisation of postgraduate students into this specific disciplinary culture. Thus, in agreement with other scholars (e.g., Becher & Trowler, 2001; Richardson, 2006;

Wang, 2007), this study approaches Education as a discipline while acknowledging that drawing on knowledge of other disciplines is an accepted norm in Education. Also, following Lee (2019), discipline is conceived as "a field of study that has its own sets of problems, and questions, knowledge bases and approaches to inquiry" (p. 85).

Socialisation of doctoral students is best understood within the peculiar context of every discipline. "Disciplines and professional fields also vary according to the structural engagement of graduate students and the resulting development of identity with and commitment to corresponding professional roles" (Weidman et al., 2001, p. 55). Every discipline's normative expectations and values may reinforce particular practices but challenge others. For example, it is common for Education to draw on knowledge from different disciplines, causing many scholars to consider it interdisciplinary. Wang (2007) supports this practice by asserting that "participation of different disciplines provides contents and experts for integrating knowledge, which makes educational practice more realistic and more resourceful" (p. 72).

On the contrary, Education's reliance on various other disciplines such as psychology, politics, sociology, and philosophy has long been the subject of debate. This has caused some critics to question the legitimacy of Education as a discipline (e.g., Pietig, 1975). These critics believe that the three fundamental characteristics of established disciplines – disciplines are independent concept systems, have their own research methods, and propose their own objects of research – are not adequately realised in Education. Some other scholars, such as Wang (2007), agree that Education is progressing towards an independent position. On the other hand, the conceptualisation of Education as a discipline is also robust and founded on extensive literature. Richardson (2006) argues that Education, like any other discipline, has "its own set of problems, questions, knowledge bases, and approaches to inquiry" (p. 253). For Lee (2019), "Education is an example of how one discipline can permeate every other one" (p. 92). Integration of knowledge from different disciplines in Education has caused many scholars to consider it interdisciplinary by nature and that this interdisciplinarity is advantageous. Wang (2007) supports this view by asserting that "participation of different disciplines provides contents and experts for integrating knowledge, which makes educational practice more realistic and more resourceful" (p. 72). However, to maintain scholarly integrity, Education students need to be "able to defend their paradigm to all-comers" (Lee, 2020, p. 93).

The processes of socialisation into the culture of Education have both intellectual and practical objectives. This requires graduate students to build scholarship through research and publication and engage with pedagogical practices, specifically those who desire to pursue teaching careers. Intellectual objectives are typically obtained through formal learning and are aligned with the 'student' role of the candidate. Pedagogical and professional goals are achieved through involvement in academic professions and align with the candidate's broader 'scholar' role (Gardner et al., 2007).

Another critical issue concerning socialisation in the field of Education is related to the objectives and prospective career paths for graduates. Gardner et al. (2007) argue that, in the North American context, the complexity and ambiguity inherent in the objectives of Education have been addressed by distinguishing between an Ed.D (Doctorate of Education) and a PhD with the former degree training individuals to become a practitioner in Education. In contrast, the latter degree develops individuals for a researcher role. Most graduate programs in Education in other countries like Australia are oriented toward research degrees that require advancing research competencies. However, students holding a PhD in Education may become teachers, researchers or opt for an entirely different career. This, accordingly, raises the problem of what a PhD in Education should entail: training to teach, training to do research or training for skills outside of academia. This requires more understanding of what doctoral students themselves expect to get from their PhD.

2.6. Formal and informal structures within an institution

As described earlier in this chapter, socialisation in graduate education is influenced by several complementary personal and institutional factors. Some of the most significant aspects of socialisation, including the role of supervision and the Faculty environment, are institutional by nature since they are related to the social and material structure of the universities and are monitored by the Faculty and departments (Weidman et al., 2001). The present study examines significant structures that affect the formal and informal socialisation of doctoral students (Weidman et al., 2001). To this end, the two following subsections provide an account of formal and informal socialisation processes. Major formal socialisation in doctoral research programs is supervision and student-supervisor(s) interaction, and a major informal structure is Faculty set-up (including the embedded peer culture). These two important stages are described in the following subsections.

2.6.1. Doctoral student supervision

The most significant experiences of doctoral students in a doctoral program are embedded in supervision (e.g., Lee, 2008; Gunnarsson et al., 2013; Sverdlik, Hall, McAlpine, & Hubbard, 2018). Supervisors are among the most important socialising agents in HEIs (e.g., Gardner, 2009; Weidman et al., 2001). In some disciplines such as art and science, a student's fate remains totally in the hands of the faculty who monitor who can get entry to the program, get access to "the closely guarded body of knowledge they possess", and be certified as a professional (Weidman et al., 2001, p. 59). Traditionally, supervision is aimed at fostering future academics as the primary goal of doctoral studies (e.g., Akerlind & McAlpine, 2010; Gardner, 2006; McDaniels, 2010; Saddler, 2008). As a result, the apprenticeship models of supervision in which supervisors functioned as a mentor had the widest application (e.g., Brown, Collins, & Duguid, 1989; Ives & Rowley, 2005).

However, the shifting landscape of the PhD resulted in scholars questioning the traditional doctoral pedagogies and supervision practices. With criticisms directed toward narrow conceptualisations of a PhD as a research or learning experience (e.g., Hasrati, 2005), which comes with "progressive reduction of uncertainty" (Phillips & Pugh, 2000), some scholars specifically criticise supervision practices. Grant (2005) criticises the configurations of supervision that indicate imbalanced power relationships, using metaphors such as 'master-slave'. Similarly, Lee (2019) argues that even the term 'supervision' implies that one party (the supervisor) is more powerful and knowledgeable than the second party (the student). Carter, Kensington-Miller and Courtney (2016) point to challenges such as job erosion that entails the changing and expanding role of supervisors in supporting students to develop as "practice-based researchers" who are able to contribute to the knowledge economy (p. 20).

A significant dimension of doctoral supervision is related to the student-supervisor relationship. Literature is loaded with studies attributing overall satisfaction with postgraduate studies to the constructive supervisory relationships among students and supervisors (Morris, Pitt, Manathunga, 2012a; Pyhältö et al., 2015; Robertson, 2017). Nevertheless, notions that have excessive reliance on students as the consumers of knowledge are not constructive because they ignore the students' agency and construct education as a commodity (Lee, 2019). Conceptualising students as 'co-enquirer' or 'co-producer' (Watson, 2010) or two-masters (Morris et al., 2012) can place students and supervisors in a more balanced position where both parties articulate their expectations and compromise on the task procedures. Moreover, the

greater number and diversity of doctoral students has resulted in more supervision varieties such as cross-cultural supervision (Kim, 2018) because "supervision must negotiate the consequences of globalisation" (Carter et al., 2016, p. 13).

Traditionally, supervision in the UK and Australia was a one-on-one task whereby a student was paired with a single supervisor through metaphors such as apprenticeship (e.g., Harrison & Grant, 2015; Lee & Green, 2009) to conduct research in traditional academic settings (Morris et al., 2012). However, industry-related research where students collaborate with an industry partner in industry settings have been accelerated (Morris et al., 2012). Likewise, supervision with a team of academics has been gaining momentum (e.g., Lee, 2020; McAlpine & Norton, 2006; Morris et al., 2012; Watts, 2010). The growing number of HE students and interdisciplinary research that requires the incorporation of different expertise has increased the demand for more than one supervisor (Morris et al., 2012; Watts, 2010). "Ideally, shared supervision can cause an appropriate division of skills and knowledge and a helpful learning experience for the academics as well as the students" (Lee, 2020, p. 30). Timely completion of a thesis is a highly reported advantage of team supervision (e.g., Johansen et al., 2019, Akerlind & McAlpine, 2017; McAlpine, Castello, & Pyhaltö, 2020; Manathunga, 2012b).

Scholars are now more aware of differences in supervisory practices, the objectives they fulfil, the alignment of supervision goals with those of the PhD studies, and the roles supervisors and students play in a specific supervision pedagogy. Scholars like Lee and Green (2009) and Harrison and Grant (2015) problematised concepts such as apprenticeship, authorship and power dynamics for being 'limited' and 'Western, and suggested more concrete approaches to supervising research students should be adopted. In addition, Lee (2019) argued that "the academics' approach to creating a research environment will have an impact on how students will do their research, and that the academics' approach to teaching will impact how those students develop" (p. 23). This framework was adopted for examining the experiences of international doctoral students and is detailed in the following section.

2.6.1.1. Lee's framework of approaches to supervision

This study looks into supervision as a formal structure within the holistic socialisation framework. It draws on a supervision framework developed by Lee (2008, 2020) and considers variations in students' approaches to learning and supervisors' approaches to teaching.

This framework has been constructed based on first-hand interview data of supervisors from research-led universities in the UK and Harvard University in the USA (Lee, 2019). The main

reason this framework can be used along with Weidman et al.'s (2001) graduate and professional socialisation framework is that it "enables examination of different values, beliefs and concepts" (Lee, 2020, p. 32). It also allows discerning match-mismatch between the expectations of the student and supervisor. It is noteworthy that these approaches permeate and complement each other. Figure 2.2 summarises the supervisor's activity, knowledge and skills regarding the five conceptual models of supervision and students' tentative reactions to these approaches.

The functional approach is the most common approach to supervision. It is an institutional approach that responds to improving the completion rates, moving towards a knowledge economy, and meeting the requirements of the funding bodies (Lee, 2019). The core value of this approach is 'performativity' through exact measures such as timelines, records, milestones, and regular meetings at specific intervals are necessary to ensure the project is 'on track'. This approach prescribes a detailed list of responsibilities for supervisors and students to ensure effective supervision. A supervisor using this approach acts professionally and is concerned with following the program's structure, meeting the deadlines, providing rules and regulations, guiding, ensuring quality assurance, and monitoring the whole research project.

The enculturation approach is associated with membership and developing a sense of belonging to a disciplinary community. Since enculturation requires the acquisition of professional, interpersonal and tacit knowledge and rules that are not explicitly taught, it is usually attributed to the apprenticeship model. A supervisor using this model will model the correct behaviours and values, such as respect for different perspectives that may increasingly become known and internalised by doctoral students. Supervisors facilitate their students' enculturation by offering opportunities for participation in various academic activities, such as attending conferences or debilitate this process by acting as gatekeepers to other communities. A common problem with this approach is the ownership of the final result, as community members often contribute to each other's work. If not managed properly, people from different cultural backgrounds can encounter challenges in integrating with the community (Lee, 2019)

The critical thinking approach is focused on doctoral students' intellectual development. Critical thinking is traditionally a central element of doctoral supervision because it involves higher-order thinking skills such as evaluation, problem-solving, and reflection. Critical thinking adds 'rigour' to the students' work, and "it is the argument that is most important" (Lee, 2020, p. 44). A supervisor using this approach helps their students critically examine their

work by questioning to improve the quality of the argument. Questions such as ‘what are the key concepts and how they are linked?’, ‘What patterns are emerging?’, and ‘What are the implications of your findings?’ can provoke reflection (Lee, 2019).

The Emancipation approach accounts for learning as a transformative experience, that is, “an experience which enables the learner to approach their world differently and more positively and which changes (or transforms) the learner in its wake” (p. 148). (Lee, 2020, p. 42). A supervisor following the Emancipation approach acts as a ‘nondirective mentor’ who offers both challenges and support. They may even allow the student to experience failure to develop resilience and self-efficacy. All interventions should be facilitative (not authoritative) and directed toward enabling students to direct their projects, make informed judgments, and be self-aware. Mentoring stresses self-experience as an essential facet of learning, which eventually helps an adult move to ‘autonomy’ or ‘self-actualisation. However, pure mentorship in doctoral supervision is hard to achieve because a mentor relationship is voluntary, whereas supervising is functional. A supervisor working in the emancipation approach does not try to keep their students within their discipline, whereas an enculturation-oriented supervisor’s main goal is to do so. However, for finding an appropriate career path, a supervisor with the enculturation approach may move toward the Emancipation approach (Lee, 2019).

Creating a relationship is an approach to supervision characterised by ‘friendship’ and ‘trust’ (Lee, 2020, p. 156). Although there are clear boundaries between students and supervisors, they may, for instance, introduce each other to their families. However, the relationship should not become too personal and more important than the task (Clarkson, 1995). Creating a relationship is more important to students than supervisors (Lee, 2019). A positive student-supervisor relationship is a salient indicator of students’ satisfaction with the program, and interruption in the relationship creates problems for the student (e.g., Ives & Rowley, 2005).

To be effective, the student and supervisor clarify the boundaries and expectations to work together harmoniously for a long time. ‘Emotional intelligence’ and ‘flexibility’ are important characteristics of supervisors who work within this approach since they assist the student in managing conflicts and noticing if they are experiencing some kind of strain. In terms of international students, awareness and respecting cultural values can strengthen the student-supervisor relationship and affect the whole experience in a positive way.

Figure 2.2. *A framework of approaches to research supervision*

PROFESSIONAL → PERSONAL

	Functional	Enculturation	Critical thinking	Emancipation	Relationship development
Supervisor's activity	Rational progression through tasks Consultation Techno-rational	Gatekeeping Introductions to people and exemplars of high-quality work	Evaluation challenge Enquiry-based partnership	Mentoring Supporting constructivism	Supervising by experience Developing a relationship/team
Supervisor's knowledge and skills	Directing Leading Negotiating Project management	Diagnosis of deficiencies, coaching	Argument, analysis Synthesis	Facilitation Reflection	Managing conflict Emotional intelligence
Possible student reaction	Logical Information giving Organised Obedient	Role modelling Apprenticeship	Constant enquiry Synthesis, fight or flight	Personal growth Reframing	A good team member. Emotional intelligence

Source: Adapted from Lee (2008a, 2000b)

For example, a common problem with students is their difficulty in using the feedback given to them (e.g., Kim, 2018; McAlpine, 2017); however, when feedback comes from a well-intended supervisor, it is well perceived by the student. Lee's (2020) approaches to supervision are adopted in this study to examine international doctoral students' experiences with the main formal structure (supervision) of a doctoral program. This framework will be used alongside Weidman's framework because it considers students, supervisors, and institutions to show that a holistic approach to supervision benefits all (Lee, 2019).

2.6.2. Institutional environment and peer climate

One of the neglected aspects of socialisation is the perceived characteristics of the Faculty or department that is referred to as 'peer climate' in Weidman et al.'s model (2001). Whereas socialisation of students through formal structures such as supervision and interaction with supervisors has been the subject of much enquiry, students' experiences with informal structures have remained under-investigated. As discussed earlier, the cognitive dimensions of socialisation are transmitted to the students through formal structures. However, the affective aspects of socialisation are often implicit and not articulated (Merton, 1975). These informal dimensions are usually related to the professional or scholarly roles of the students. As Weidman and Stein (2003, p. 644) argue:

> The sociali[s]ation of a novice to effective role dimensions and integrating knowledge with professional practice has less to do with the formal structure or explicit goals of a department than with the general climate established by informal contact between faculty and students.

Students often perceive the institutional environment to be positive if a) norms and values are transmitted explicitly and if the program is easy to navigate; b) the environment is collaborative, not competitive; c) opportunities for social interaction with faculty and peers are abundant, d) they are student-centred rather than institution-centred; e) there is a harmony between the student role and the professional role of the students; and f) the environment enhances a sense of belonging for under-represented or other different student groups (Antony, 2002; Merton, 1975; Tinto, 1993; Weidman, 1989). Students' perception of the institutional environment is an indicator of their participation in scholarly activities (Weidman & Stein, 2003). Therefore, it is essential to establish a supportive environment that encourages interaction with colleagues and participation in scholarly activities.

Tinto's (1993) model of Student Departure (i.e., attrition) indicates that negative experiences with the institutional environment, particularly after entry into the program when the students'

attitudes are being shaped, may cause a decision to withdraw. Positive experiences heighten the chance of integration into the program and, as a result, improve the program efficacy (Pascarella & Terenzini, 2005). Therefore, it is essential to identify the elements of the departmental climate that affect students' socialisation and the program efficacy (Weidman & Stein, 2003). Likewise, understanding the reciprocal effect of students on the faculty is important (Antony, 2002).

2.7. Conclusion

The present study takes a holistic approach to exploring the experiences of international students. This opens up the possibilities of delving into institutional, individual and socio-cultural factors influencing the socialisation processes of international students enrolled in a doctoral program in the field of Education. The study draws on two frameworks introduced in this chapter. First, Weidman et al. (2001) Graduate and Professional Socialisation model is utilised as an overarching framework to underpin and guide the study. This framework takes account of the reciprocal relationship between institutional and individual factors. One of the main components of the framework is consideration of students' demographic and academic and professional background. As argued by Weidman et al. (2001), the socialisation processes that each student goes through should be understood because some experiences are "perceived differently by students with different characteristics" (p. 5). Thus, by investigating the students' values, aspirations, and expectations at both pre-entry and post-entry socialisation, this approach gives equal weight to individual and professional factors. This study draws on one of the main conceptualisations of socialisation that examines its outcomes regarding the KSD acquired during the program. Unlike excessive dependence on the concept of 'identity' and its transformation to explain socialisation outcomes similar to many scholars, inquiry about KSDs fostered in the program signals whether they have the expertise required to enter their desired professional career after graduation. Second, Lee's (2020) approaches to supervision framework are used to examine international doctoral students' experiences concerning supervision as a main formal structure under scrutiny in this study.

CHAPTER 3. EMPIRICAL LITERATURE REVIEW

3.0. Introduction

There is an extensive record of research in the US, UK, Canada, and Australia on graduate students' cognitive and affective lives in HEIs doctoral education, but literature on students' experiences from socialisation perspectives emanates predominantly from the US literature. The literature reviewed in this chapter draws on empirical studies that applied Weidman et al.'s (2001) as well as other socialisation frameworks to explore different dimensions of students' experiences in doctoral education. There has been a tendency to explore students' experiences in postgraduate programs holistically in the US context. Since its formulation in 1974, Weidman's (1974, 1989) model of undergraduate socialisation has been the most frequently used theoretical framework to address the experiences of students across a wide range of disciplines such as Engineering (Hughes & Hurtado, 2013) and Nursing (Holley & Taylor, 2009; Goodfellow, 2014). The extended version of the model – developed for application at the graduate level (Weidman et al., 2001) has also remained one of the most comprehensive approaches to understanding doctoral students' experiences in graduate programs (e.g., Weidman et al., 2001).

However, until recently, most of the scholarly endeavours undertaken in contexts other than the US explored cognitive, psychological and structural/institutional variables, which appear to influence students' experiences in doctoral programs. Some of the most intensively explored variables include doctoral students' attrition (e.g., Golde, 2000; Lovitts, 2001), disciplinary culture (e.g., Gardner, 2008a, 2008b, 2010; Gardner, Jansujwicz, Hutchins, Cline, & Levesque, 2012), doctoral supervision (e.g., Grant, 2010; Lee, 2008), graduate or transferrable attributes (Barrie, 2006; Gardner et al., 2007; Kensington-Miller et al., 2018), student-supervisor relationships (e.g., Akerlind & McAlpine, 2017; Deuchar, 2008; Gunnarsson, Jonasson, & Billhult, 2013; Helfer & Drew, 2019), peer interactions (Nerad, 2010, Flores & Nerad, 2012), and (re)formation of scholarly identity (e.g., McAlpine, Jazvac-Martek, & Hopwood, 2009; Sweitzer, 2009), and career aspirations of doctoral students (e.g., Cook, Crane, Kinash, Bannatyne, Crawford, Hamlin et al., 2021; Moss & Frieze, 1993; Powers & Myers, 2017).

Over time, an extensive literature has developed on how socialisation into graduate school and a professional career occurs. The first section of this chapter reviews empirical studies exploring and reporting graduate students' most common career aspirations. The following sections focus on the most influential socialising factors (e.g., personal, relational, institutional, etc.) contributing to doctoral candidates' pursuit of a specific career. In this sense, the second section addresses the effect of disciplinary culture on doctoral student socialisation by reviewing empirical studies that explored the socialisation of students a) across different disciplines and b) in the field of Education, in particular. The third section reviews empirical studies that examined the effect of the Faculty environment on doctoral students' socialisation. The next section reviews studies that addressed students' engagement in formal structures, mainly supervision and interaction with the Faculty. The final section focuses on research that explored doctoral students' interaction with peers and other personal communities and PD activities. The chapter concludes with describing the gaps identified in the literature.

3.1. Career aspirations of doctoral students

Students' career aspirations have come under more critical scrutiny in recent years (e.g., Cook et al., 2021; Ko & Jun, 2015; Levine & Hoffner, 2006; Nguyen, 2018). Research specifically examines how globalisation and doctoral programs change students' career aspirations. Most of the studies address the career aspirations and/or expectations of undergraduate and graduate students in the context of the vocational anticipatory socialisation framework (Jablin, 2001). These studies aim to identify the processes through which individuals receive messages about different careers from their environment that influence their career aspirations. Powers and Myers (2016) administered a career interest survey to 873 undergraduate university students from a variety of disciplines (e.g., psychology, biology, economics, etc.) in the US. The participants reported their teachers or professors as the most significant sources, providing career details. Mothers were also found to be conveyers of messages that aimed at enhancing their children's fulfilment (e.g., "My mom told me that in America to be respected I should become a lawyer"). On the other hand, friends were the main sources of negative messages about careers (e.g., "My field is very competitive, so there is a high chance I may not be able to do what I want to do").

Given the effect of individual characteristics on career choice, Grim et al. (2021) examined factors that contributed to the career aspirations of doctoral students of colour. A sample of 2,717 doctoral students of colour across the US completed a survey on graduate student

experiences. Findings indicated that the students aspired to pursue a teaching career at the beginning of their doctoral studies, but some of them withdrew from this pathway at the personal stage of socialisation. Students with prior scholarship and publication at the anticipatory socialisation reported having more tendency to follow a teaching career because they had already developed a scholarly identity and disrupted the historical racial discriminations or inequalities against teachers of colour. In this study, socialisation experiences did not significantly impact the students' teaching career aspirations. By contrast, the teaching experiences of the students, mentorship during their doctoral studies, and their relationship with the Faculty were factors that enhanced their desire to maintain a teaching career.

In the context of Australia, a dedicated strand of research known as graduate employability is concerned with addressing the aspirations of doctoral students mainly in the form of national surveys and independent from the socialisation experiences of students. Edward, Bexley and Richardson (2011) reported on the National Research Student Survey (NRSS) findings on career aspiration and motivations of 11,710 higher degree graduate students and early career academics in Australia. The majority of the participants were local Australian students who reported considering engagement in an academic career after graduation (83%) despite their high rate of negativity about the availability of academic jobs. These students viewed an ideal academic position as one with a balance of teaching and research. Findings indicated that over 45% of the students had a full-time job, and over 9% had part-time or casual jobs before they commenced their research degree. The majority of students with prior full-time jobs were from the fields of Education (63.9%) and Architecture (64.8%), whereas students from Science were more likely to have a straight transition to graduate study from the undergraduate degree. Overall, more than half of the students saw the academic position as a medium- to long-term prospect. Even for the rest of the students who were not in favour of academic careers inside the Education sector, it was important to find a job closely associated with their research degree. Observing supervisors and engagement in teaching during their studies were the main reasons these students picked up the teaching pathway. Yet, interestingly, more than half of them were not aware whether their institution offered any teaching training. Therefore, despite a high desire to follow a teaching career, many students could get training on teaching skills not until they secured a full-time teaching position because research programs were highly research-oriented.

In a recent study, Cook et al. (2021) conducted a secondary analysis of data by Crane et al., (2016) collected from a large sample of graduate students in Australia. Using focus groups, interviews and feedback breakfasts, these scholars examined the employability career prospects of 319 postgraduate students in 26 universities across Australia. Findings indicated that postgraduate students preferred to consider doctoral studies as joining the scholarly community and a stage in their career rather than simply transitioning from the undergraduate to the postgraduate phase. From the students' perspective, employability was one of the key factors embedded in the overall graduate experience. However, they reported "(1) lack of career-related professional development of staff and students; (2) insufficient practical application of curriculum; (3) few opportunities for paid tutoring in the study area; (4) no effort to accommodate and map relevant paid student work (other than tutoring) into formal studies; and (5) no formalised networking with student peers, as professionals, through created opportunities for peer engagement" (p. 160). Students were overall pessimists and frustrated about finding a prospective career.

Besides the survey studies that provide large data useful for future re-designing and planning of the programs in line with goals of the PhD including employability of the graduates, a group of scholars used qualitative methodologies to provide a detailed account of change in students' aspirations. Nguyen (2018) drew on studies of space, transnationalism and imagination to explore the lived experiences of 38 Vietnamese students who undertook their doctoral studies across various disciplines in Australia. The main focus of the study was to identify any transformation in the participants' identity and its effect on their life and future career choice. Data collected using semi-structured interviews revealed that the students underwent a sustained process of identity reconstruction. A combination of global forces, national forces and students' personal, professional and social self-desires extended the scope of their aspirations. The participants were found to be quite positive, proactive and flexible about their career aspirations and wanted to maintain transnational connectivity between their country and the world regardless of whether they would decide to stay in Australia or return to their home country. However, there were some tensions between the personal and professional identities of the (specifically female) students whose future aspirations were dependent on their partner's desires and employment situations.

Studies reviewed in this section suggest that teaching and research-oriented academic careers have remained the main aspiration of students following a graduate degree. It also appears that both doctoral students and the Faculty are aware of the changing realities and the increasing

scarcity of academic careers, but the research programs, supervisors and the Faculty are not yet able to accommodate other alternatives (Edward et al., 2011). Until recently, most of these studies were survey-based and addressed students' aspirations divorced from their socialisation experiences during the program (cf. Cook et al., 2021; Nguyen, 2018). Also, qualitative studies provide information on students' career aspirations with certain demographics (e.g., Grim et al., 2021; Nguyen, 2018). Therefore, there is little information available on processes during graduate studies that can lead to a shift in the career aspirations of doctoral students. This problem has been mainly addressed in the context of employability, while socialisation theory posits that the pre-entry values, expectations and professional experiences should be studied as a determinant for their post-entry career aspirations.

3.2. Disciplinary culture

3.2.1. Socialisation of doctoral students across different disciplinary contexts

Disciplinary culture and context is a variable that plays a critical role in socialisation into doctoral education. Traditionally, socialisation in higher education contexts has been mainly perceived as learning to adapt to a particular discipline's attitudes, norms, values, skills, knowledge, and common practices (Gardner, 2010). This is true because "disciplines are cultural phenomena: they are embodied in collections of like-minded people, each with their own codes of conduct, sets of values, and distinctive intellectual tasks" (Becher, 1981, p. 109). In this sense, what is 'legitimate' in one discipline may be 'illegitimate' in another (Hasrati, 2005). A domain-specific focus brings more precision to the learning and activities that occur within a bounded context. Also, the type of norms, values and environment cultivated by each discipline does influence the success, retention and overall experiences of students. For example, peer-focused laboratory groups in STEM disciplines have been found to facilitate students' learning and reduce the need to have a supervisor whereas performing individual research in the humanities disciplines reinforces reliance on supervisors for each doctoral candidate (Gardner, 2008b). To cite another example, applied sciences such as Geography and Communication place a high value on skills needed outside academia, whereas Humanities fields such as Anthropology and History that are academically oriented focus on career preparation and job search (Morrison, Rudd, Zumeta, & Nerad, 2011).

For a few scholars, disciplinary differences are the prime variable, which affects every other variable when investigating doctoral students' experiences. In the US context, Gardner (2007, 2008a, 2008b, 2009a, 2010; Gardner et al. 2012) has extensively contributed to scholarship on

the socialisation of HE students across diverse disciplines. This line of research often incorporates both doctoral students and/or academics as their participants (Gardner, 2010b; Kensington-Miller et al., 2018). A review of these studies shows the processes that facilitate or debilitate the socialisation of students across different disciplines. These findings can be compared with other disciplinary contexts such as Education and help program developers foster and develop activities that have been proven more effective in socialising Education students.

Gardner (2010a) compared the socialisation of 60 doctoral students (of which 50% were international students) across high completing and low-completing disciplines in a research-extensive university in the US. The specific context of completion and attrition in which the departments are situated is essential in understanding students' experiences. The disciplines with the highest to lowest completion rates over 20 years at the institution were communication, oceanography and psychology (above 70%), English (above 50%), mathematics (40%), and engineering (20%). By drawing on socialisation theories and Glaser's (1978) comparative method to analyse the interview data, she identified differences between the lower-completing and the higher-completing departments. The higher-completing departments were characterised by making clear expectations for students, facilitating social and academic integration and providing supportive faculty-student mentoring relationships. Low-completing departments had the least supportive environments. International students comprised the majority of the student population in the low-completing departments. They experienced more negative experiences related to transition, encountered ambiguity in understanding the expectations, and lacked peer support, requiring them to be more self-reliant than students in the higher-completing departments such as psychology.

In a follow-up study, Gardner (2010b) interviewed sixteen experienced academics in five disciplines – history, psychology, oceanography, engineering and a self-designed interdisciplinary program – at a research university in the US to elicit their perception of doctoral student socialisation processes. The three socialisation elements suggested by Bragg (1976) were applied as the units of analysis. These included a) interaction of students with the structure of the academic setting, b) interaction among students in the program and c) interaction between students and faculty members. The findings indicated a consistent goal among the academics concerning the curriculum and programmes and regular visits with their students in both formal and informal settings. Nevertheless, only a few academics acknowledged the importance of interaction among the students. The academics were mainly

concerned with the institutional elements of the programs rather than the interpersonal and developmental elements. They stated that day-to-day interaction with their students was not necessary for socialisation.

Gardner et al. (2012) examined the socialisation of eighteen third- and second-year doctoral students in the context of an interdisciplinary doctoral program. Based on the interview results, students reported a successful transition to the interdisciplinary programs in the anticipatory stage thanks to their prior academic and professional experiences, followed by an intense learning process. In the formal stage, they were trying to balance the breadth and depth of research in multiple fields and their place in it, but they were concerned about language barriers and time constraints. Informal socialisation was understood as students' interaction with peers to understand the implicit professional expectations and share their uncertainties. The personal stage was characterised by the students' desire to undertake a profession outside of academia; however, they lacked clear professional goals in light of their interdisciplinary degree. They also worked under the supervision of professors who had a fixed place in one discipline only. The findings highlighted the intricacy of socialisation in interdisciplinary programs, which combine two or more disciplines due to "language barriers among disciplines, epistemological differences, and structural issues that permeate traditional universities such as reward systems and even the physical boundaries of buildings" (p. 378). This suggested that interdisciplinary programs required a non-traditional arena with a cohesive graduate curriculum and clear goals and expectations.

In a more recent study, Kensington-Miller et al. (2018) explored the graduate attributes that students across different disciplines learn during the program. These scholars were interested in particularly the invisible attributes that "are treated as either 'aspirational' goals of a university, or as personal qualities of students, rather than attributes which can be actively planned for in learning objectives and learned through classroom activity" (p. 11). They adopted a mixed-method design including a survey administered to the students and semi-structured interviews administered to academics across six disciplines – English, Psychology and Chemistry (Science), Dance and Music (Creative Arts) and Law (Professional) – and two employers from each discipline who often recruited graduate students. The identified attributes included competencies that promoted students' learning processes (e.g., autonomous learning), social aptitude (e.g., diversity awareness and collaborative skills) and professional readiness (e.g., time-management and resilience). Although no direct comparison was made across the disciplines regarding the invisible attributes, the authors maintained that these attributes could

be discipline-specific. It is of note that, in some conceptualisations of graduate student socialisation, the invisible attributes may refer to as disposition or habits of mind (cf Weidman et al., 2001).

In sum, the main objective of contrastive studies among different disciplines is to identify the socialisation processes that characterise every discipline. Studies reviewed in this subsection provided evidence that doctoral student experiences in different disciplines are quite diverse because every discipline creates a specific disciplinary context in which certain values, behaviours, and modes of interaction are legitimate. These studies are somewhat monolithic because they revolve around students' efforts to fit into the model of the graduate program and the disciplinary culture that they undertake (Gardner & Barnes, 2007). Although these studies shed light on disparate disciplines' practices, norms, values, and common practices, they did not account for variations found within a single discipline. According to McAlpine et al. (2009), "detailed analysis within a bounded setting is an important first step before we examine disciplinary variation in future work" (p. 99). The following subsection reviews important studies which have addressed the socialisation of doctoral students in the field of Education.

3.2.2. Socialisation of doctoral students into the field of Education

To date, several studies, including doctoral research, have been conducted to better understand doctoral student socialisation in the field of Education or similar disciplines such as Second Language Education (e.g., Austin & McDaniels, 2006; Kim, 2018). The recurring theme in the majority of these studies is the development of academic or scholarly identity by the Education doctoral students as an outcome of socialisation. Examination of doctoral socialisation in the field of Education has been notably concentrated on academic writing as the most advanced skill at the postgraduate level and as a means of presenting new knowledge. The locus of these studies is the acquisition of literacy, interpreted as the ability to write and produce scholarly texts. In other words, writing has been depicted as a fundamental requirement for an individual's socialisation into an academic discipline.

In his study, McArthur (2011) discovered two indications of students' increased scholarly capacities in a study of two male Education doctoral students in a proposal writing course. These indications were first, becoming a legitimate member of discourse communities; second, developing a scholar's voice by exhibiting greater certainty, confidence and authority resulting from understanding the knowledge of the field. Moreover, the development of a scholarly identity was marked by four new habits of mind: willingness to take risks, suspend closure

(facing the problems rather than avoiding them), sustain focused attention on the tasks, accept criticism from senior members and explore alternative ideas. These findings indicate that for Non-native English Speaking writers, however, writing is a more inclusive activity and covers "knowledge of the linguistic, textual, social and cultural features of academic written discourse as well as knowledge of English as used by their academic disciplines" (Ferenz, 2005, p. 340).

Closely connected to writing practices, as one of the main academic and scholarly socialisation activities, are feedback practices. In doctoral education, written feedback on students' writing, such as proposals, dissertations and scholarly papers, has been situated within the broad framework of socialisation and usually the second language socialisation framework (Schieffelin & Ochs, 1986). In this sense, feedback is not viewed as a pedagogical tool but rather as "a platform on which newcomers gradually come to adopt the ways that full-fledged members of an academic community think, behave, and write" (Kim, 2018, p. 3). Students require feedback not only on academic issues but also on adjusting to implicit cultural practices (Carter & Kumar, 2017). In what follows, some of the studies on the socialisation of doctoral students into Education programs are reported.

Inouye and McAlpine (2017) explored how two first-year doctoral students in Education constructed their scholarly identity through writing and engagement with the pertinent feedback and revision, including supervisor feedback on their thesis proposal. In their study, scholarly identity comprised three major components: self-confidence, independence in research thinking, and positioning the self in relation to others. Multiple sources of data, including semi-structured interviews conducted over three months, different drafts of the research proposal, and written supervisor feedback on the drafts, were collected and analysed. The students were agentive in the type of feedback they sought; one of them sought feedback from members of her network in addition to her supervisors' feedback, while the other one incorporated only her supervisors' feedback because of the trust she had in her experience.

Kim (2018) investigated feedback networks of four international students (from Egypt, Israel, Libya, and Korea) in the field of English Education in the first year of their doctoral education undertaken in the US. Data were collected over four months through multiple sources, including the drafts of the participants' papers with written feedback, interviews with the students and their professors, observations of the classes they attended, and documents such as course syllabi. Based on the results, the most prevailing feedback categories were *interaction with content* (29%), such as making recommendations or asking for clarification, and *academic*

writing (17%), such as students trying to control their voice in the text. This finding suggested that the professors mainly aimed to mediate the knowledge and culture that characterised a community to balance their conventional identity with a developing writer identity. For example, repeated feedback, though sometimes frustrating for the students, socialised them into a community where the accuracy of citing was highly valued. Moreover, students were found to reflect on oral and written comments from their course professor, supervisor, reader, and peers to improve the quality of their writing.

It appears from the reviewed studies that improvements in students' performance specifically in writing are taken as the development of a student's identity, suggesting that identity is used as a conceptual tool to indicate the "dynamic view of doctoral students as constantly under construction, change, and revision in relation to an individual's particular circumstances" (Jazvac-Martek, 2009, p. 254). Individuals' identities are often characterised by labels pertinent to social positions or roles that convey certain meanings and expectations in a social system. Labels such as 'doctoral student', 'research assistant' and 'sophomore' contain a set of expectations that needs to be fulfilled by them (Colbeck, 2008). However, "roles are externally defined by others' expectations, [while] individuals define their own identities internally as they accept or reject social role expectations as part of who they are" (Colbeck, 2008, p. 10). As a result, multiple identities or roles might be in play as individuals are usually members of several networks, each with its own set of norms, values and expectations (Weidman et al., 2001). To elaborate, in a study of nine full-time doctoral students in a single Faculty of Education in a Canadian Research 1 university, Jazvac-Martek (2009) observed that the students oscillated between different role identities as a teaching or research assistant, dissertation proposal-writer, and novice researcher. Apart from those student roles, all the participants at some point during the program were able to take on scholarly roles (e.g., presenting at conferences and receiving subject-specific grants), which brought them a sense of belonging to the academic community. Also, most of the students could identify as a teacher by the end of the program because it was the role identity confirmed by the faculty and senior colleagues.

Likewise, Anderson and Anderson (2012) argued that although research programs may not offer 'teaching' practice showing that students do not have to pursue an academic career, they fail to prepare them for responsibilities outside of research, either. These authors examined the socialisation of seventeen doctoral students who were socialised to HE as future faculty members in the field of Education at a research university in the US. The sources of data

included the doctoral students' narratives and semi-structured interviews. Findings confirmed that only the doctoral students working with mentors had the opportunity to familiarise themselves with faculty roles, acquire professional experience for faculty positions, and create a foundation for a prospective scholarship. In contrast, those with no mentorship hardly had any developmental experiences beyond the curriculum and had to rely on their own self-directed teaching and learning.

Based on the studies reviewed in this subsection, advanced academic literacy particularly writing skills, was strong evidence of academic identity development (e.g., McAlpine et al., 2009). Consistent with Widman et al. (2001), research indicates that doctoral students draw on feedback both from supervisors and peer to advance in their studies. The reviewed studies also implied that unlike the changing landscape of doctoral education and the possibility of pursuing diverse career pathways by Education students, socialisation outcomes into the field of Education are still highly understood as doctoral students' transformation into future academics (e.g., Jazvac-Martek, 2009). Due to this assumption, even researchers who looked into students' scholarly roles tended to rely on the students' advancement of academic skills of teaching and publication as a sign of scholar identity development. There was no emphasis on the acquisition of transferable skills, either. A few researchers, such as McArthur (2011), looked at other scholarly development indications such as adopting specific habits of mind (or dispositions) such as the capacity to accept criticism.

In short, studies reviewed in this section suggest that the socialisation of doctoral students in Education has been insufficiently scrutinised. It also appeared that most of these studies did not engage in understanding students' experiences and challenges at different stages of student development (Weidman et al., 2001). More scholarship may help better understand students' academic and professional socialisation in the field of Education. Moreover, the reviewed studies indicated that students' development of an academic identity is prioritised in research without sufficient attention to other (conflicting) identities that students, particularly non-traditional students, might have developed (e.g., professional identities at the pre-entry stage). In this sense, students' involvement in different scholarly activities does not necessarily a sign of adopting an academic or scholarly identity (Colbeck, 2008; Weidman et al., 2001). Therefore, students' commitment to a role or professional identity warrants further investigation (Weidman et al., 2001).

3.3. Departmental and institutional environment

Socialisation studies often investigate some dimension of an area known as 'college impact' in the literature, which broadly refers to environmental characteristics and interpersonal relationships embedded in these environments (Weidman et al., 2001). Within the broad institutional context, faculty or academic departments are places where students acquire the values and attitudes of their disciplines through interaction with people who model these values and beliefs (e.g., Bragg, 1976). Current literature has paid much attention to the psychological considerations of college students, such as their motivation to undertake a graduate study (e.g., Edward et al., 2011; Hands, 2018), but the nature of campus and faculty environment and interaction in these contexts has been largely neglected (e.g., Barrie, 2018; Smart, Feldman, & Ethington, 20006; de Valero, 2001). Studies reviewed in what follows indicate that older studies focused on the students' fit to characteristics of each disciplinary environment (e.g., Holland, 1985; 1997), but more recent studies started to identify and emphasise those environmental characteristics that facilitate students' socialisation (e.g., Cotteral, 2015).

To address departments' influence on students, some scholars have tried to identify the salient features of different academic environments or departments. For instance, Holland's (1985, 1997) well-known theory of vocational behaviour specifies six types of academic environments, including investigative (e.g., Economics), artistic (Foreign languages), social (e.g., Psychology), enterprising (e.g., marketing), conventional (accounting), and realistic (mechanical engineering), which corresponded to six personality types. However, several scholars express concern about the dominance of such psychological constructs in HE research. They argue that despite the usefulness of these constructs in understanding the congruence between students' personalities and the characteristics of the environments, they underscore the socialisation effect of the institutional environment (Pascarella & Terenzini, 2005). Therefore, interested to know the effect of academic environments on students' learning and cognitive development during the HE experience, Thompson (2003) utilised Holland's (1985, 1997) theory along with the Weidman et al.'s (2001) socialisation framework to address both psychological and social aspects of doctoral students' experiences. Structured interviews with twenty-four graduate associates and full professors at a research II university in the US from four different academic environments (investigative, artistic, social, and enterprising) indicated differential student learning and development patterns. The author concluded that:

> the process of socialisation occurs through environmental demands which: 1) stimulate graduate students to perform preferred activities of the academic environment; 2) foster their

> respective competencies; 3) encourage students to see themselves in ways consistent with the preferred values of the academic environment; and 4) reward students for the display of the preferred values of the academic environment. (p. 428)

Although Thompson's (2003) formulation of disparate academic environment socialisation framework contributes to our understanding of different academic environments' values, standards, and politics, it is based on the assumption that students with specific psychological characteristics fit in particular disciplines.

Later studies examined the influence of departmental climate on the socialisation of doctoral students into academic norms and values by focusing on the interaction between students and the faculty. Weidman and Stein (2003) recruited 50 students in the discipline of Sociology (n=26) and Educational foundations (n=24) in two American public research universities. Data were obtained from a survey designed by the researchers based on the existing literature, which specified six variables: participation in scholarly activities, student-faculty interactions, student–peer interactions, supportive faculty environment, department collegiality, and student scholarly encouragement. Findings suggested that a scholarly climate was characterised by collegiality among faculty and the faculty and the students. Accessibility of the faculty to students, translating expectations to students and encouraging them to involve in scholarly activities, and the faculty's own vigorous engagement in scholarly activities was found to contribute to the scholarly environment. The rate of student-peer interaction was higher among sociology students than the Educational Foundation counterparts, probably due to the higher number of part-time students in this group.

In another study, Solem, Lee and Schlemper (2009) explored the perception of graduate (master's and PhD) students in Geography about their department's social and academic climate. The results of the focus group with the participants yielded five major themes. First, most of the participants agreed that their department advocated *diversity* as it was evident in the number of international students, ethnic and gender diversity, and the university's location. Second, participants described the *disciplinary and institutional cultures* of their setting and the nature of the program as "publish or perish". Third, *career planning and development* was a source of anxiety. Participants were particularly concerned about doing their teaching commitments properly because they were assigned to teach some undergraduate units without any preparation; thus, most demanded formalised preparation for teaching and writing. Fourth, *financial matters* were mainly related to students trying to obtain funding for research by applying for a research grant, but only a few of them were successful. Fifth, concerning the

quality of the learning environment, the majority of the students believed that the relationship among the students at the department was supportive, not collaborative. These findings were further analysed to shed light on the relationship between students' background and their perception of the departmental environment. As indicated by the results, female students who belonged to a minority group and international students (non-US citizens) experienced the highest level of social isolation in their programs. Lack of socialisation in some departments was a potential drawback, leading female minority students to drop out. On the other hand, international students appeared to appreciate the department that helped them develop a sense of belonging.

In a study involving six postgraduate students in Australia, Cotterall (2015) examined those departmental factors that contributed the most to developing students' researcher identity. All students lamented the lack of a supportive community at the Faculty level, and they reported not being able to get help from anybody except their supervisors. As indicated by some policies, they also felt positioned as peripheral members of the university hierarchy. For example, students were asked to use their student email for all official communications rather than their professional emails.

DeWine, Bresciani Ludvik, Tucker, Mulholland, and Bracken (2017) explored the transition of a racially/ethnically diverse group of community college students to a large doctoral research university in the US. Transition to a research-based program presented the students with transfer shock –A decline in students' grades following a transfer to another program. Despite all efforts, the transfer students confronted several challenges related to the environment and characteristics of the new program. Pre-enrolment programs and Orientation sessions were influential in guiding the students to navigate the program, yet, they could not address the diverse needs of the students. The academic staff in the research university were perceived as unapproachable and focused on research activities, whereas the transfer students focused on teaching. While the Faculty provided information on different programs and events, still some students found it difficult to identify involvement opportunities. The research program was more demanding due to its shorter quarter accelerated pace than the longer semester pace. Also, due to higher academic expectations, transfer students were required to study more and to have better time-management, critical thinking and analysis skills.

In light of the reviewed studies, it is conceivable that the departmental and institutional environments have an important role in the socialisation of students. Students appreciate

environments with clear and well-established academic and professional norms to follow (Merton et al., 1957; Gardner, 2010). They also prefer non-competitive environments where faculty and peers support and collaborate with each other (e.g., Antony, 2002; Solem et al., 2009). A favourable environment should also offer opportunities for interaction between faculty and students (Merton et al., 1957; Weidman et al., 2001). Socialisation experiences of doctoral students can be quite different depending on the mode of doctoral training (i.e., part-time vs full-time or course-based vs research-based). The transition from one training mode to a different mode is challenging and not preferred by all students (e.g., Dewine et al., 2017; Lovitts, 2005). The findings of these studies overall suggest that identifying the potential role of the departmental environment – due to its considerable effect, particularly on specific students group (e.g., minority students) – warrants further examination.

3.4. Engagement in formal structures

This section has two subsections that review studies that investigated doctoral students' engagement with formal structures of the doctoral program, including supervision and PD activities. The goal is to understand the students' experiences in the program and the reciprocal effect of students and formal structures on each other.

3.4.1. Doctoral students' experiences with supervision

There is a large body of research about doctoral education and training and how new students are socialised into the academic and disciplinary communities. Supervisors are quite often reported as the most crucial socialisation agents because the development processes that students engage in, the learning processes, and the internalisation of specific norms and values are mediated by a supervisor (e.g., Austin, 2002). Therefore, the supervisors' supervision approach and their contribution to students' diverse cognitive, affective and social needs have been a major subject of inquiry. This section reviews a selection of studies that examined doctoral students' satisfaction with supervision by addressing the match and mismatch in expectations of students and supervisors.

An important strand of research looks into the match between students and supervisors. Deuchar (2008) examined the extent to which students' needs were congruent with the supervisory assistance offered to them. Applying a qualitative research approach, the researcher collected data from four main supervisors and their four students at a Faculty of Education at a Scottish university. The participants were asked to plot how autonomously they can work on their research in view of the directed supervision provided to them using an

alignment tool proposed by Gurr (2001). Findings highlighted incongruence between the candidates' needs and the adopted supervision style. For instance, a supervisory dyad was characterised by the students needing more directorial supervision style, while the supervisor resisted that and provided pastoral support instead, resulting in the student's frustration. In another dyad, a new overseas student felt marginalised and desired more pastoral care and direction, while the supervisor avoided that due to her busy schedule. It appeared that the neoliberal agenda influenced the supervision practices in doctoral education, such as the timely completion of the thesis and supervisors' own experience of being supervised. Also, early-career supervisors felt compelled that their students would complete successfully as their own performance was evaluated. Overall, the participants reported that they would appreciate a fluid and flexible supervision style, with their supervisors being their critical friends (Evans & Pearson, 1999).

Some scholars investigated how supervisory relationships change over time. Gunnarsson et al. (2013) interviewed seven PhD students and nine supervisors in Sweden and England. Their enquiry indicated that the cause of disagreement between students and supervisors in the early stages of the students' candidature was the problematic decisions that the students made about their projects without discussing them with their supervisors. However, in later stages, making independent decisions was a sign of students' maturity. Other sources of disagreement included the supervisors' out-of-date knowledge, their dubious and not well-thought advice, the diverse or contradictory comments given by the supervisors involved in the supervision cohort, and supervisors' effort to challenge students enough to make them proactive (rather than to collapse them). In another longitudinal study involving 60 Social Science students in two universities in the UK, McAlpine and McKinnon (2013) found that receiving different advice from different supervisors and co-supervisors made students concerned and disrupted their steady progression. Moreover, students appeared prepared to adjust their expectations to what supervisors offered, leading the scholars to conclude that the alignment among expectations can result in successful relationships.

Consistent with the findings of McAlpine and McKinnon's (2013) qualitative study, the results of an online survey-based study conducted by Ali, Watson and Dhingra (2016) showed that high accord between supervisors and students on what constitutes good supervision could result in a satisfactory supervisory relationship. The study participants reported that supervisors should be interested in the students' research, provide constructive and timely feedback, foster

independent work and create opportunities for students to present their work. Supervisors were also expected to be friendly, approachable and aware of the standards.

In contrast, some studies provided evidence that the mismatch between students and supervisors can be a major source of challenge and dissatisfaction with PhD studies. In a longitudinal study, Ives and Rowley (2005) investigated the relationship between 21 students and their main supervisors in an Australian university. Findings indicated that eleven students remained satisfied throughout their candidature, whereas six gradually became dissatisfied. The main causes of dissatisfaction were the students' perceived need for more guidance or direction and higher structured supervision. The degree of match with the supervisors' expertise was also a significant factor affecting the students' satisfaction with their doctoral studies. Moreover, it appeared that supervisors with more experience could create more satisfying supervision for their students. (Also see Lee, 2008)

In another study, Helfer and Drew (2019) examined the perceptions of 30 full-time research Engineering students about their expectations with doctoral supervision at a research-intensive university in Australia using surveys and interviews. These researchers found many discrepancies between what roles students perceived as their own responsibility and their supervisors or both. Students' perceptions of the roles also contradicted the University's policies and Code of Practice. To illustrate, the majority of the students specified four tasks as the chief responsibilities of a supervisor: "introduction of the student to the services and facilities of the department and University", the "provision of information about the relevant policies, procedures and requirements relating to PhD candidature", the "verification of all drafts of work" and "decision on the standard and format of the thesis" (p. 508). However, based on the university's Code of Practice, the three latter roles were the responsibilities of both supervisors and students. Half of the students were satisfied with their supervision, 24.5% were dissatisfied, and 26.5% were neutral. The main reasons for the students' satisfaction with supervision included "supervisor encouragement to write and submit papers for publications" (77.6%), supervisors being "friendly and approachable" (75.5%) and "available" (71.4%). On the other hand, students' main concerns were related to the provision of "meetings" (46.9%) and "clear directions" (44.9%), whereas supervisors worried about publication rather than students' learning experience (30.6%). The authors suggested that clarification of roles, supervisors' role in socialising and integrating students into the academic community, public recognition of students' publications, and co-supervision, among other things, could contribute to students' satisfaction.

Studies reviewed on research supervision indicate that the student-supervisor relationship's efficiency and the lack of congruence among supervision approaches or supervisors' expectations and the students' needs have been maintained as significant sources of dissatisfaction inhibiting the socialisation of students. There are also some indications of programs adapting to a new knowledge economy as indicated by a focus on efficiency and the image of students as independent producers of knowledge and the need for alternative models of supervision such as cohort (or team) supervision. Nevertheless, further research on the effect of supervision on the overall socialisation of students is warranted.

3.4.2. Doctoral students' experiences with PD activities

To prepare the future workforce for the increasingly diverse and competitive job market, HEIs in recent years tried to equip doctoral students with transferrable or generic skills (or competencies) that enable them to switch to different career options. One common way is to design and offer workshops referred to as 'professional development' that is assumed to facilitate doctoral students' transition into professional careers (Nerad, 2015). Since the inclusion of the PD component in doctoral programs is a relatively new phenomenon, the scholarship surrounding this topic is just emerging in the literature. Some nuances exist among PD programs across different countries. As clarified by Nerad (2015), in the US context, PD activities include PhD-completion skills such as writing and publishing required for successful completion of a PhD and *professional skills*, such as teamwork and managing people and budgets that are not the common outcomes of completing a PhD. In Europe, several PD frameworks have been proposed. To elaborate, PD employed by the European Alliance on Research Career Development (EARCD) is a forum comprised of 21 national organisations affiliated with the European Science Foundation (ESF). ESF defines PD as "a structured approach to the continuous development of researchers' knowledge, expertise and attributes at all stages of their career to improve their competencies, employability and ability to pursue multiple careers paths" (p. 10). In Australia, PD involves skills that facilitate individuals' transition to post-PhD pathways and professional careers. The differences in constituents of a PD across countries are the result of the diverse modes of doctoral training in these countries (Nerad, 2015).

Very little has been published to date on students' need for PD activities. Similarly, assessment of PD activities has been often limited to end-of-the-program feedback from the participants or the local survey-based examinations of the PD developers to evaluate the impact of their

initiatives, ensure a return on the investment and highlight where improvements are needed to be made (Walsh et al., 2010). In what follows, the few available studies on this topic are reviewed to highlight the variations in PD programmes or workshops across different countries and programs and see their contribution to doctoral students' professional development and satisfaction.

Walsh et al. (2010) examined the perceptions of late-stage PhD research students at a centrally-managed transferrable skills programme at a research-intensive university in the UK. Students in eighty different courses were included in the programme who received training from half a day to one full day. The program included residential courses including research skills development for the first-year students and non-residential courses including other transferrable skills. Students were free to choose the courses they needed without any limitations but completing a minimum of four courses was a requirement. In the absence of any evaluation model, they adopted an 'impact framework' from a cross-sector body (Rugby Team, 2008) tailored to the training and development of researchers in HE. The model has five impact levels representing the benefits of training (foundations, reaction, learning, behaviour, and outcomes). Over 1000 students completed a survey designed to assess their satisfaction with the PD program. Seventy-three per cent of the students attended more than the minimum required hours. They reported the positive impact of the non-residential and residential courses (63.6% & 74.1%, respectively). However, 30.5% of the students reported that attending skills workshops distracted them from their research. The programme's relevance to the future needs of the students was not clear to 21.3% of them. The supervisors' perception of the transferrable skills as an 'extra' activity and in conflict with the primary purpose of the students reinforced the students' negative attitudes about skill development. Despite confirming the importance of skills training, some students were not satisfied with them for these possible reasons: lack of available training opportunities, an external factor limiting take-up of training opportunities, low quality of training, and inconsistency between the training goals and needs of the students. Although the findings of this study shed light on students' satisfaction with the PD activities, they told little about *how* these activities contributed to students' body of knowledge, skills and future career choices.

On the other hand, in a mixed-method study conducted by Heflinger and Doykos (2016), which explored students' perception of PD activities in a Research I university in the US, students identified and reported the areas of improvement. Six hundred eighty-eight eligible students from colleges of Arts and Science, Engineering, Religion, Nursing and Education participated

in a survey. The students reported their preparedness to enter the employment sector based on their improvement in research skills, including writing, presentation, expertise knowledge, and understanding research ethics. However, they felt some deficiency in their knowledge concerning professional areas such as team leadership, supervision, teaching and grant writing. These findings demonstrated that the development of students' scholarly profiles by emphasising writing and publishing is yet a priority for institutions. As a result, the students requested profession-related centres for teaching, interdisciplinary careers, and further guidance to navigate the job market. Notably, some of the students attributed their skill development to actual engagement in professional opportunities provided by their supervisors (e.g., working in the supervisors' laboratory) rather than participation in PD workshops.

Rather than focusing on students' perception of PD activities, Nerad (2015) reported on the results of a national survey of PhD holders across six disciplines at a research university in the US that aimed to identify transferrable skills. 'Analysis and synthesis skills' were found as the most significant skills since they were needed in nearly 75% of careers, followed by the professional skill of 'presentation' required in 66% of non-academic and 33% of academic careers. Students' other required skills included working with diverse groups, teamwork and collaboration, working in interdisciplinary contexts, and managing people and budgets. All students reported that they needed presentation skills and career guidance to understand the skills and knowledge required for different careers.

Collectively, previous research pertaining to PD activities suffers from some weaknesses. First, PD activities were investigated detached from other components of the program. Second, a range of research and professional activities was presented without considering students' expectations and career aspirations. Hence, the reasons why students in these studies found some workshops more relevant and more satisfactory than others remain to be addressed. Despite the reported advantages of the PD activities, some students still did not feel prepared to work outside of academia. These findings question the out-of-context presentation and training of the transferrable skills (Porter & Phelps, 2014) and suggest evaluating the effect of career-related activities as an integrated component of doctoral training, in relation to other components of the program such as supervision, and also importantly, in light of doctoral students' career expectations.

3.5. Engagement in informal structures

This section has one subsection that reviews research examining doctoral students' engagement with the main doctoral program's informal structures, including peer interaction, to understand how peers can facilitate each other's socialisation.

3.5.1. Interaction with peers

Peer interaction and peer learning are no longer new phenomena in doctoral education. The prevalence of peer learning over the last two decades is due to some shifts in doctoral training in response to the demands of globalisation (Nerad, 2012) and the provision of better experiences to students. Peers also play a key role in each other's socialisation, particularly at the informal stage; hence they are considered other important socialising agents that students are in contact with during their candidature (Weidman et al., 2001). The supportive role of peers in graduate students' wellbeing, learning and retention has been extensively acknowledged in literature (e.g., Austin, 2002; Brown, 2021; Paolucci et al., 2021; Sverdlik et al., 2018). However, some voices question the efficiency of peer learning in doctoral education and associate it with how students view and embrace peer interaction opportunities.

One strand of research examines doctoral students' positioning towards their peers in doctoral programs. Boud and Lee (2005) criticised 'provisionism' or dominance of 'supervision' as the most common doctoral training pedagogy in Australia. Alternatively, they reconceptualised the notion of peer learning as a pedagogical discourse whereby reciprocal learning activity takes place. These scholars examined the influence of some initiatives, such as the monthly meetings of Education PhD candidates and discussion of their topics of interest. Comparing and contrasting the interaction patterns of two students who had identical opportunities to participate in different activities revealed that the students' positioning towards 'peers' had a significant effect on their experiences in the program. The student who positioned herself as 'becoming an academic' used any opportunities to interact with peers. The other student who positioned herself as a 'student' seldom interacted with peers and felt 'apart' from them.

Similar findings were observed by Fotovatian (2012). She examined four non-English background doctoral students' informal departmental interaction with peers, staff and academics in a research-intensive university in Australia. Observation of the students' out-of-classroom departmental interactions and interviews, their narratives, and two focus groups in the early and final stages of completing their degree. The findings indicated that although the participants had some similarities as newcomers to a Western university, they exercised agency

and selected different pathways for integrating and engaging in institutional interactions. Some of these pathways led to limited gains. For instance, a student who adopted a self-isolating approach to negotiating her identity also had minimal interactions with others in the institution. In contrast, another participant took a self-engaging approach to establish and maintain interaction in the academy since she was granted Australian residency and intended to stay in Australia after graduation to find a profession.

The second strand of research generally centres on the experiences of doctoral students in the program, including their interaction with peers. It provides evidence of challenges experienced by international students' efforts to network with peers. Cotterall (2011a) examined the lived experiences of six international students in an Australian university by looking into their learning experiences, interactions, and the support they received. She drew on multiple theories, including CoP (Lave & Wenger, 1991), activity theory (Engestrom, 1999), and theories of academic literacies development (Lea & Street, 2006) and collected longitudinal narrative data for two years of the students' candidature. Findings indicated that although these students had lived outside of their country before, they experienced some challenges in Australia. These included understanding Australian English, homesickness, administrative problems, the function of the university, making friends outside the office, and research-related problems. The findings confirmed that students' learning was not limited to supervision; they could also learn through their networks; however, no participants managed to connect with Australian peers.

Sala-Bubaré and Castelló (2016) studied the experiences of eight ecology doctoral students in an online academic writing workshop at a research-intensive university in Barcelona over three months. Doctoral students in this study reported having more trouble with research communication such as presenting at conferences than with domain-specific problems such as research procedures. These students also found it difficult to obtain a legitimate position in the pertinent communities. Some students perceived themselves as an insider and some as an outsider. Nevertheless, the experiences involving broader social layers, such as interaction with the supervisor, the scientific community, international groups, research groups, and other groups, were more effective to promote the students' socialisation and their positioning in the community.

Unlike some studies that view peer interaction as an informal structure, some researchers emphasised notions such as 'collegiality' when dealing with peer interaction in an

organisational context, such as doctoral education. For instance, in their study involving twelve doctoral students, Lee et al. (2017) specified three categories of peers based on their relationship with each other. These included special, collegial and information peers that were characterised by different levels of trust and self-disclosure from low to high, respectively. Moreover, students exchanged five types of information with each other, including basic, administrative, professional, social, and personal, depending on the nature of their relationship. This finding denotes that peer interaction and networking among peers is quite purposeful and strategic.

In another recent study, Brown (2021) proposed the term 'collegiality' over 'peer learning'. She argued that the profile of non-traditional students, which involves prior professional experiences and older age, makes 'collegiality' more relevant to the context of doctoral programs. Moreover, the involvement or membership of students in an academic community entails working as a colleague. Hence, she investigated the perception of approximately 1300 students at a research-intensive university in New Zealand. Data was collected using the phenomenographic principle – a collective way of knowing a phenomenon – through focus groups. Four types of everyday collegiality were generated from the data analysis. *Professional collegiality* was a regular reciprocal interaction implying that students could count on and help each other in case of need. *Intellectual collegiality* was related to the sharing of knowledge. *Social collegiality* entailed social and supportive relationships in the academic environment or outside of academia related to the students' wellbeing. *Emotional collegiality* was the sharing of emotional experiences among the students, which contributed to overcoming solidarity, demonstrating sympathy and increased feelings of being an insider.

In light of the literature reviewed in this subsection, it is conceivable that students with more personal, professional and peer networks could better stay connected and benefit from these communities. By contrast, those with little peer support and cohort experience could be left out and feel more isolated. These studies also tried to show that accepting peer interaction as a learning pedagogy can be challenging since the provision of peer interaction opportunities alone does not guarantee positive contribution; it greatly depends on how students interpret these opportunities and use them (e.g., Boud & Lee, 2005; Fotovatian, 2012). In addition, non-traditional students can be more agentive in their interactions with peers or other staff at the institution. Therefore, peer interaction can be conceptualised differently depending on its context and purpose. These findings encourage examining peer networking in light of the current realities of doctoral education (Nerad, 2012; Brown, 2021).

3.6. Conclusion

With rapid changes in global circumstances and shifts in demographics of higher degree students, doctoral education tries to find ways to navigate the tension between the existing structures and new demands. A clear understanding of the socialisation processes can assist in designing more sustainable programs. This comprehensive literature delineated the need for research in all dimensions of doctoral student experiences in all contexts, including Australia, one of international students' main study abroad destinations. Collectively, literature indicated that the seminal work on graduate and professional student socialisation (Weidman et al., 2001) is a helpful framework for addressing different dimensions of students' experiences in graduate school. The majority of the studies reviewed did not lend a holistic view of the doctoral student experiences in the program. Also, little research has been done on doctoral students at different phases of their candidature to better capture their development in different stages of the program. While research on doctoral student socialisation in the Australian context initiates a broader understanding of this phenomenon, research should focus on understanding students' experiences in light of the disciplinary context in which they are embedded. This study thus addresses the inconsistencies in literature through a deeper investigation of doctoral students' socialisation in a modern PhD in the field of Education. By adopting a qualitative approach, the study gives voice to the doctoral students to provide us with a deeper understanding of their socialisation processes, rather than by evaluating the effect of different program components on students' experiences, which is the dominant approach to research this problem in the literature. In this way, doctoral students interpret based on their own background and worldview.

CHAPTER 4. METHODS

4.0. Introduction

This study employed qualitative research methods to explore how six international doctoral students were socialised into doctoral education in Australia. Guided by the social constructivist worldview and drawing on the Graduate and Professional Student Socialisation (Weidman et al., 2001) framework and Lee's (2020) proposed approaches to supervision, the study's objective was to explore doctoral students' values, aspirations and expectations in pre-entry and personal stages of socialisation. It also examined socialisation outcomes in the form of knowledge, skills, and dispositions that students acquired through supervision, PD activities and peer interaction in formal and informal stages of socialisation.

This chapter is organised into four main sections. The chapter starts with two sections on the study's theoretical paradigm, followed by explaining the rationale for adopting a qualitative case study methodology. Section two also presents the research questions proposed in this study. Section three outlines data collection processes in four subsections. The first subsection provides information on ethical issues, including obtaining human research ethics approval for administering the study and obtaining individual and collective consent from the participants and ways of maintaining confidentiality. The next two subsections explain the participant recruitment strategy and the data collection period. The fourth subsection describes the data collection instruments, including semi-structured individual and group interviews, observation and field notes, and institutional policy documents. It then explains the triangulation of qualitative data collected in the study. Section four presents the data analysis procedure chiefly done through the thematic analysis of the interview and observational data. Section five elucidates how trustworthiness was established through the four criteria – credibility, transferability, dependability, and confirmability – proposed by Lincoln and Guba (1985) and using measures such as prolonged engagement and thick description. Section six provides a brief conclusion to the chapter.

4.1. Research paradigm

Consistent with social constructivism – also referred to as interpretivism – realities and construction of knowledge are individual-specific, and understanding different social

phenomena is rooted in the history of people, societal and cultural expectations, norms and values of the context in which they are embedded (McMahon, 1997). Therefore, meaningful construction of knowledge occurs when individuals are engaged in social activities, suggesting that learning is both an individual and a social process (Creswell, 2007; Merriam, 1998). This study examines how international students socialise into the norms and values of an Education doctoral program in Australia. These processes occur as a result of students' interaction with Faculty, supervisors, peers and other personal and professional groups. Adopting a social constructivist paradigm for this research is appropriate because it contextualises any changes in students' values, aspirations and expectations and the development of any KSDs in students' social environment.

4.2. Qualitative case study design

The research problems were investigated by adopting a qualitative approach since "qualitative researchers are "interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009, p. 5). Qualitative research rests upon five principles (Merriam, 1998). First, it is aligned with the social constructivist paradigm and socialisation theories. As described in the previous section, the social constructivist paradigm proposes that realities are constructed through interaction among individuals. Thus qualitative design was useful for this study, which addressed context-dependent social phenomena from the participants' perspective over a sustained period of time (Creswell, 2007). Second, the researcher's role was central to the research process since she was the primary data collection and analysis source. She also had responsibilities pertaining to safeguarding the participants' privacy and maintaining the trustworthiness of the research (Lincoln & Guba, 1985). Third, fieldwork or gathering information about peoples, cultures, and environments in a natural Faculty setting was essential for this research. Fourth, interpretive research techniques, such as interviews and observations conducted in the field, were synthesised with the understanding gained from scholarship in the field. Fifth, 'richly descriptive' data sets were prepared because qualitative research involves collecting non-numerical data to understand attitudes, experiences, and behaviours. Moreover, qualitative research uses a small sample size to facilitate collecting in-depth data (Creswell, 2007; Merriam, 1988).

Relying predominantly on the conceptualisations and guidelines proposed by Merriam (1988) and Yin (2003, 2009), a case study research design was adopted. Merriam (1988) defines a

case study as “a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon” (p. 41). Drawing on this definition, Yazan (2015) specified three characteristics of a case study. A case study is *particularistic* because it concentrates on a particular situation, event, or phenomenon; *heuristic* because it illuminates a reader’s understanding of the phenomenon under examination; and *descriptive* because it results in a thick description of the phenomenon under investigation.

Yin’s (2009) explication of three characteristics of the case study research method can further justify the aptness of this research design for this study. The first characteristic, a case study that seeks to answer ‘why’ and ‘how’ questions, was illustrated in this study's overarching research question: how international doctoral student socialisation takes place in a specific context. *How* questions are “more explanatory and … deal with operational links needing to be traced over time” (Yin, 2009, p. 9). In the same way, to fully understand the formal and informal socialisation processes that doctoral students engaged in, the researcher traced their trajectories over one and a half years. The second characteristic addresses contemporary events and the contextual conditions that are assumed to be relevant to the phenomenon under study. The internationalisation of HE in countries like Australia is a contemporary phenomenon, as evident in the increasing number of international students who come to this country to continue their studies. Examining modern phenomena is significant since it leads to first-hand, real-life data collection. The third characteristic specifies that the participants' behaviour or events under investigation happen naturally and were not manipulated. It was the case in this research to observe the naturally occurring behaviours of the international students while they were involved in the social activities of their academic communities.

This qualitative case study research followed a systematic and iterative process involving an extensive literature review, constructing a theoretical framework, identifying a research problem, crafting and sharpening the research questions (Merriam, 1998). The researcher was cognizant that her choice of the conceptual framework might need some degree of formal theorising after data had been collected because the modern PhD under investigation had both the characteristics of the research-based apprenticeship (or German) model and the North American model that included some coursework. In this sense, the theoretical framework was used as part of an iterative process of data collection and analysis, with theoretical understandings being modified in light of the findings from the data (Walsham, 1995). This step is called *thematising* by Kvale and Brinkmann (2009), who stipulate that in case study research, “theory may be used in different ways” (p. 106).

Moreover, Creswell (2003) warns that case study researchers may fall into the trap of trying to answer a broad question that has many objectives for one study. To avoid this trap, a technique referred to as 'to bind a case' was utilised whose aim is to place some boundaries on the case (Creswell, 2003). The study concentrated only on one mode of the PhD program (full-time and three-year) in Education at one research-intensive university in Australia to bind the case. The student participants were categorised as international students (rather than local or miscellaneous categories). Moreover, observations were bound just to the Faculty's academic activities and events in which every participant reported participating.

4.3. Data collection process

This study aimed to provide a holistic picture of the socialisation processes that international doctoral students in the field of Education engaged in by seeking to answer the overarching question:

> *How do international doctoral students socialise into the norms and values of a research PhD program in Education in Australia?*

This general question had four sub-sections that aimed to answer different questions raised by the research. Before explaining the research design, a summary of the data sources collected to answer the research questions and the methods used to analyse data related to each research question are presented in Table 4.1.

In what follows, different phases of the data collection procedure are delineated. Overall, data collection involved three phases: a) obtaining ethics approval, b) participant recruitment process, and c) data collection: interview and observation.

Table 4.1. *Research questions and the corresponding data sources and data analysis methods*

Research questions	**Data sources**	**Data analysis method**
(1) What values, expectations, and aspirations do doctoral students have as they begin their study?	- Individual interview data with the student participants	- Thematic analysis as informed by values, expectations and aspirations (Weidman et al., 2001)
(2) How do supervisors influence the doctoral students' knowledge, skills, and dispositions throughout their candidature?	- Individual and group interview data with the student participants - Individual interview with supervisors - Observational data of the student participants	- Dyadic and triadic thematic analysis informed by KSDs-outcomes of socialisation- (Weidman et al., 2001), and - Framework of approaches to supervision (Lee, 2019)
(3) How do peers and professional development activities influence the doctoral students' knowledge, skills, and dispositions throughout their candidature?	- Individual and group interview data with the student participants- Observational data of the student participants - Institutional policy documents	- Thematic analysis as informed by values, expectations and aspirations (Weidman et al., 2001)
(4) What values, expectations and aspirations do doctoral students have towards the end of the PhD candidature?	- The 3rd individual interview data with the student participants	- Thematic analysis as informed by values, expectations and aspirations (Weidman et al., 2001)

4.3.1. Ethics

4.3.1.1. Obtaining ethics approval

Approval for conducting this research study was obtained from the Human Research Ethics Committees (HRECs) of the University (14/03/2019). The approval notice was incorporated into all the participants' consent forms and letters (Appendix A).

4.3.1.2. Obtaining participants' consent

Participation in this study was voluntary. The identity of the participants was not revealed to anyone outside of the study, and the participants' personally-identifying information was accessed through pseudonyms that they selected for themselves. Following the recruitment of the participants, they filled out a written questionnaire, which documented their background characteristics. The researcher used the information provided by the six international doctoral

participants in the demographic form to reach their supervisors. Every student had two supervisors who were invited via email to participate in the study. Of the six pairs of supervisors recruited, ten supervisors gave informed consent to join the study on a voluntary and confidential basis. In the case of two student participants (Joker and Monica), only one of the supervisors (co-supervisors) participated in this study.

Once the participants were recruited, written informed consent was obtained from all interviewees before being interviewed and digitally audio-recorded. Moreover, to maintain the confidentiality of the students and supervisor dyads/triads, they were invited to be interviewed separately. Care was taken not to present the participants with their identifiable information such as their ethnicity and specific research area since anonymity and confidentiality are particularly important when researching familiar settings (Hockey, 1993). Alternatively, homogenising terms such as Australian, American and Asian were used. Moreover, the participants were asked to select a pseudonym for themselves so that the transcripts and recordings could be coded and stored anonymously.

4.3.1.3. Obtaining collective consent

Obtaining consent and interrogating the observation process was an ongoing process throughout this research (Mulhall, 2003), meaning that, in addition to the consent given by the student participants at the beginning of the study, their consent to be observed was also obtained before observing them in any socialising events. Another concern was obtaining informed consent from all community members or group members since the participant's behaviour was observed while interacting with other group members. In this case, 'collective consent' was obtained by approaching the group leader, explaining the research objectives, indicating the student being observed, and seeking approval from all with the help of the group leader.

4.3.2. Recruitment strategy

Following a qualitative case study tradition, the study's theoretical framework and research questions determined which participants needed to be recruited, making the sample conceptually driven (Miles & Huberman, 1994; Yin, 2003). This study required a purposeful sample of participants "as the most appropriate sampling strategy" because the researcher needs "a sample from which the most can be learned" (Merriam & Tisdell, 2016, p. 96). Participants were recruited using two techniques: first, invitation, and second, snowballing. To this end, an advertisement was developed and posted around the Graduate Student working

spaces and on the Faculty's research community Facebook page. The advertisement contained a brief description of the study, the inclusion criteria, and the researcher's contact information. In line with the goals of the research study, students could participate in the study if

- they were international students (students who joined the program on a student visa and did not have Permanent Residency),
- they have already passed the first milestone,
- they were on a scholarship from the government or university of the host or home country, and
- they were enrolled as full-time students.

The above inclusion criteria, which fitted the conceptual framework of the study and research questions, were set to ensure that all the participants were homogeneous in terms of their academic, economic and residency status. It is noteworthy that the second criterion was loose because doctoral students could join the program and fulfil the requirements of every milestone at different times throughout the year, making it difficult to recruit participants who were all exactly at the same level of their candidature. Therefore, a time range was specified – a few months before and after the first milestone – to include participants in the study. Moreover, the slow initial take-up prompted the adoption of snowballing as a non-random sampling technique where the primary participant nominated another potential participant (Miles & Huberman, 1994). The participant recruitment was started and kept open until an adequate number of participants were recruited. Approximately twenty students responded to the call and showed interest in participating in the study; however, only six students were eligible to participate based on the inclusion criteria. The sample was comprised of *information-rich* cases in that students "from which one can learn a great deal about issues of central importance to the purpose of the inquiry" (Patton, 2015, p. 53). Moreover, the sample of underrepresented students was large enough to make the study feasible to implement during the time-limits of the study and give the researcher adequate time to collect and analyse a large amount of data and information (Yin, 2003).

4.3.2.1. Participants' profile

The six student participants varied according to ethnicity, gender, and previous academic and professional background. The ten supervisor participants varied according to their disciplinary background, years of engagement with doctoral supervision and number of students

supervised. Tables 4.2 and 4.3 summarise the main background information of the student participants and their supervisors, respectively. As Table 4.2 indicates, the participants were two male and four female students. The female participants were married and lived with a family member in Australia, whereas the male participants were single and lived alone or with their housemates. The ethnicity of the students reflects the fact that in this University, as in other Australian universities, Asian students comprise a large percentage of Australia's doctoral student body. All the participants had both a Bachelor's and Master's Honour's qualifications except Eve, who only had a Bachelor's degree and a graduate certificate. All participants except Monica had several years of professional experience in their disciplinary areas. All the students were recipients of the Australian government or University scholarship except Dace, whose education was funded by a governmental body in his own country. Analysis of data in the later stages of the study revealed that all of these student participants, excluding Joker, were the only representatives of their ethnicity in the Faculty at the time of the study.

Table 4.3 specifies the characteristics of the supervisors. There were seven female supervisors and two male supervisors. In terms of their professional background, supervisors fell into two broad categories: early career academics and senior academics. Early career academics were those supervisors who were within the first five years post-PhD and had no or a few completions. Mid-career academics had got tenure and worked more than five years in academia, and had more than one-two PhD completion. Senior academics were supervisors with more years of experience and working with PhD students as identified by higher completion numbers. These supervisors specialised in different disciplinary areas.

Table 4.2. *Profile of international doctoral student participant*

Name/ Pseudonyms	**Age**	**Sex**	**Marital status**	**Background***	**Academic qualifications**	**Previous professional background/positions**	**Scholarship**	**Supervisors**
Eve	29	F	Married, came to Australia with her husband	South Asian	- BSc (Hon) in Applied Sciences, her country - Graduate Diploma in Brand Management, her country	- Environmental consultant (3 years)	Domestic	Lotus Patricia
Claudia	37	F	Separated, came to Australia with her daughter	South Asian	- BA in Teaching (Social Sciences), her country - MA in Teaching (Education), Victoria University, Australia	- Head of a program (4 years) in her country - Kindergarten teacher (1 year), Australia - Research assistant (1 year), Australia	Domestic	Mary Gabriela
Catherine	37	F	Married, came to Australia with her husband	Southeast Asian	- BA in Industrial Technology (Technology Teacher Education), in her country - MA in TESOL, Melbourne (Monash University), Australia	- Primary School Teacher (15 years), in her country - Part-time instructor (5 years) in her country - IELTS speaking interviewer (1 year), in her country	Domestic	Sara Caitlin
Joker	32	M	Single	Southeast Asian	-BA in Education, in his country -MA in Applied Linguistics, Adelaide, Australia	- Part-time English private teacher in his country - Lecturer (6 years), in his country	Domestic	Mina
Dace	28	M	Single	South American	- B. Ed. English Language Teaching, in his country - MA in English Didactics, in his country	- English language teacher for high school (3 years); undergraduate students (3 years); & university lecturer (2 years) - A public high school English language teacher (3 years)	Country of origin	Stephanie Ernesto
Monica	27	F	Married, came to Australia with her husband	South Asian	- BA in Science Education - MA in Science Education	No professional experience (6 months of internship during her BA studies)	Domestic	Andrew

* Broad nature of the background is to deidentify participants

Table 4.3. *Profile of international doctoral students' supervisors*

Supervisors/ Pseudonym	**Disciplinary area**	**Professional background**	**Number of doctoral students supervised by the supervisors**
Gabriela	Early childhood education	Mid-career	Three completed Seven in progress
Mary	Early childhood education	Senior/experienced	Over Twenty-seven completed
Sara	Teacher education, language arts and professional learning	Early career	One completed
Caitlin	Teacher education, language arts and professional learning	Mid-career	Two completed Six in progress
Stephanie	Teacher education, TESOL	Early career	One in progress
Ernesto	Curriculum, pedagogy, educational foundations, research methodologies	Mid-career	Five completed
Lotus	Globalisation leadership and policy-environmental sustainability	Mid-career	Ten completed
Mina	Teacher education, language arts and professional learning	Early career	Two completed Seven in progress
Patricia	Sociology of education	Senior/experienced	Ten completed
Andrew	Curriculum, assessment, pedagogy	Mid-career	One PhD completed Seven MA in progress

4.3.3. Data collection period

The data collection period in this study was approximately one and a half years. This allowed the doctoral students' progression to the completion of the second milestone, and their entrance to the final year of their candidature could be traced. Prolonged engagement and persistent observation by the researcher who spent sufficient time in the field or setting of the study allowed the researcher to gain a comprehensive understanding of the setting and the participants of the study (Lincoln & Guba, 1985). In this way, the credibility (confidence about the accuracy of the research findings) and transferability (The degree to which the results of qualitative research can be transferred to other contexts and other respondents) of the findings were increased.

4.3.4. Data collection instruments: Interview and observation

4.3.4.1. Collecting interview data

The interview is one of the primary data collection techniques in a case study (Merriam, 1998; Yin, 2003). Interviews allow participants to provide detailed information about their perspectives on the questions raised in the interviews. They also enable the interviewer to have better control over the types of information received, an opportunity that is not available to an observer (Creswell, 2015). Collecting data from the doctoral students and their supervisors were carried out separately. The data collection timetable in Table 4.4 indicates the dates at which the interview data for this study were collected (#28 interviews). The interviews with the student participants were conducted between 7th May 2019 and 24th July 2020. The interviews with the supervisors of the student participants were conducted between 6th June and 18th August 2019. The researcher catered for the participant's schedule or availability to partake in the interview at their convenience. The interviews were administered in meeting rooms in the faculty, which the researcher booked for this purpose. A questioning protocol guided the interviews; nevertheless, a recursive interviewing style was applied whereby the interviews followed the line of a conversation. All interaction between the researcher and the interviewees was audio-recorded using a recording device and the researcher's mobile phone (just in case) and transferred to a laptop for future retrieval, transcription and analysis. All the files were transferred to the researcher's laptop, saved on Google Drive within a few hours after the interviews, and completely cleared from the recording device and mobile phone.

Two interview formats were incorporated to collect data: a) semi-structured interviews with both student participants and their supervisors and b) group interviews with the student

participants only. Semi-structured interviews were used because they involved understanding what to focus on without being too bound to a theory (Moser & Korstjens, 2018). Two semi-structured interviews were conducted with the student participants, once at the beginning and close to the end of the academic year (2019), which was the study's data collection duration. A group discussion was administered to every pair of student participants mid-way through the data collection period. The first interview with individual doctoral students was retrospective. It aimed to elicit information about the students' past, including their academic and professional histories and their values, expectations, and aspirations prior to beginning a PhD program in a study abroad context. An example of an open-ended interview question was, 'describe your life experiences before college or during college that influenced your view of the education profession.' A further focus of this interview was to elicit information on students' experiences during the first year of their candidature (Appendix B). Some interview questions included, 'What do you expect to get from this program for your personal and professional development (knowledge, skill, aspirations, etc.)?' and 'What are some things you have liked and enjoyed so far? What are some things you have found difficult or frustrating?' These questions were expected to yield information on the students' transition experiences, their networking with different socialising agents, and their involvement in different academic and social activities. A total of six interviews were administered to the six student participants, with each lasting about an hour.

The second interview with the student participants was in a group discussion format administered almost eight months after the first interview. A total of three group discussions were administered to three pairs of student participants, and every discussion lasted for about an hour. The researcher mediated the focus-group discussion using a questioning protocol (Moser & Korstjens, 2018) and focused on their current experiences during the program (Appendix C). Some of the interview questions included, 'What are the mindsets, knowledge and skills that you have (have not) acquired and can exhibit so far?' and 'What type of support (academic, emotional, professional, etc.) do you get from your supervisor?' The group discussion participants were able to "stimulate each other in discussing and sharing their views and experiences" (Moser & Korstjens, 2018, p. 14). Students were encouraged to report on the effect of different structures on their success and progress in the PhD program, specifically in the three areas of knowledge, skills, and dispositions.

The third interview, which was conducted approximately six months after the second interview, sought to discover any changes that might have happened concerning the students' values,

expectations and aspirations as they entered the last year of their doctoral studies and made decisions about the next steps of their lives (Appendix D). Some of the interview questions included, ‘How do you evaluate the educational activities that you have been involved in over the past year as part of the requirement of the program?’ and ‘what are your career aspirations after graduation?’ These questions looked into changes in students’ networking, their intention to stay in Australia, and their career prospects. The researcher designed the interview questions cognizant of available literature on the socialisation of doctoral students and the specific goals of the study centred on doctoral students’ experiences in different stages of socialisation. Questioning students about their past, present, and future was an effort to present a comprehensive picture of how graduate student socialisation takes place in a developmental manner and identify the influential variables that cause the students’ developments or transformation. A total of six interviews were administered to the six student participants, with each lasting about an hour.

Semi-structured interviews with the participants' supervisors were conducted only once at the beginning of the study (Appendix E). The interview questions that were informed by the existing literature on this topic aimed to elicit information on a) characteristics of a good PhD program in Education, b) their contribution to the knowledge, skill, and dispositions of the students, and c) the role of different stakeholders in socialising the students from their viewpoint. Some of these questions were, ‘What do you consider to be an ideal PhD program in education?’ and ‘How do you (faculty, department, etc.) encourage and facilitate student involvement in activities of the department?’ A total of ten interviews were administered to the ten supervisor participants, with each lasting about an hour.

4.3.4.2. Collecting observational data

Observation is one of the basic techniques used to collect first-hand data in case study research (Merriam, 1998; Yin, 2003). Observation is known as an *unobtrusive* measure because it is an indirect way of eliciting spontaneous behaviour from the participant (Webb, Campbell, Schwartz, & Sechrest, 1966) against more direct techniques such as an interview.

Table 4.4: *Timetable of data collection – observation and interviews with the doctoral students and their supervisors*

Supervisors	**Interview**	**Students**	**Interviews**			**Observations**	
	Date		**1**	**2**	**3**	**Socialising events**	**Date**
Mina	19/06/2019	Joker	21/05/2019	10/03/2020	01/07/2020	Conference presentation Visiting scholar seminar MGR workshops (#2)	23/09/2019 03/10/2019 17/05/2019 & 30/07/2019
Sara Caitlin	06/06/2019 11/06/2019	Catherine	02/05/2019	10/03/2020	01/07/2020	First-year milestone Conference presentation Writing groups (#2) MGR workshops (#2)	04/04/2019 23/09/2019 15/05/2019 & 10/10/2019 17/05/2019 & 30/07/2019
Stephanie Ernesto	12/06/2019 12/06/2019	Dace	07/05/2019	13/03/2020	30/06/2020	Visiting scholar seminar MGR workshops (#2)	13/07/2019 17/05/2019 & 17/05/2019
Andrew	19/08/2019	Monica	29/07/2019	13/03/2020	01/07/2020	Conference presentation Writing groups MGR workshops (#6) (Observation in natural settings)	23/09/2019 & 30/09/2020 21/10/2019 13/11/2019 15/11/2019 & 20/11/2019 22/11/2019 & 27/11/2019 20/11/2019
Mary Gabriela	14/08/2020 07/06/2019	Claudia	22/05/2019	18/03/2020	16/07/2020	Second-year milestone Conference presentation PhD group meeting	13/03/2020 30/09/2020 25/08/2020
Patricia Lotus	20/06/2019 19/07/2019	Eve	17/05/2019	18/03/2020	24/07/2020	First-year milestone MGR workshops	23/05/2019 29/05/2019

The observational data was used as the secondary data source in this study and triangulated with interview data as the primary data source to validate what the doctoral student participants had already reported about different phenomena under examination in the interviews. It also contextualised and situated data in a social setting. Observational data yielded information (e.g., non-verbal expression of feelings) that otherwise was not possible to collect through other data collection techniques such as the interviews. Above all, incorporating observational data was a vantage point because the iterative processes between interview and observational data increased confidence in the findings (Lee, 2008).

An observational checklist guided the researcher on what to consider before, during, and after the observation (Creswell, 2015). This checklist outlined ten questions that are indeed the general observation process proposed by Creswell (2015, p. 216) that are converted into a question form in the checklist. Table 4.5 indicates these questions:

Table 4.5. *An observational checklist*

☐ Did you gain permission to study the site?	☐ Will you develop rapport with individuals at the site?
☐ Do you know your role as an observer?	☐ Will your observations change from broad to narrow?
☐ Do you have a means for recording fieldnotes, such as an observational protocol?	☐ Will you take limited notes at first?
☐ Do you know what you will observe first?	☐ Will you take both descriptive as well as reflective notes?
☐ Will you enter and leave the site slowly so as not to disturb the setting?	☐ Will you describe in complete sentences so that you have detailed fieldnotes?
☐ Will you make multiple observations over time?	☐ Did you thank your participants at the site?

Moreover, before running the observations, several considerations were made by the researcher since participant observation can give rise to particular challenges because it is usually done over an extended time period, involves a variety of settings, from close interactions to some public social events, and the changing nature of the researcher's role. The first consideration was related to obtaining individual and collective consent from the student participants and the communities in which they were observed (See sections 4.3.1.2 & 4.3.1.3).

The second consideration was ‘what to observe’ because it is never feasible to observe everything (Moser & Korstjens, 2018). Hence, in the first interview with the participants, they were asked to specify any formal and informal socialising events they participated in and find most beneficial to their academic and/or professional socialisation. Aligned with the goal of this study, ‘socialising events’ were defined as any informal or formal situations that require the active involvement of the participants and their interaction with other members of the community to achieve a personal or communal goal. Moreover, the event should have allowed the members to engage in practices of their discipline (for example, professional writing sessions, and mentoring sessions) where they learned about disciplinary norms and values. Based on the student participants’ responses in the initial demographic form, five socialising events that they attended were identified: a) milestone sessions, b) doctoral writing groups, c) graduate research workshops, d) local conferences, and e) PhD group meetings. A timetable of the socialising events observed throughout the data collection period (#28) (along with the interviews) has been summarised in Table 4.4. Two factors influenced the number of observations conducted: first, the extent to which the student participants took part in different activities, and second, the outbreak of the COVID-19 pandemic and closure of the institution and transition to online modes of communication, which seriously inhibited the collection of observational data in the second half of the data collection period.

The third consideration was adopting a suitable structure for observations. On a structured-unstructured interview continuum, fully-structured observation was avoided since early use of concepts and frames could make premature conclusions (Silverman, 2008). Alternatively, semi-structured observation was adopted since this was a flexible approach that allowed the researcher to “create more focused ideas about what is of interest” as the research progresses and more observations are made (p. 101). Hence, “the ‘structured/unstructured’ distinction is one that is worked through by the researcher as the researcher progresses” (Gibson & Brown, 2009, p. 109). Adopting a semi-structured observation allowed to focus on some pre-specified agendas, features, and behaviours either surfaced in the interviews or were informed by the analytical framework, and on the general atmosphere of the setting without any preconception to “gain an ‘emic’ or insider understanding of how the setting works” (Gibson & Brown, 2009, p. 101).

The fourth consideration was identifying the researcher’s role in observations. The observation was *undisguised*, meaning that the participants were aware of the researcher's identity and her goal. The researcher employed Creswell’s (2015) conceptualisation of observational roles to

collect observational data. These roles are the 'participant observer' and 'nonparticipant observer'. To elaborate, when the researcher observed and interacted with a student participant in a writing group in which she was a member, her role was that of a 'participant observer' or 'insider'. On the other hand, when the researcher did not engage in activities of the context, for example, when she just observed the participant in their milestone, her role was that of a 'nonparticipant observer' or 'outsider'. However, the scope of the events determined the researcher's observational role on a continuum from an insider to an outsider, depending on how she interacted with the participants in the research sites (Creswell, 2015).

During and/or after the observation sessions, field notes were made. Field notes are the written records of observations and experiences. To guide the observation process and writing of the fieldnotes, the researchers developed an open-ended observation form aligned with the objectives of the study (Appendix F). Fieldnotes were both descriptive and reflective; they recorded both "a description of the events, activities, and people" and "personal thoughts that researchers have that relate to their insights, hunches, or broad ideas or themes that emerge during the observation (e.g., what sense you made of the site, people and situation)" (Creswell, 2015, p. 215). To maintain and reflect on the observational experiences, the researcher made the fieldnotes during the observation or immediately or a few hours after conducting the observations (Emerson, Fretz, & Shaw, 2001).

Since fieldnotes can be quite subjective and reflect the researcher's understanding of the events, not that of the participant, once the *observers*' *notes* were written and formulated, they were 'co-interpreted' by the researcher and the participant within a short time after the observation task. This process called 'covalidation' (de Varela, 1996) included early simultaneous involvement of the participant in data validation. A sample of the 'co-interpretation' of the researcher's field notes with a participant, Catherine, during her first milestone, has been provided in the last section of the observation form (Appendix F). This sample illustrates how knowledge was co-constructed by the researcher and the participants.

4.3.4.3. Governmental and institutional policy document analysis

In this study, document analysis was used as a supplementary way of collecting data. Documents are vital for understanding an organisation's identity, and documents describing the characteristics of an organisation show whether it is similar to or different from other organisations. Also, the functions of educational organisations, specifically those dependent on

governmental funding, are dictated by national and local policies. On the importance of documents for universities, Prior (2003) stated:

> A university (any university) is in its documents rather than its buildings. The charter together with other documents names the university, provides warrant to award degrees, and legitimi[s]es the officers of the university and so on. Naturally, a university has buildings and equipment and lectures and students, but none of those things are sufficient for the award of university status. Only the charter can define the organi[s]ation as a university, and in that sense provide the one necessary condition for its existence. (p. 60)

He further advised that when "approaching documents as a field for research we should forever keep in mind the dynamic involved in the relationships between production, consumption, and content (p. 26). Therefore, the relevant policy documents are collected and reviewed to better understand the nature and goals of the program under investigation study.

Documents were selected following guidelines proposed by Caulley (1983). Most documents had a short time interval with the incident described, documents authored by the government and organisation that were supported by policies, rules and regulations (rather than those written by an interested author for various purposes) were selected.

Understanding an institution's normative and structural constituents requires reading policy documents that specify the missions, needs, and goals. To understand the governmental arrangements and the supporting policies, the researcher examined relevant documents, surveys and records published on the Australian Government website or in print. Documents provided a rich background on the history and current practices of the Australian HE and information on the rate and status of international students, specifically in doctoral programs. Documents added invaluable information to the study and increased its rigour.

4.3.4.4. Triangulation of qualitative data

There is a consensus among case study experts (e.g., Merriam, 1998; Yin, 2003, 2009) that researchers should draw on a chain of evidence. "Triangulation is a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation" (Stake, 2000, p. 443); thus, it reduces the risk of misinterpretation and increases the credibility of the research. Typically, six data sources can merge in a triangulated fashion: interviews, direct observation, participant observation, documentation, archival records, and physical artefacts (Yin, 2003). This form of qualitative data allows a rigorous description of social phenomena (attitudes, behaviours, interactions), which adds to the credibility of the data (Yin,

2003). In this study, data for the research problems were generated through a) individual semi-structured interviews with student participants and their supervisors, b) group discussion with student participants (primary data source), student participant observation and field notes (secondary data source), and relevant policy documents (supplementary data source). This generated rich qualitative data collected from separate instruments brought together at the interpretation stage, allowing for a thick description and a thorough understanding of the research problem.

4.4. Data analysis process

Data analysis refers to "the process of making sense of the data which involves consolidating, reducing, and interpreting what people have said and what the researcher has seen and read – it is the process of making meaning" (Merriam, 1998, p. 178). The researcher followed simultaneous data collection and data analysis recommended by qualitative researchers such as Merriam (1998) because the preliminary data analysis could highlight the need for making some alterations in the data collection procedure. This made the design more flexible. The following sections describe how the data was analysed.

4.4.1. Thematic analysis of interview and observational data

The data collected through the interviews were subjected to Thematic Analysis (TA), defined as "a method for systematically identifying, organizing, and offering insight into patterns of meaning (themes) across a data set" (Braun & Clarke, 2012, p. 57). The first phase of this six-step approach is 'familiarising with data' by transcribing the data. The researcher used machine transcription software to convert part of the raw audio data to text. According to the university's Graduate Research guidelines, the automated data transcription could be applied only to two-thirds of the data. Thus, the rest of the data was transcribed manually by the researcher. To secure the data uploaded on the online transcription machine, the company cleared the audio files as soon as they processed them to generate the transcriptions. For a 60-minute audio recording, this processing took, on average, 10 minutes. Only the transcriptions remained on the server, which the researcher deleted after they were transferred to her laptop. The transcription machine incorporated several features such as voice recognition to identify the speakers, timecodes, trimming function, and clearing background noise, which yielded organised high-quality transcripts. All the transcriptions were then listened to by the researcher two times, who made further corrections and inserted the necessary contextual clues such as

pauses to capture how things were said. This provided an opportunity to review, recall and reflect on the interview content during transcribing.

This study used a six-step Thematic Analysis (TA) procedure developed by Braun and Clarke (2006). These steps included: 1) familiarising myself with data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes, and 6) producing the report. Some themes were generated during the TA process as informed by the underlying theoretical framework and guided by the interview protocol. However, as the coding procedure progressed, some themes were differentiated into subthemes, and additional themes were generated from the data. The main themes were refined using a multi-step, iterative process involving continuous searching, reviewing and condensing codes until saturation was reached. Saturation or "data adequacy" is a common term in qualitative research that refers to the collection of data – here, categorising data into themes – "until no new information is obtained" (Morse, 1995, p. 147). These phases corresponded to phases 2 to 6 of the TA process. The following excerpts from the interview with some supervisors in one of the interview questions, "What do you consider to be an ideal PhD program in education?" indicate how different thematic analysis phases led to the generation of the main theme (Table 4.6).

The initial coding was based on the main idea put forward by every supervisor, which included independence (Caitlin & Stephanie), mentoring (Ernesto), and facilitating (Lotus). 'Mentoring' and 'facilitating' implicated methods of assisting students, and these two terms were interpreted concerning forms of 'dependence'. Informed by the outcomes of socialisation defined in terms of KSDs (Weidman et al., 2001), the theme 'independence' was ultimately interpreted as representing the most important disposition to be fostered by doctoral students. The same thematic analysis procedure was followed for data to answer other research questions.

The inclusion of both doctoral students and their supervisors in this study allowed dyadic or triadic analysis of each student-supervisor(s) data set. In this way, both doctoral students and their supervisors provided their perspectives on the supervision approach.

Table 4.6. *A sample of the thematic analysis procedure*

Supervisors	Caitlin	Stephanie	Ernesto	Lotus
Excerpts of data	[PhD] is an **independent** study and if the students are able to set the agenda for the meetings and lead the way and show initiative in the types of reading they want to do, in the theories they want to engage with.	There is this expectation of **independence** and that you get as much as you give, […] that you might have a few meetings here and there but ultimately it is a hundred percent up to you to kind of make connections and to put yourself out there.	When I was a doctoral student and that as a new doctoral student, I was **paired** with a more experienced doctoral student, kind of a more formal mentoring kind of process. Student and their two supervisors are **complementary parts** [who form] a key set of **relationships** to keep that student progressing.	I think a good education program should be **holistic**. So, you should allow students to develop academically, but also to develop other personality traits too. […] [It should] have strong **support systems,** especially for international students, and that comes from my own experience.
Initial codes	Independence	Independence	Mentoring	Facilitating
Homogenising themes	Independence		Dependence	
Final theme	**Independence**			

Consequently, once the thematic analysis of the individual audio data was prepared, and themes were generated, data were analysed at the dyadic/triadic levels. This cross-case analysis was performed to find contrast and overlaps among the codes and themes identified in data related to every student-supervisor dyad/triad.

4.5. Trustworthiness

Every qualitative case study is unique because the evidence is drawn from specific entities and at a particular point in time. The trustworthiness of this research was established using the four criteria proposed by Lincoln and Guba (1985). These criteria are credibility, transferability, dependability, and confirmability. This study fulfilled these criteria through five techniques suggested by qualitative researchers (Lincoln & Guba, 1985; Merriam, 1998; Stake, 1995; Yin, 2003, 2009). These criteria include triangulation, prolonged engagement and persistent observation, thick description, member-check, and audit trails.

Triangulation of data was the first measure to increase the credibility of research, reduce the risk of misinterpretation, and increase the research's credibility. "Triangulation is a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation" (Stake, 2000, p. 443); Data collected from multiple sources – individual interviews, focus-group interviews, participant observations – were triangulated to ensure completeness of data (See section 4.3.4.3). Thick description was the second measure employed to establish the credibility and transferability of the findings. These two criteria were established by providing such a detailed description of the context of the study, participants' behaviours and activities that the accounts make a sense to a reader (an outsider). The detailed description allows the readers to transfer or consider the applicability of the findings to other contexts. Member-check was the most crucial technique for establishing credibility because it helps avoid bias (Lincoln & Guba, 1985). The purpose of this technique was to double-check the data (transcripts) with the participant from whom the data was collected to ensure what they said matched what they intended. In case of ambiguity, further clarification could be requested from the participants. The following indicates an instance of bias by the researcher that was member-checked during the interview with Patricia, a senior supervisor:

> Patricia: I am still I think probably more of a traditionalist in my thinking.
>
> Researcher: What do you mean by traditionalist? Do you mean that you prefer the course-based programs?

> Patricia: no course, no course at all. So I would say initially the idea of a PhD was for an individual student to come to someone whose work is the research they respected or they liked, a person to help you for them to teach you what they knew and then for you to do some research, to build on the research.

The above example shows that the researcher's presumptions about traditional PhD as the course-base or North American mode of PhD that was based on her knowledge about PhD education in her country interfered with understanding what the supervisor meant by the term that, based on her own background, referred to an apprenticeship or German model of PhD. The source of miscommunication and ambiguity was prevented through member-check and asking for further clarification of unknown concepts.

Prolonged engagement and persistent observation allowed the researcher to gain a comprehensive understanding of the setting and the participants of the study by spending sufficient time in the field or setting of the study and observing the student participants in different socialising events over a year (Lincoln & Guba, 1985). Audit trails were deployed to establish dependability (stability of findings over time) and confirmability of research. Audit trails contributed to the transparency of research by providing a step-by-step description of the decisions made by the researcher throughout the research and the rationale for the decisions made so that a clear research path throughout the study could be established (Halpern, 1983). An audit trail can include notes on methodological procedures. For instance, in the data analysis phase, a decision was made to run a dyadic/triadic analysis of the data related to each student and their supervisor(s) rather than analysing the data and presenting the findings separately.

Finally, reflexivity was maintained by the researcher's engagement in the critical self-reflection process about oneself as a researcher and addressing her own biases, preferences, and preconceptions. The role of the researcher in this study was significant because her personal experiences contributed to the in-depth understanding and conceptualising of the participants' narratives. As a doctoral student in the same Faculty, the researcher fully captured the context in which the participants interacted and noticed the contextual clues that an outsider researcher might not see. Context plays a key role in observation because the participants' behaviours made sense in light of the context in which they occur. This allowed the researcher to determine the features that facilitated or otherwise debilitated the socialisation processes, for instance, power relationships within every socialising context and students' interactional patterns. Moreover, there was no initial discomfort that participants may feel in the presence of an outsider observer.

By fully situating herself in the program and communicating with other students, the researcher was able to build rapport with some peers in the first year of the program who later consented to be participants of the study in the second year of the program. In this way, trust between the researcher and student participants was established and allowed the researcher to recruit participants who were willing to share their previous and present personal and academic experiences with the researcher over more than a year. Moreover, the researcher's reflective voice is that of the 'passionate participant' (Lincoln, 1991) because the construction of knowledge is understood as the outcome of the interaction between the researcher and those being researched. In other words, the meaning that the researcher arrives at is her interpretation of the meaning articulated by the participants.

4.6. Conclusion

This chapter has provided a detailed description of the research design and methodology. It introduced social constructivism as a paradigm governing the study and explained the important effect of the researcher's role as a reflective insider on different aspects of this research, such as the research data and research outcomes. The research fitted the qualitative case study design due to its exploratory nature and desire for an in-depth understanding of the socialisation experiences of a group of international doctoral students in a natural setting of a tertiary institution. Data were collected from students and at least one of their supervisors. The methodology allowed collecting data over one and a half years of the students' candidature as well as retrospective and prospective data. Data were collected from multiple sources combined in a triangulated fashion to allow a thick description of the data. Several measures were taken concerning the confidentiality of the participants and the trustworthiness of the research at all levels and stages of the inquiry.

CHAPTER 5. PRE-ENTRY STAGE: VALUES, ASPIRATIONS AND EXPECTATIONS

5.0. Introduction

This chapter, the first of the four Findings Chapters, is focused on the pre-socialisation or the anticipatory stage of the socialisation process. This chapter identifies the deeply ingrained values, expectations, and aspirations that entering doctoral students held due to their personal and professional experiences. The findings presented in this chapter indicate the interconnection of past, present and future in students' experiences (Weidman et al., 2001). The chapter reports the research findings obtained from the first interviews with doctoral students and addresses the first research question:

> *What values, aspirations, and expectations do doctoral students have as they begin their study?*

To answer the research question, first, the terms values, expectations and aspirations are defined, and aspirations and expectations are differentiated to draw out the important and subtle distinctions. For Weidman et al. (2001), "time, alternative career choices, self-esteem, social status or reputation" are examples of personal values associated with professional roles (p. 17). 'Expectations' are preconceived ideas about a chosen field and are different from person to person and from program to program. 'Aspirations' such as 'career aspirations' and 'professional aspirations' refer to an individual's orientation towards specific long-term (career) goals. According to Azmat et al. (2013), this last "is a more difficult concept for the Australian university system to be responsive to, as each student has differing aspirations for life" (p. 3). These three concepts may also be interrelated. For example, an expectation may develop as a result of values and aspirations.

Weidman et al.'s (2001) formulation of socialisation stages was used as an overarching frame for the research question in this chapter. The anticipatory stage of socialisation is considered to be when doctoral students prepare to enter a graduate program and can hold stereotypical and preconceived images of the graduate program and their roles. It is also construed as "the acquisition of values and orientations found in statuses and groups in which one is not yet engaged but which one is likely to enter" (Merton, 1968, p. 438). In this chapter, the

anticipatory stage of socialisation incorporates the more generic conceptualisation of *pre-entry* socialisation to highlight that students' values, expectations, and aspirations emerge from their personal, cultural and professional histories. The pre-entry stage starts from childhood and continues into adulthood, where knowledge is continuously acquired through interaction with personal (e.g., family and friends) and professional communities (e.g., educational systems, previous work experience) (Weidman et al., 2001). Despite the significance of students' experiences in the pre-entry stage of socialisation, most research concentrates on the post-entry socialisation or experiences of doctoral students after they join the program. However, by taking the pre-entry experiences as a strong influence the on post-entry socialisation of doctoral students (e.g., Feldman, 1976), this chapter focuses on doctoral students' past experiences and influences as a way of illuminating their values, expectations and aspirations. In reflecting on the students' backgrounds, special attention is given to their personal and professional communities. How doctoral students' background oriented them in navigating the doctoral program will then be explored in Chapters 6 and 7 in relation to knowledge, skills and dispositions (Weidman, 2006).

A case-by-case analysis of the data revealed that the desire for a PhD credential was the only factor the six student participants had in common. The analysis yielded six forms of aspirations, which related to credentials only, teaching expertise, professional impact, social impact, research expertise and leadership. There was overlap in these forms, but they denote the dominant type of aspiration that characterised each student. In this chapter, the participants and their desired knowledge, skills, and aspirations will be discussed in turn.

5.1. Joker

Joker was a 28-year-old single student from a country in Southeast Asia. Table 5.1 summarises his values, aspirations and expectations at the pre-entry stage of socialisation:

Table 5.1. *Joker's values, aspirations and expectations at the pre-entry stage*

Values	-getting a promotion/ social mobility -serving his community
Aspirations	-to serve the community through his civic Foundation -to become a guru
Expectations	-to gain a credential

For Joker, the pursuit of education was a respected cultural value, ingrained in his early socialisation in a family who recognised a higher degree obtained overseas as a means of social mobility. He perceived this to be desired by many individuals, as he remarked, “Everybody wants to go studying abroad, especially in [my country].”

Joker’s aspirations were closely related to his professional history. First, he was involved in professional activities that were aligned with the aforementioned cultural values and conformed to his aspiration to serve his country. For instance, he set up a civic foundation in his village registered by the Ministry of Law, which aimed to improve social problems and reinforce adolescents’ civic engagement by offering educational training to those with little literacy access. Some of the organisation's activities included running English classes for adolescents and training for mothers and women of childbearing age to improve their children's health. The following quote highlights the priority of Joker’s aspirations:

> If I invest my time in pursuing a PhD, I will lose so much. I will be taken away from my context and be very deep into the PhD. Yes, to me, doing a PhD is, I would say, this is now more like something that I need for my job […] I think when I finish this doctorate, people will start putting more expectations. Yeah, I think I'm the only doctorate in my village and when you're a doctor, you can lead.

Joker clearly stated that fulfilling his professional roles like “serving the people of [his] village” was more important than committing to his PhD. He explained that focusing too much on the PhD requirements might lessen his connection to his professional responsibilities. In the meantime, he implied that the PhD would upgrade him as a leader by contributing to his social mobility but, at the same time, increased expectations from him.

Second, Joker got a full-time lecturing position at a university in his country until retirement, so his aspiration to have a PhD was not aimed at employability. Rather, he appeared to seek the honour, trust and respect that this credential would bring him. The PhD program was thus perceived as advantageous if it would contribute to his status in his country. While elucidating the cultural and religious values embedded in his teaching, he aspired to be a *guru*, a position beyond having teaching skills or subject matter knowledge and entangled with religious morals and expectations central to being a Muslim teacher in his country. Being a teacher and educator is a vital community position, imbued with spiritual purposes that directed him “to sharpen our intelligence, soften our heart, and strengthen our will”.

A fully-funded doctoral program was thus attractive, not only because it would bring financial security but also because it would offer a credential he desired but was not strongly invested in before beginning his candidature:

> I'm a scholarship hunter […] The main motivation for doing a PhD [is that it] comes with a scholarship. So, I think that's important there. I do PhD because it's a scholarship; if it's not a scholarship, I will never do a PhD.

Joker's main expectation in studying in the doctoral program appeared to be to gain a credential. He was exclusively focused on acquiring a doctoral qualification. Even though the title 'doctor' was not considered to be a life-changing event, it did offer him opportunities: "if you get a 'doctor' title, you'll be involved in a lot of projects. […] A 'doctor' title will give me more power, […] I got to make a change."

These projects and changes appeared to be benefits associated with his current work. Five years of professional experience as a university lecturer had convinced Joker that teaching was the right job for him. He identified himself as a 'university teacher' and was passionate about it. He observed that "this is something that I want to be for the rest of my life, being an educator", suggesting that the possibility of following a new career trajectory for him after acquiring a PhD credential was slim.

5.2. Catherine

Catherine was a 37-year-old married student from a Southeast Asian country who came to Australia with her husband to undertake her doctoral studies while her parents looked after her only son in her home country. Table 5.2 summarises her values, aspirations and expectations at the pre-entry stage of socialisation:

Table 5.2. *Catherine's values, aspirations and expectations at the pre-entry stage*

Values	-social mobility by obtaining international knowledge
Aspirations	-to become a high-standing academic -to migrate to Australia
Expectations	-to obtain expertise knowledge (TESOL)

Similar to Joker, Catherine valued social mobility that could be attained by studying in a developed country. She aspired to migrate to Australia, hoping that her higher education would make her an outstanding academic one day. However, in contrast to Joker, who joined the doctoral program solely to obtain a credential, she expected to fill the gaps in her knowledge

and skills, in other words, to obtain expertise. Catherine held a Bachelor's degree in Industrial Technology but had worked as a primary school English teacher for over twelve years. Given the discrepancy between her BA credential and her field of interest (English Teaching), she did not consider herself a legitimate member of the field of Teaching English to Speakers of Other Languages (TESOL). This became a motive for her to pursue a Master's and doctoral degree credentials in an Education-related discipline to align with her self-image as an English teacher. She related, "I'm an English teacher, I need to improve my skills in teaching English". She also desired to be officially recognised as an expert:

> I think culturally in [my country] if you're just like a plain teacher or a Master's degree teacher, you're not really that good or you don't have much of an impact on the students or the people around you.

When discussing different aspects of her academic career, she was particularly interested in the importance of inspirational training and the potential impact that professional teachers could have on the lives of children, specifically at the foundational level:

> I applied to a primary school because I really wanted to deal with children, and yeah, I think teaching is to make a difference in the lives of the children, I want to be there in their foundation. […] I think at first like I just wanted to get a teaching job to feed my family. So, it's like teaching superficially, like the value of teaching for me was like simply just to teach. [Then,] I realised that teaching is not just to teach children, it's just like you go beyond, how to teach professionally, how to be more than a teacher. […] I want to make an improvement with regard to teaching, I think that also changed how I view education as a profession.

This comment indicates that Catherine's previous work experience was an important factor in shaping her current conception of the teaching career and also her desire to become a professional teacher by obtaining specialised knowledge through her participation in a graduate program. In view of this, she first completed a Master's degree in TESOL in Australia and returned to her country, where she continued her job for two more years. However, this experience had already resulted in new aspirations to live in Australia. Therefore, after two years, she returned to Australia to continue her doctoral studies. She envisioned graduate school in a foreign country beyond a site for doing research; but rather as an enriching space, which would equip her with knowledge and skills, allowing her to grow as an expert or lead scientist:

> It's for my professional growth, that's the main thing, and I really want to be like a *doctor*, so like an *expert* in the field of English language teaching or learning, […] like, for example, in digital literacy. In [my country], it's new, so I want to be the first person to introduce it to [my

> country] or give workshops. I want to gain those skills that you know when people invite speakers; for example, I want to be one of the speakers. […]

As the above comment indicates, Catherine perceived being a doctor as the state of having expert knowledge in a specific area. In contrast, Joker, a credential seeker, understood himself already to have the required knowledge. For Catherine, upgrading from a 'plain teacher' to an 'expert' required affiliation to a higher education institution in a more developed country. To attain a higher status as a top university lecturer, she needed to possess a kind of rare expertise demanded in her country. Thus, she was also aspired to migrate to Australia:

> I want to stay in Australia. I want to teach, get a university lecturer job probably, or I want to be a primary school teacher here. I don't want to go back to work in [my country], but I want to be invited as a speaker about, you know, everyday digital literacy, or about language and literacy. Yeah, it's my dream.

By signalling that she "want[s] to stay in Australia", Catherine revealed a long-term aspiration sitting behind her motivation to do a doctorate in a foreign country. This aspiration was also aligned with her values and social mobility by migrating to a more developed country. While both Joker and Catherine intended to serve their countries, a desire leading them to doctoral education, their personal and professional histories were different, leading Catherine to seek teaching expertise in a developed country as well as credentials.

5.3. Eve

Eve was a 29-year-old, married student from a South Asian country who came to Australia to pursue her PhD with her husband, who accompanied her on this journey. Table 5.3 summarises her values, aspirations and expectations at the pre-entry stage of socialisation:

Table 5.3. *Eve's values, aspirations and expectations at the pre-entry stage*

Values	-social mobility by obtaining international knowledge
Aspirations	-to become an academic
Expectations	-to obtain a professional impact and make a difference in her profession

She intended to return to her country upon completion of her PhD because she valued social mobility in her own country through 'international knowledge' acquired in a more developed country and specifically in a university with a high academic reputation. By participating in a doctoral program, she aspired to become an academic and expected to achieve professional

impact related to her prior professional experiences as a consultant in a few tertiary institutions. Aligned with her specialisation in environmental sustainability, she was involved in and consulted on environmental research projects in private and public sectors for three years before joining the doctoral program.

Eve was the only participant whose academic dispositions and research experiences showed a change of direction from Science to Humanities. She had a Bachelor's Degree in Applied Sciences and a Graduate Diploma in Brand Management. Despite having no Master's qualification, her prior extensive research activities and publications qualified her to undertake a doctoral program in Education. Although it may suggest that she was ready to redeploy her research experiences in her doctoral studies, there was a chance that she would experience difficulty as she became accustomed to the field of Education.

Interestingly, Eve's professional practices inspired her to join a graduate program in the field of Education because she perceived that the research gap identified during her job experiences required different types of interventions. In other words, a disciplinary shift appeared to be essential as she realised the limitations of resolving environmental problems only through technical means and the importance of having academic expertise to avoid environmental consequences. Besides, as she had no graduate qualifications – unlike the other participants – she perceived herself to need further experience in the academic space so that she could understand and investigate the social and environmental problems more thoroughly:

> It's actually because of previous experiences I had, you know, groundwork experiences and the challenges to people, and also as consultants, we also had challenges. So, I saw some gaps in [my country] which we had to address academically, which we don't have any evidence of how to go through that. So, I did it in a professional way, but I wanted to do it through academics […] actually that my groundwork motivated me to do so. I came here to research [my topic] more professionally.

Eve acknowledges the value of diverse international perspectives for providing more advanced solutions to the research problems under investigation; Catherine also acknowledged acquiring expertise in a foreign country. Despite this similarity, there was a significant difference in what these students demanded. Catherine sought to establish herself in a single disciplinary content area, whereas Eve assumed that today's global challenges could be better approached by combining expertise from different disciplines. Hence, she envisioned a multidisciplinary approach as a distinguishing characteristic in her career trajectory.

Eve's decision to do a research-based doctoral study in Australia and at a particular university was also connected to her future career goals. During three years of professional experience in her country, she worked for universities that were funded by the Australian bodies to work on environmental sustainability projects for communities, as she described:

> We can get PhDs in [my country] as well, but I wanted to get into an international context and see how other academics, other people see this problem through their minds, so I actually wanted to work in an international setting. […] Because in my work, I worked with Australia Education, so I had like better contacts with Australia [through] DFAT, Department and Trade Affairs of Australia, [it] is the place we got the fund […] I got other chances as well, but I preferred [this university] of course because of the reputation, and I had a good network.

Eve's remark stresses the significant role of her professional networks that served as the first point of contact, leading her to a program in a particular institution. Moreover, she envisioned herself in the professional position she used to have but was promoted to full-time academic staff after obtaining a PhD qualification.

> Because I was working as a contract(or) […] not, you know, permanent staff in my university, so […] it was not a problem [to stay in Australia]. When I was coming to Australia for my PhD, my main motive was to go back to [my country] and start the same profession as an academic there.

Obtaining a doctoral credential accredited by a particular international institution fulfilled the requirements of Eve's prospective workplace, increasing her chance of employment in her country after graduation.

5.4. Dace

Dace was a 28-year-old single student from a South American country. Table 5.4 summarises his values, aspirations and expectations at the pre-entry stage of socialisation:

Table 5.4. *Dace's values, aspirations and expectations at the pre-entry stage*

Values	-social justice -cultural experience by studying abroad
Aspirations	-to make a change for a good cause through his research
Expectations	-to obtain experiences that help him to have a social impact

Dace's life history drove him to focus on social change in his country. He valued social justice as well as cultural experiences that allowed him to achieve his goals. By participating in a doctoral program abroad, he expected to obtain cultural experiences that would help him have a social impact because he was inspired to make a change for a good cause. Coming from a middle-class family in which teaching was a common profession, he was inspired to become a teacher in the field of English Language Teaching; thus, he was following a known route transmitted by relatives and acquaintances:

> I come from a family with many teachers. [When] I was 15 years old, [my uncle] suggested me to study languages and I agreed, and once I started studying, like to be an English language teacher, I just really enjoyed it so I continued the career. […] My uncles explain to me many things, like legal things, what does it mean to be an English language teacher in [my country], in primary schools, like how is the process to get a job […] I ask them for advice like how to manage your classroom with disruptive behaviour, for example.

Supported by his family through this career path, Dace was inspired to make a change for a good cause through his research in Education. Dace's identified research gap was associated with both his academic and professional experiences in the South American society where social equity was a major downside of Public Education:

> The higher social classes in [my country] send their children to bilingual schools, and later on, they have an advantage when they want to find a job, for example. So that experience made me realise about social equality as one of the main problems that [my country] faces and I still have that conception. That's [i.e., social equity] is the ultimate goal of Education. […] It's through English that the government is trying to balance that equality, offering children from primary schools the chance to use a second language, a foreign language.

Based on Dace's observations, disadvantaged children in society should be provided with equal access to English education to advance to higher education and have more promising futures. This was a driver for him to acquire a doctoral credential in ELT-related fields: a Bachelor's degree in English Language Teaching and a Master's degree in English didactics from South American universities. These credentials aligned with his perceived present and future self as an English teacher or lecturer thanks to over twelve years of English teaching experience. Moreover, it appeared that his embeddedness in the field of English Language Teaching (ELT) propelled him to desire the cultural experience of studying in an English-speaking country:

> I think that education in [my country] is very good. I was not looking for something that was better academically speaking, but like something cultural, cultural experience, you know using

> English all the time in a foreign country, meeting people around the world. I think that was the thing that made me study abroad.

When recounting his professional history, Dace specified three aspects of his career that included teaching, learning and research:

> I have always been an English language teacher in high school. Hum…. I gave some English language courses at university, and later in 2015, I gave some modules for pre-service teachers. So, I was teaching them Applied Linguistics, English literature, academic writing. […] How people learn a second language, how to teach a foreign language, how to do research in the area of education, I think those three are the main aspects of my career. […]

He had a variety of teaching experiences within his field and was more specific about what his professional activities included. This suggests that he had more relevant disciplinary knowledge to deploy in the doctoral program in Education. This is similar to Joker but contrasts with Eve, who had to redeploy the knowledge of different disciplinary areas into the field of Education. Dace also positioned himself as having a researcher identity:

> Bachelor's and Master's programs are very different in [my country]. So, you will conduct research there and you will do a thesis by the end of the program. So, I don't see the PhD as the beginning of my research road. Let's say, it's in the middle of the process and it's not the end. […] So, I was lucky to have a very good research Professor. So, I'm not an expert or like, oh I came here knowing everything that I needed, no, no way but I already had contact with research.

Dace's remark, particularly that he did not view the PhD "as the beginning of my research road", signified the recognition of his prior learning experiences that legitimised him to consider himself a researcher. Although all the participants had met the 'research' requirement of entering a PhD program in Education, specifically as a major component of their Master's degree, it did not result in an uptake of a 'researcher' identity. Only Dace and Eve looked upon themselves as researchers. This can be explained in light of their previous professional engagement with research, which justified their presence in a research-based doctoral program, as well.

5.5. Claudia

Claudia was a 37-year-old single mother from a South Asian country who came to Australia with her nine-year-old daughter to pursue her PhD. Table 5.5 summarises her values, aspirations and expectations at the pre-entry stage of socialisation:

Table 5.5. *Claudia's values, aspirations and expectations at the pre-entry stage*

Values	-improvement of early childhood education
Aspirations	-to lead the field of early childhood education in her country
Expectations	-to upgrade her educational leadership skills by improving her theoretical knowledge

Claudia valued most the improvement of early childhood education. She had extensive experience working for universal bodies such as the United Nations, UNESCO, the Australian-Himalayan Foundation, and multilateral and bilateral donors such as the European Commission, which essentially aimed at developing pedagogy and practice in children's education. Accordingly, she was inspired to lead the field of early childhood education in her country. Through her participation in a doctoral program, she expected to upgrade her educational leadership skills mainly by improving her theoretical knowledge.

She had received all her qualifications from foreign countries. With a Bachelor's degree in Social Sciences from India, she secured a position in the development sector. Here she worked closely with teachers and educators in universal bodies and organisations such as the United Nations, which provided funds for girls' education. As a head of programs for four years, she described her responsibilities in that position thus:

> I channelised (created pathways for) all the programs and how to design them and then I liaised with the donors and where the fundings would go, and how we planned everything, the programs. So, if it's a five-year project, we plan the programs for five years and I did go for monitoring, evaluation and initial baseline assessment.

Similar to the other participants, she linked her professional history to the field of Education, but the role that she fulfilled in her educational practices was different from those of the other participants. She worked as a director or an educator rather than as a teacher and viewed herself mainly as an 'educational leader' who created 'channels' or pathways to set up new programs that supported childhood education. Cooperation with the aforementioned organisations directed her "more into the education of children", where she identified a research gap to investigate:

> We worked for those companies, worked specifically for children's education in [my country] because there's still a need to work a lot on our education system. We need to kind of upgrade knowledge and skills, and bring in more quality teaching and expertise into the country. I wasn't

> a teacher. I was just someone who worked closely with teachers […] it has helped me understand how teachers work and what is the change that we need to look into.

Similar to Eve and Dace, Claudia's intention to pursue her studies was not to complete a degree that qualified her to start a career but to improve the existing career by filling the gaps in her knowledge. For example, she was inspired to investigate new models of teaching and learning in the context of her work. She discovered the theoretical or philosophical assumptions underlying her practices in primary education in her country:

> I knew a lot of practical things that we implemented, but I didn't know the theory behind them. So that's something that I had to un-learn and re-learn during my Master's degree, and I think that's the same during my PhD […]. So, there's a lot of packing and unpacking that I've done and I think that's helped me to kind of view things from a different perspective once in a while.

It is clear from her statement that she specifically sought to bridge the gap in her theoretical knowledge. The quest for this form of knowledge was also expressed by Eve. Moreover, it suggested that the students valued both theory and practice. Many years of doing academic activities such as teaching and researching do not necessarily yield the perception and confidence of being internally identified with a role. To elaborate, it was likely that the participants could not perceive themselves as an able researcher because of a flaw they perceived in their knowledge or credentials. To bridge the gap in her knowledge, Claudia pursued a Master's degree and, after two years, a PhD degree in Australia at the same university:

> When I was doing a Master's, my Master's supervisor told me that I should continue doing a PhD, but I thought I should go back because I told the organisation that I would come back and we would plan projects which we did. So, I went back for two years and then [Mary], my main supervisor also encouraged me to apply for a PhD. It did take me two years to get prepared mentally, and I finally came.

As Claudia indicated, she did not need a higher degree credential to find or maintain a job as following her previous career was a likely option for her. Thus, it was mainly the desire to learn and her supervisor's encouragement directing her to the doctoral program. She also appeared to be open to further career opportunities, as the following comment indicates:

> I don't know, for me, it's never been about finding better jobs. PhD's more of an understanding of what I do has always been my motivation. I worked for children's education and I worked with teachers that have been my motivation to understand the sector more. It's never for me to

> find a job […] but if PhD gives you an added advantage to find better jobs, why not, but I haven't thought about that.

By joining a doctoral program, Claudia expected to find her niche in Education. She was the only participant who was primarily focused on being a knowledgeable educator both in theory and practice and not on the external work of seeking recognition and identification with a particular job.

5.6. Monica

Monica was a 27-year-old married student from a South Asian country who came to Australia to complete a doctoral degree along with her husband, who was undertaking a Master's degree at a different Australian university. Table 5.6 summarises her values, aspirations and expectations at the pre-entry stage of socialisation:

Table 5.6. *Monica's values, aspirations and expectations at the pre-entry stage*

Values	-learning and research and social mobility
Aspirations	-to become an academic in her country
Expectations	-to gain research expertise

Love of learning and research were the main values driving Monica to pursue a doctoral degree. She too was inspired to return to her country, where she was able to secure a full-time academic position at a specific university. Having a higher-degree credential from a foreign country could change her status relative to her current situation, resulting in greater social mobility.

Unlike the other participants in this study, Monica hardly had any professional experience. However, her academic experiences had a significant effect on her aspirations. Her only work experience was a six-month internship as a component of her Bachelor's degree in her country that involved some teaching and administrative work:

> The purpose of an internship in our Bachelor of Education program is to use the knowledge that you learned until now and apply it with the pedagogy and in real school settings. We do everything a teacher does, like with that administrative work, […] to arrange social events for my supervisor and the kids involving the classes I'm teaching. And also, we have to take their exams, to everything. I mean, we are just part of that institution for six months.

The professional experience outlined by her was more relevant to teaching and logistics than research. However, it appeared that she was more in favour of research. By reflecting on her

only research experiences and acknowledging the research components of her Bachelor's and a Master's studies in Education, which included a "full-fledged thesis", she commented:

> Everything related to the research interests me […] I'm open to learning rather than teaching, open to dialogues and everything regarding research.

She was not quite certain about her career prospect; she envisioned herself as a researcher, meaning that attending a graduate school was another test of being a researcher:

> That could be a great opportunity for me to stay as a researcher because, you know, when you are in the university profession as an academic, you get more chances to learn and research.

Despite her interest in being a researcher, Monica reported that she did not initially seek a PhD in a foreign country because of her family commitments; she did not need further credentials to find an academic job in her country. However, one external factor rooted in her educational history appeared to have inspired her to pursue a doctoral degree. She admired the professionalism and open-mindedness of her instructors, who were trained in Australian universities, and she was inspired to take up a similar role:

> I don't want to live here. I don't like being away from home because of my parents, because I'm the eldest daughter. […] Having a PhD isn't like (a) mandatory for having a university job like a lecturer […] I think for me the main motivation would be seeing my teachers studying here. […] They have an open mind, they can think clearly, so I wanted to have that.

Her comments suggest that she would acquire certain dispositions such as open-mindedness, which characterises efficient and inspirational researchers by studying abroad. Following the footsteps of her instructors, she became a member of the Institute of Educational Research (IER) in her country that, among other things, aims to advance study and research in Education by cutting-edge overseas training of teachers. Guided by her instructors who were trained in Australian universities through the IER, she pursued a doctoral research degree at this Australian university. She commented,

> It's purely a personal motivation […] it is for me a learning journey […] once you have good grades, you're thinking of applying somewhere and [this university] is the first thing that comes to your mind because you're seeing your supervisors and your teachers are studying here, doing their PhD. So yeah, it's kind of, you know, affects you. We have a connection through our teachers to this institute, not personal connections, but we have the motivation to apply here. […] The previous dean of our Faculty was from this university. This University is like a hub for students [from my country].

While implying the pursuit of a doctoral degree as a sought-after expectation, she emphasised how networking between her university and the prospective Australian institution could pave the way for her future participation in the research community. Eve stated a similar experience.

Since Monica did not bring professional experience to the program, she positioned herself just as a learner; she rarely talked about what her own contribution could be. It is possibly because students with no professional experience might not have clear career aspirations. Thus, a graduate program is a site for discovering professional opportunities and what future role they envision for themselves, a function typically expected from a doctoral program (Weidman & DeAngelo, 2020).

5.7. Discussion

The findings presented in this chapter interpreted doctoral students' values, expectations and aspirations through the discourses of their past experiences at the pre-entry or anticipatory stage of socialisation. The main values attached to doctoral education were identified to be upward social mobility. This aligns with other findings; for example, giving priority to higher education is "already implying success in life" (Burlutskaia, 2014, p. 54) and contributing to one's community and society (Australian Government report, 2018). According to Weidman et al. (2001), personal communities, including immediate or distant family members, were found to be among the most important influences "whose expectations and encouragement may support or detract [students] from the graduate study" (Weidman et al., 2001, pp. 38-39). These findings provided evidence for the significant role of personal communities in supporting the value of HE and particular career options for students. For instance, Joker reported that his parents and relatives helped him understand the honour and trust that a higher degree credential could promote his status in society. Dace reported having been encouraged and assisted in following a teaching career due to his relatives and engagement with this profession (e.g., Grim et al., 2021). This implies that both generations, including the parents and their children, were confident that higher education is the prime condition required to achieve success and have a stable position and career in life (Burlutskaia, 2014; Mazzarol & Soutar, 2002). However, it appeared that motivation to pursue doctoral studies also included the student participants' desire to contribute to the advancement of knowledge for the sake of serving their countries. This value serves the general goal of a PhD in the contemporary era where "there is a growing expectation in industry, government, and the broader community that, for research to be valuable, it must connect to the needs of society" (Barrie, 2018, p. 2). This value was

particularly represented in the students' selected research problems; all of them addressed an educational issue that they identified in the local context in which they were brought up.

Alongside values, the students developed an expectation that they would be able to undertake an Education doctoral program in an Australian university because their efforts to get admission were strongly guided or inspired by the academic networks in the pre-entry stage (Weidman et al., 2001). It appeared that the choice of the doctoral program for some students was influenced by their engagement in a Master's program in a similar or different Australian university. These students had "more accurate anticipatory socialisation" (Weidman et al., 2001, p. 59) because they already had the chance to become familiar with the Australian educational context and admission standards and build personal and professional networks which subsequently encouraged the pursuit of doctoral studies. Three students with no prior educational experience in Australia benefited from the second-hand experience of knowing friends and academics from their local contexts who were trained at Australian universities and served as role models for them (Chang et al., 2008; Powers & Myers, 2017; Weidman et al., 2001). This can explain why the participants did not stop after completing a Master's degree and saw value in pursuing doctoral education.

Furthermore, the students' career aspirations represented the professional roles that they held before joining the program and were geared toward- securing a "full-time tenure-track faculty position" at a university in their countries (e.g., Golde & Dore, 2001; Edwards et al., 2011). Five of the doctoral students had already formed preferences and job aspirations due to their own first-hand professional experience at the pre-entry stage of socialisation. Part-time (or full-time) employment is one of the main sources of a process called 'vocational anticipatory socialisation' through which the participants had begun to form preferences for a particular occupation by evaluating their preferences against their values and self-concept (Jablin, 2001). The participants reported that during this process, they acquired some functional information about their professional roles (e.g., primary school teacher), the culture of the organisations for which they worked and the knowledge and skills that they needed to develop and utilise to function well in those specific organisations. All of the participants (except one) had performed their careers for many years, demonstrating their commitment and well-informed, emotional investment in their chosen career. Moreover, students' commitment to a job could signpost an intention to remain in the field (Bruss & Kopola, 1993). This finding not only established students' career aspirations in line with their prior (or current) professional responsibilities but also confirmed that securing academic careers or sustaining the academic positions one already

has continued to be the main aspiration associated with the pursuit of a doctoral qualification (cf Golde & Dore, 2001).

Participants' career aspirations outside of the academic domain occurred only for one participant whose professional experiences included a broader variety in terms of both context and professional activities compared to the rest of the participants. Claudia reported being open to new career opportunities both inside or outside of academia and in different contexts. This was compatible with what she had already experienced throughout her professional trajectory. These findings signify the important role that anticipatory socialisation plays on the future career aspirations of PhD candidates because it gives students previous knowledge about "the behavioural, attitudinal, and cognitive expectations held for a role (Weidman et al., 2001, p. 12).

Meanwhile, by participating in this doctoral program, all the doctoral students understood that they were fulfilling the expectations of the professional communities (or prospective employers) to which they belonged or were seeking to join as a likely future workforce (Weidman et al., 2001). This suggests that the participants had already perceived some level of job fit or job satisfaction with their prior work that might influence their later job fit. Some of the communities that the participants had already worked for were associated with Australian bodies; this may help to explain why Australian universities were a prominent study abroad destination for the participants. Therefore, by obtaining a doctoral qualification that their affiliated organisations accredited, they aimed to fulfil the requirements and standards of their known prospective workplaces, increasing the chance of employment in their local settings after graduation. This highlights the mediating role of professional communities in students' choice of a particular program before initiating the doctoral education experience (Weidman et al., 2001; Edwards et al., 2011).

It appeared that students with no, or minimal professional experiences in the pre-entry stage, tended to have aspirations that were driven by their doctoral studies. Monica was looking forward to being introduced to different career pathways during her doctoral studies. Doctoral programs are likely to have a more significant role in forming career aspirations of traditional student populations comprising younger students with no or limited history of engagement in professional activities who "prepare to be research scholars (research Faculty)" and are "immersed in study" as a learner (Offerman, 2011, p. 22). Additionally, they may be preparing to become a full-time scholar compared to the non-traditional student population who are "increasingly professional research doctorates" and often aim to enhance an existing career

(Offerman, 2011, p. 22). As a result, they might have more precise expectations and aspirations and their perception about congruence or fit with different roles is filtered through their prior professional experiences (Jablin, 2001; Weidman et al., 2001).

As a result of their values, expectations, and aspirations, the doctoral candidates sought different expertise. Since they were preparing for various roles in academia, they expected to fill in the gaps in their academic credentials and knowledge. Variations are significant as they lead the participants to different resources they anticipate needing to further themselves in their career trajectories. Doctoral students' expectation to develop specific expertise was related to their prior professional experiences. For example, students who already had a wealth of practical knowledge tended to focus on enhancing theoretical knowledge through their doctoral studies. Those who intended to upgrade their teaching expertise anticipated taking up a role as a teacher or lecturer. As a result of engagement with their specific professional experiences, most of the participants viewed doctoral education as a site to gain the resources they needed and reinforce their desired academic roles (Weidman, 2006). All of the participants except one did not appear to be ready for the transition to an alternative career. Nguyen (2018) argues that the career prospects of female students might be dependent on the other family members' circumstances along with their professional and personal histories. For instance, Claudia who was a single mother with various career experiences, was more flexible around future career prospects. However, the four female participants in this study were married and more investigation is needed to clarify if this holds true for single individuals who are not bound to family circumstances.

Finally, academic professions appeared to be more appealing to students, including four with no experience and only academic experiences who were inspired to stay as researchers or lecturers. This finding is consistent with previous studies that found that a majority of students appear to pursue a doctoral program that is aligned with specific careers. For instance, by following entrepreneurial programs, students see the potential to develop entrepreneurial skills for management-related jobs, often in companies (Rae, Woodier-Harris, & Matlay, 2013). This also applies to students who pursue a degree in Education with the primary goal of becoming or staying an academic. However, the extent to which doctoral students' different professional goals and expectations can be fulfilled is dependent on several factors: different components of the program, including the type of expertise knowledge offered to the students, educational expectations, potential tasks and roles, and relationships (Feldman, 1976), and the degree of pragmatism in an increasingly competitive market. The last factor implies that securing an

academic career in a saturated job market may not be feasible, thus, pushing the Education graduates to occupations in non-academic sectors.

CHAPTER 6. APPROACHES TO SUPERVISION OF DOCTORAL STUDENTS

6.0. Introduction

The previous chapter focused on the pre-socialisation or anticipatory stage of socialisation process by identifying the values, aspirations, and expectations that entering doctoral students held due to their personal and professional experiences (Weidman et al., 2001). It also addressed what they expected or anticipated to develop by their participation in the doctoral program. In this chapter and the next chapter, I move on to explicate the post-entry experiences of the doctoral students and their engagement with various structures (Weidman et al., 2001). The chapter reports the research results obtained from ten one-on-one interviews with supervisors and nine one-on-one and group discussion interviews with the international doctoral student participants. It addresses the second research question:

> *How do supervisors influence the doctoral students' knowledge, skills, and dispositions throughout their candidature?*

Similar to all the research questions, this question was informed by the conceptual framework of socialisation (Weidman et al., 2001; Weidman, 2006). Drawing on the classic definition of socialisation by Brim (1966), later adopted by Weidman et al. (2001), the outcomes of socialisation are conceptualised as knowledge, skills and dispositions (KSDs). The KSD correspond to three domains of learning: cognitive (knowledge), psychomotor (skills), and affective (dispositions or values) (Weidman, 2006). In the context of the present study, knowledge is conceptualised as disciplinary knowledge, which is mainly represented as theoretical knowledge. Skills are referred to as students' ability to engage in writing, representations of critical thinking and general professional 'tools' they needed to be successful both in their studies and their prospective careers. Disposition refers to students' affective orientation, such as resilience and self-initiation. These three domains are used to explore the dynamics of social interaction among students and their supervisors who have been found to be one of the most potent socialising agents (e.g., Barnes & Austin, 2009; Gardner, Hayes, & Neider, 2007; Lovitts, 2001; Nettles & Millet, 2006). Students' interaction with their

supervisors is also examined by drawing on Lee's (2019) conceptualisation of supervision approaches.

This chapter is structured into four sections. The three main sections of the chapter specify the core knowledge, skills and dispositions of a PhD in Education that the supervisors and their doctoral students negotiated. The supervisors adopted different supervision approaches to guide individual international doctoral student participants at a particular stage of their PhD. The approach to supervision was found to be the most significant influence on the KSDs, and will therefore be discussed first. The knowledge and dispositions generated by analysing the data included independence, persistence and theoretical knowledge. Skills were not as conspicuous in the supervisor-student data as they were in data on professional development activities and will thus be discussed in Chapter 7.

6.1. Independence

When supervisors of the doctoral students were asked about what an ideal doctoral program aimed to achieve, the majority were of the view that development as an 'independent researcher' was the ultimate goal of a PhD in Education. They assumed that securing an academic career was the goal that their students sought to achieve upon their graduation. 'Self-direction', 'self-alignment', 'self-motivation' and 'self-initiation' were common terms the supervisors utilised to clarify their expectations. This section summarises these terms under the umbrella term of 'independence'. By placing the notion of 'self' at the center of every activity or learning act, supervisors proposed that doctoral students were the most important agents in their own socialisation and responsible for their learning and transformation. Nevertheless, the data revealed that the supervisors expected different levels of independence even though they were working toward an idealised 'independent' goal.

These different expectations were categorised according to five identified supervision approaches: Functional, Emancipatory, Enculturation, Critical thinking, Relationship and Whole-person approach. The first five approaches align with Lee's (2019) proposed approaches to supervision, as discussed in Chapter Two. These approaches "intertwine in a complex manner and, … are not independent of each other" (p. 32). However, a holistic approach was also identified that aligned with Miller's (1988) conceptualisation of the 'Whole-person' approach. The whole-person approach contains many characteristics of the five supervision approaches proposed by Lee (2019). These approaches will be explained in light

of the student-supervisor(s) relationships and the supervisor's role in the supervision process (see Table 6.1) throughout the chapter.

All the student participants and their supervisors comprised six supervisory dyad/triads (Table 6.1). The composition of the first three supervisory groups involved an early career and a mid-career academic. The composition of the next three groups involved a mid-career and a senior supervisor. The first two groups were oriented toward a Functional approach, or a highly guided, systematic, institutional kind of supervision. The students of these supervisors showed a high level of dependence on their supervisors. The third and the fourth groups were representatives of an Emancipatory approach to supervision that emphasised individual autonomy and independence. Students exposed to this approach experienced more challenges due to their exposure to non-directive assistance, but they eventually appeared to gain more autonomy. The fifth and the sixth groups were leaning toward Enculturation and the Whole-person approaches to supervision, respectively. These approaches promoted interdependence through directive support from the supervisors and colleagues and aimed at integrating students into the academic community.

Table 6.1 summarises these approaches as they were understood to relate to both student participants and their supervisors. The relationship between the student and supervisor and supervisor role is also identified in the table. The formal relationship was characterised as a serious, distant relationship with courteous conduct, and the informal relationship denoted friendly and less formal conduct.

Table 6.1. *Supervisors' approach to supervision, their expected level of independence and their assumed roles*

Groups	Doctoral students	Supervisor	Dominant supervision approach	Independence level	Student-supervisor relationship	Supervisor's role
1	Catherine	Sara & Caitlin	Functional	Dependence	Formal	Advisor
2	Joker	Mina	Functional	Dependence	Formal	Advisor
3	Dace	Stephanie & Ernesto	Emancipation	Independence Interdependence	Formal	Mentor Mentor
4	Monica	Andrew	Emancipation	Independence	Formal	Mentor
5	Claudia	Mary & Gabriela	Enculturation	Interdependence	Informal	Mentor
6	Eve	Patricia & Lotus	Whole-person	Interdependence	Informal	Mentor

6.1.1. Functional approach

Two early-career supervisors, including Mina and Sara, who each had one completion, appeared to predominantly favour self-regulatory strategies that aimed to promote independence. For these supervisors who had completed their PhDs in one of the Australian Go8 universities within the last five years before supervising a student, independence was characterised by conducting independent research supervised by one academic without undertaking any PD component and any milestone structure to follow. The following excerpts demonstrate how these supervisors interpreted independence:

> […] supervisors and support staff and the community can just be there to support them along the way and students are the people who actually do the project. They need to lead the project […] learn to manage the project themselves, so I mean the sense of independence and independence here also means they seek opportunities to engage with the broader community as well besides the thesis. […] So, if they are proactive in that aspect that benefits them readily in their career. [Mina, 19/06/2019]

> When I was a PhD student, I was never given any tasks. I usually came to my supervisor, we had a discussion and then I said, 'Okay for the next meeting, I'll do this.' […] When I tried this approach with some of my students, it didn't work; again, not with everyone. I have one really good student who usually said what he will do for the next meeting, I never had any issues with him. [Sara, 06/06/2019]

> [PhD] is an independent study and if the students are able to set the agenda for the meetings and lead the way and show initiative in the types of reading they want to do, in the theories they want to engage with. […] I was self-driven during my PhD whereas sometimes students at different points in their PhD might need further guidance. [Caitlin, 11/06/2019]

The expectation for directing their own research in the above comments characterises the Emancipatory approach to supervision (Lee, 2019). Especially evident in Mina's account is how students are expected to be 'proactive' and be self-reliant. Similarly, Sara defined "a very good student" as one who demonstrates optimum self-directed behaviours. However, setting independence as the main parameter to evaluate doctoral students' performance has potential drawbacks. As Caitlin also suggested, even highly experienced student researchers might need considerable assistance if their previous experience did not include the skills required to work in a specific research domain or context (Lee, 2019). Therefore, supervisors working in the Emancipation approach should not expect much independence and need to provide appropriate support when required. This finding is consistent with that of Deuchar (2008), who indicated

that teachers' resistance to providing more directive feedback eventually causes students' frustration. Moreover, many doctoral students cannot be self-directed from the outset of their candidature, so they need scaffolded preparation by their supervisors, who facilitate and model autonomous behaviours (Phakiti & Li, 2011).

Observations and comments made about supervisors by their students were analysed to identify the perceived supervision approach. Joker was supervised by Mina and a main supervisor who did not participate in the study, and Catherine, was supervised by Sara as her main supervisor, and Caitlin, a senior lecturer with six completions from Australia:

> I'm pretty satisfied with the way things are going. I think I present myself in front of [my supervisors] as a student from the East and they're from the East as well, […] every time in the emails, I always say 'doctor', 'supervisors', it feels like Guru, teacher. I'm not comfortable saying 'No' to my supervisors to be honest. I meet my supervisors once in two weeks. They like giving feedback and I respond to what is necessary […]. I think milestone is important as a requirement in finishing a PhD. [Joker, 10/03/2020]

> I meet my supervisors every two weeks, and that has never changed since I started my PhD. I like it because it means they really follow up on whatever things that I do. […] It works for me because sometimes I procrastinate, but with this rule like meeting every two weeks, I'm on the right track. I feel like I have these two supervisors guiding me, holding me, feeding me; I'm a toddler! I see them higher than me because I feel that they are more knowledgeable. I have huge respect for my supervisors because teachers are considered powerful in my culture [Catherine, 10/03/2020]

As apparent in the above accounts, Joker and Catherine's supervision was characterised by the Functional approach. Both students pointed to a social hierarchy in the supervisory relationships with supervisors in a position of authority. These formal relational conventions appeared normal due to the cultural background of the participants even though they were not common norms of the Australian educational context that allows respectful but more informal supervisory relationships where individuals have more or less equal status. In this regard, Cruz (2004) argued that when someone higher in status allows being called by their first name, they enact a rule of politeness related to equality to suggest a more informal and equal relationship.

Moreover, it can be inferred from Joker's and Catherine's accounts that the core value in their supervision procedure was 'performativity*',* which characterises the Functional approach to supervision. Performativity was achieved through regular meetings, clear plans, timetables and milestones to ensure that a piece of work is 'on track' and the thesis would be complete in time

(Lee, 2019). Students appeared quite satisfied that their functional needs – such as regular signposts about what to do next – were met, and their progress was closely monitored. However, the clash that can be felt in these supervisory triads was that the supervisors of these students stated working towards emancipation while students' description of their supervision procedure was indicative of a Functional approach as they sought directive guidance. Thus, students' needs led their supervisors to adopt the principles of the Functional approach (Lee, 2019). In this way, supervisors functioned professionally as advisors or directors to offer more directive feedback to lead the students. Moreover, Deuchar (2008) argues that less experienced supervisors are likely to adopt this approach since they want to ensure that students complete the thesis within the specified timeframe.

6.1.2. Emancipatory approach

Supervisors in the next two groups (3 & 4), similar to those in the two first groups reported adhering to an Emancipatory approach to supervision; however, their role was different from that of the first group. The second group included Dace's supervisor, Stephanie, an early career supervisor with no completion, and Ernesto, a mid-career academic with six completions, both from North America and Monica's co-supervisor, Andrew, a senior academic- with at least five completions. They expressed their expectations as follows:

> There is this expectation of independence and that you get as much as you give, […] that you might have a few meetings here and there but ultimately it is a hundred percent up to you to kind of make connections and to put yourself out there. […] I think an ideal PhD program is the development of an academic that can collaborate with others, that can kind of learn the skills needed to delve into a particular expertise as well as to be able to write for academic journals and present that to the field. [Stephanie, 12/06/2019]

> I think it's a student's work supported by the mentor so I don't like correcting. Let's take the issue of English. When we're doing the draft, for instance, I might sort of highlight certain things that the students should go and get help with that. [Andrew, 19/08/2019]

Especially clear in Stephanie's remark, 'you get as much as you give', and Andrew's remarks is that any achievements obtained during or after the program were considered the students' ability to direct their behaviours towards achieving the desired outcomes. Mentorship was a strategy that appeared to be utilised by these supervisors to promote autonomous behaviour. Andrew explicitly stressed that students needed to seek "mentor" support. A mentor was not necessarily a supervisor but could be anybody who facilitated learning for the students.

However, what they suggested by ‘mentorship’ was the provision of initial guidance and support while maintaining a distance from the ‘student’s work’. This perspective on mentorship implies the equality of both students and supervisors as autonomous beings (Pearson & Brew, 2002). Therefore, mentorship appeared to be an ‘emancipatory’ act whose purpose was to provide both challenge and support so that students could reach their utmost potential (Lee, 2019). To this end, “the academic wants the student to find their direction and values and to decide to apply them to their research” (Lee, 2020, p. 135).

In response to the Emancipatory supervision style, the students of these supervisors, Dace and Monica, described their supervision experiences as follows:

> We meet every two weeks. At the beginning, I had two supervisors. My main supervisor Stephanie and Ernesto. Before my confirmation, someone else came to the team. I always thought that having someone else would be better. Stephanie is in charge of the whole supervision. Andrew doesn’t come to all the meetings. […] I think [Stephanie] understands me very well. I think they are very easy-going, maybe because they’re American. […] I would say that 90% of your experience is just based on the relationship with your supervisors [but] they can be much more supportive. [Dace, 07/05/2019]

> The fortnightly meeting is set at the beginning of the year, and it was maintained throughout the whole two years. Both of my supervisors have the same percentage, 50%, but my main supervisor does the heavy lifting […]. After we have done some work on a chapter, then Andrew comes and gives his perspective on that chapter. They're about to keep the distance, yeah, not really warm like [people from my country] or Asian people there. […] During the first year, I thought that I have to agree with my supervisors and take into account their every suggestion, which didn't help my project, but from the second year, I changed my strategy. I felt that if I agreed to their opinions, I'm going to be failed during my mid-can and everything. [Monica, 29/07/2019]

These comments highlight that Dace and Monica received an emancipatory type of support within the functional routines mandated by the institution, such as regular fortnightly meetings. Dace appeared to have a friendly relationship with his supervisors, which could be due to cultural similarities. In contrast, Monica held the stereotypical assumption that cultural differences between her and her supervisors might be the reason for a perceived distance among them. Both Dace and Monica indicated a desire for freedom. Dace showed openness to different perspectives by admitting that the inclusion of a third supervisor could benefit his project, and Monica tried to take control of her research project and direct it herself by objecting

to her supervisors' perspectives. Nevertheless, the provision of non-directive support might present the students with challenges or even failures that 'hurts', as it was apparent in Dace's remark, "they can be more supportive". However, in an Emancipatory approach whose goal is students' "independence" and "personal growth", this difficult situation is "recogni[s]ed as an opportunity to learn from experience" (Lee, 2020, p. 64).

It is noteworthy that while having at least two supervisors has become a norm in doctoral research, it was suggested by the participants that substantial assistance comes from the main supervisors (Lee, 2019). To elaborate, although Dace had three supervisors who worked within different or even contradictory approaches to supervision (Emancipatory vs. Enculturation), he was largely exposed to the approach held by his main supervisor, Stephanie (See Lee, 2019). Thus, Ernesto's – Dace's co-supervisor – Enculturation orientation was grouped with the next group of supervisors.

6.1.3. Enculturation approach

Supervisors in the last two groups (5 & 6) – Mary, Gabriela, Lotus and Patricia, along with Ernesto (Dace's co-supervisor) – were mid-career and senior supervisors who were characterised by having more experience in working with doctoral students and having at least ten Master's and PhD completions each. These supervisors positioned themselves as a 'mentor' who facilitated students' learning by encouraging interdependence. This section is focused on the Enculturation approach adopted by Ernesto and Mary and Gabriela (Group 5). Dace's co-supervisor, Ernesto commented on the goal of a PhD in Education:

> It's a PhD, not a Nobel Prize, it's not meant to show the pinnacle, it's sort of the entrance so I expect from an ideal program that folks are able to construct [a] study, to carry it out, to write it up, to try to have publications based on that, to kind of be mentored a bit as to what it's like to work as an academic. […] when I was a doctoral student and that as a new doctoral student, I was paired with a more experienced doctoral student, kind of a more formal mentoring kind of process. [In this program] student and their two supervisors are complementary parts [who form] a key set of relationships to keep that student progressing. [Ernesto, 12/06/2019]

Ernesto advocated the North American doctoral model that involved a *dependent stage,* including taught courses, research training and mentorship to increase doctoral students' research potential before the students initiate the *independent stage* when they conduct independent research (Lovitts, 2005). Moreover, by describing doctoral education as an 'entrance' to the field and quoting from a colleague that PhD was not a 'Nobel prize', he valued

the ‘learning processes’ involved in research training rather than the product of the PhD, which should be an outstanding thesis (Lee, 2019). Unlike supervisors like Andrew and Stephanie, who acted as a “non-directive mentor” by keeping a distance from the student’s work (Lee, 2020, p.134), Ernesto, who also called himself a ‘mentor’, positioned himself as a co-learner or “knowledgeable equal” (Lee, 2020, p. 139). In this sense, the supervisory triad, including the doctoral student and their two supervisors, were considered “complementary parts” who enhanced each other’s learning.

Claudia’s supervisors, Mary, a senior supervisor from Australia with twenty-seven completions and Gabriela, a mid-career supervisor from Latin America with ten completions, stated that their mentorship did take place in a scholarly community with a wealth of interactions and experiences that not only benefited the student but also allowed everyone in the community, including the supervisors, to grow:

> I've been a research leader and mentor for the last 20 years […] my whole focus is to mentor and support PhD students. […] The ideal model is where we have experienced PhD students and new PhD students together with me and with other academics so that the student is never alone. The student has a rich community that they can participate in and that is a journey that we collectively do […] so it’s a very mutually beneficial arrangement. […] then I'm not like at the top of the funnel where everybody's going through me, actually, it's distributed, we all have each other. [Mary, 14/08/2020]

> The ideal program… really, it’s to do with a student that can think independently, that is able to collaborate with other students and share their own work and give feedback to each other because that is also an important part of being an academic and being a researcher. [Gabriela, 07/06/2019]

It appears that Claudia’s supervisors adopted an Enculturation approach to PhD supervision in which goal attainment is feasible through the interconnection of all the members for the collective benefit of a tight-knit community (Lee, 2019). In this model of supervision characterised by team coaching, integration of knowledge and skills from diverse experiences and sources were openly appreciated and stimulated. Therefore, students were expected to assimilate into the academic community and become valued team members (Lee, 2019). Mary, in particular, explained that she deliberately avoided being the ‘funnel’ or distributor of knowledge and information. Accordingly, the team will be advantaged because “the principal supervisor can delegate some functions, newer supervisors can learn new skills, personality

clashes can be more diffused if one supervisor leaves the student will not be so bereft, and problems can be shared and sometimes more creatively solved" (Lee, 202019, p. 30).

Claudia, who was also in favour of Enculturation, supported the supervisory procedure undertaken by her supervisors:

> Ideally, it's supposed to be a fortnightly meeting, isn't it? but mine has never been like that. I think last year, I was in my second year, I hardly saw my supervisor. But even if [Mary] is not there, she's got her whole team that I work with, and they supported me a lot with my ethics and stuff like that. […] I never felt isolated. She just looks at how my concept and thinking is developing and if I don't understand something, she explains everything herself. Gabriela, she gives me more nitty-gritty […]. My supervisors tell me that I'm very respectful, and that's a culture that we all want to have in the PhD group, we all work together. [Claudia, 22/05/2019]

Claudia's comments indicated that she did not necessarily follow the fortnightly procedure recommended by the Faculty, but rather she met with her team every week (although her supervisor was not necessarily present) where she experienced a kind of coaching and received intensive direction and instruction. This is one of the main indicators of the Enculturation approach because students who work in groups are somewhat dependent on each other and need "to be shown what to do" (Lee, 2019, p. 99). Claudia's description of her supervisory experiences suggested more reliance on the community than on supervisors. However, benefiting from the community was due to her main supervisor's outsourcing to provide a network of support to share the supervision responsibilities and connect the student to the community. Orientation towards the disciplinary community was prevalent in this supervisory triad, also marked by 'mutual respect' as a value appreciated and fostered among the community members. The spirit of collaboration, interconnectedness, and belonging to a group was further revealed by observing Claudia in some socialising events, such as the PhD group and two national conferences where she and her four colleagues had a joint conference presentation, and each one presented one section of the work.

6.1.4. Whole-person approach

Eve's supervisors, Lotus, a mid-career supervisor with ten Master's and PhD completions, and Patricia, a senior supervisor with ten PhD completions, stated that a good program is not the one with a mere focus on academic aspects:

> I think a good education program should be holistic. So, you should allow students to develop academically, but also to develop other personality traits too. […] [It should] have strong

> support systems, especially for international students and that comes from my own experience as a PhD International student here. When I was doing my PhD, there were no formal writing groups, no reading groups. We created them, or we asked people to create them. It's really nice to have that cohort. When Eve was doing a presentation, 10 or 12 of the PhD students came and attended her rehearsal presentation so she could rehearse and talk, and they gave feedback [to her]. [Lotus, 19/07/2019]

> I think one of the big drivers for me is how we develop wisdom; I think that's a lifetime skill, wisdom is something that is just so precious and I think it to me, that's the ultimate educational goal. So, what I'm doing is trying to lay the seeds for [the students] of a little bit of critical thinking, a little bit of a moral sort of ethical framework, a little bit of calmness and stillness. [Patricia, 20/06/2019]

Both Patricia's and Lotus' recounts positioned them towards an approach to supervision that included some tenets of the different approaches proposed by Lee (2019). For instance, the student-supervisor relationship in this triad represented a Relationship approach to supervision and, at the same time, focused on qualities, such as 'wisdom' that geared toward personal growth as the core of the Emancipatory approach. Nevertheless, taken together, the approach implemented by these supervisors was holistic and aimed toward going beyond conventional teaching with an emphasis on academic (cognitive) outcomes to focus on the development of other personality traits. Therefore, Eve's supervisors appeared to be proponents of what is also referred to as the Whole-person approach (Miller, 1992). In this approach, education is regarded as learning about life, mind, body, and spirit that emphasises the "wholeness of human experience" (Miller, 1988, p. 26). Hence, as Patricia outlined, fundamental human skills such as critical thinking, ethics, and stillness needed to be ingrained in students to respond to their psychological, physical and spiritual needs. Honing in on the importance of different academic communities, including the writing and reading groups and their contribution to student learning, was explicitly mentioned and exemplified by Lotus. Patricia also placed 'life' at the center of students' attention and positioned them as a 'wise' member of a community to imply that students should be successful in their personal lives and be accountable to other members of society. In this sense, the supervision style adopted by Eve's supervisors is oriented simultaneously towards both the student (development of different personality traits) and the community that represents the link between every individual and society.

For Eve, the 'coincidental' cultural and religious fit that she perceived to have with her supervisors was an advantage that contributed to her research development:

> They contribute 50-50. I meet [Lotus] every two weeks, once every two weeks, and [Patricia] once a month. So, every time when I meet them, I record them and I have to send the summary to both of them. […] To be frank, I don't know if it's professional or not but both are like father and mother to me. It's like I'm growing up with a family. They are very emotionally supportive and you know, they actually give my personal life the first priority; when I am in a tough situation, they are flexible. The feeling I had towards them was always like, you know, more than professional, it's more like personal I guess. They're so enthusiastic about my culture. [Eve, 18/03/2020]

Like the rest of the participants, Eve was exposed to her supervisor's approach within the university's functional paradigm. Eve appeared to be quite satisfied and immensely supported by her supervisors, who provided her with directive feedback and, based on her recounts, were 'emotionally' engaged. Friendship, flexibility, and offering pastoral support were all important elements of the Relationship approach that were evident in this holistic approach. However, friendship may blur professional boundaries, and the supervisory relationship may become more personal. This concern was also highlighted by Eve, who expressed that her supervisors were as intimate as her parents to her, and it might not be professional. Notably, the parental-like relationship denotes intimacy but simultaneously points to the power dynamics with supervisors in a higher position and the student being the more dependent member in the triad. In such supervisory groups, the members often show enthusiasm to work together, thus, working toward interdependence (Lee, 2019).

In general, findings indicated that early career academics who had higher expectations for independence and autonomous learning were mostly incorporating Emancipatory approaches to learning and development, which was mainly characterised by the provision of both challenge and support designed to foster students' professional growth. These supervisors leaned towards the needs of individual doctoral candidates. However, in case their students were too dependent, they switched to a more Functional approach and provided more directive assistance. Mid-career academics worked closely with senior academics and adopted various supervision approaches and roles such as the Enculturation and the whole-person approaches. They also assumed a 'knowledgeable-equal' role that reinforced interdependence and paid more heed to learning processes than outcomes. These supervisors were oriented towards socialising their students into the academic community. The reason might be that senior supervisors were able to outsource to provide a network of support that connects students with a community of practice and consider a more holistic focus.

6.2. Persistence

Persistence was found to be the second crucial disposition developed by the doctoral students. Persistence enables students to balance their personal, academic and professional lives and resolve conflicts. The supervisors' approaches to fostering independence and the level of formality in the student-supervisor relationship influenced the development of this disposition. Supervisors' orientation to persistence was sometimes different from that related to the disposition of 'independence'.

The first two groups of supervisors, including Mina and Sara (early career academics) who applied a Functional approach based on their students' recounts, adopted an Emancipatory approach to supervision and left their students to balance the competing demands of their work, life and study, autonomously. Also, one early career academic, Stephanie, who practiced Emancipation, switched to the Relationship approach. On the other hand, the rest of the supervisors comprising five mid-career and senior academics, including Mary, Gabriela, Patricia, Lotus, and Andrew, sustained their already-held supervision approaches – Emancipatory, Enculturation and Whole-person– and often provided directive assistance to support their students. These supervisors had more resources to support their students and paid attention to different dimensions of the student's life (academic, social, psychological) to successfully persist throughout the program. Table 6.2 summarises the findings of this section:

Table 6.2. *Effect of supervision approach on the development of the international doctoral students' disposition of persistence*

Groups	Doctoral students	Supervisor	Supervisor's approach	Work-study-life balance	Student-supervisor relationship	Examples
1	Catherine	Sara	Emancipation	Dependence	Formal	Work-study tension
2	Joker	Mina	Emancipation	Dependence	Formal	Work-study tension
3	Dace	Stephanie	Relationship	Independence	Formal	Life-study balance E.g., sport, dinner party
4	Monica	Andrew	Emancipation	Independence	Formal	Life-study balance
5	Claudia	Mary & Gabriela	Enculturation	Interdependence	Informal	Life-study balance Tolerance to ambiguity
6	Eve	Patricia & Lotus	Whole-person	Interdependence	Informal	Life-study-work balance E.g., MERC

6.2.1. Functional approach

Supervisors in the first two groups, including Mina and Sara (Joker's and Catherine's supervisors, respectively), expressed their concern about students' welfare; however, they conceived it as an issue that the students themselves should sort out:

> I always advise my student to try to maintain a balance between study and family. […] There's no answer on how to go about it. Every student would do it differently from each other […] so it's difficult to have a formula for how to keep that balance. [Mina, 19/06/2019]

> I try to learn as much as possible about my students; whether they have now children, how old are their children, what they do here, is everything fine, because of course, it influences what they do and how they do their PhD. [Sara, 06/06/2019]

These two early-career supervisors who had a formal and somewhat distant relationship with their students expected them to be self-directive in managing their personal and academic responsibilities. In contrast, Joker and Catherine, who saw their supervisors in a higher position, expected to get more directive assistance and support (Lee, 2019). The following comment shows that Joker's concern about his professional commitments was not adequately addressed by his supervisors (1st interview), restraining him from sharing with her about the subsequent clashes between his academic and professional obligations during the next years of his candidature (3rd interview):

> The only thing that I told them but they didn't care maybe, […] like I have a project back home, I told them in the first meeting […] so they [don't] impose something on me. [Joker, 21/05/2019]

> They don't know that I got this another part-time job. […] I'm Ok with not having an article published because I am not that type of scholar! […] I'm just completing my development hours, and nothing else, like I don't want to join a conference. [Joker, 01/07/2020]

Although Catherine had a positive experience of sharing an emergency situation with her supervisors (1st interview), similar to Joker, she tended to hide her professional commitments from her supervisors:

> I was the one who opened up about my son who has a heart problem. I told them, 'Can I go to [my country] just for five days? They readily said, 'yes, you may go and then from then on, when we meet they always say, 'how are you? How's your son?' So that was the start because at least they can help me whenever I'm in trouble because of my writing or because I look so stressed, so yeah, I open up. [Catherine, 02/05/2019]

> I didn't tell [them] I got a job at the English Connect and I'm afraid to tell them because they are worried about jobs. [Also,] I'm looking forward to publishing with [my] team. We just thought of submitting a journal article without the knowledge of my supervisors. [Catherine, 01/07/2020]

It is discernable from the students' recounts that there was growing concern about students' professional commitments that persisted throughout their candidature. Due to the supervisors' reference to the importance of finding a way to have a balanced life by the students for the sake of the research project, both Joker and Catherine understood that their supervisors were mostly concerned with the timely completion of their PhD and felt uncomfortable opening up about other professional and life commitments. Particularly by saying that "I was the one who opened up about my son…", Catherine tried to imply that unless she reminded her supervisors about her motherhood and other commitments, they would not consider that. Moreover, these students had a formal supervisory relationship, making it difficult for them to object to their supervisors' requests if they asked them to prioritise their academic commitments. For example, following her aspirations to stay in Australia, Catherine sought part-time jobs that kept her "connected to the outside world" and potentially exposed her to a long-term "future profession" in Australian society. She also insisted on having a joint publication with an online team of students who shared a similar research area due to their awareness of the great value universities place on publications. Therefore, these students were probably trying to preserve the 'face' of an obedient student to stop their supervisors from being gatekeepers and critical of them (Manathunga, 2007b; Lee, 2020). Furthermore, they showed more independence in following what they were willing to do (Lee, 2010).

Overall, the mismatch between the supervisors' and students' expectations made the issue of persistence in these two student-supervisor dyads even more problematic; in addition to dealing with academic and professional challenges, the students had to find a way to demonstrate their commitment to research. Lee (2019) argues that Emancipation happens in a supportive environment where the supervisor provides the student with both support and challenge. The solution adopted by the students – hiding the professional commitment from their supervisors and the subsequent anxiety caused by that – can suggest that inadequate supervisor support prevented the students from learning effective persistence strategies (e.g., negotiation) for resolving work and life tensions.

6.2.2. Emancipation approach

In contrast to supervisors like Sara, who did not encourage engagement in professional commitments because she was worried that it might impede the timely completion of her student's thesis based on her evaluation of the students' performance, Stephanie, an early career academic (Group 3), stated that non-academic activities contributed to doctoral students' "mental health":

> So, doing things other than just reading and writing but doing something outside of those [are] really important for their own mental health. […] We just focus on the academic side of things and we meet the number of times we have to, so that's a very clinical idea what we do, but for me personally, I am generally a more social person. So, I'll do things like when a student finishes a milestone, we'll go out, like all of my PhD students go out for dinner, celebrating it, things like that. [Stephanie, 12/06/2019]

According to Stephanie, social interactions could moderate supervisors' Functional approach where the core value was following timetables and plans to ensure that "a piece of work was 'on track'" (Lee, 2019, p. 42). She called this approach 'clinical' (or too prescriptive), and by incorporating social experiences like dinner parties into the PhD experience, she tried to foster a caring relationship with her students. Dace, who experienced isolation and formal supervisory relationship during the first year of his candidature, pointed out some positive changes in his supervisory relationship during the second year of his candidature:

> Socially speaking, the PhD experience has been very isolating. You come here to the office, and you see that everyone is working all the time. […] I have seen that at the beginning, [my relationship] was very academic, very professional and now it turns out to be a little bit of social; [Stephanie] will ask me how my family is. How is it twitching in [your country?]? I will ask her, 'how the children are? If they are going to school', these kind of things. [Dace, 13/03/2020]

Dace's remark that highlighted more satisfaction with his supervisory relationship during the second year of his candidature indicated an orientation towards the Relationship approach with his supervisor that positively contributed to his persistence in the program.

Andrew, who also implemented an Emancipatory approach to supervision (Group 4), emphasised the importance of professional behaviour in the student-supervisor relationship, implying that supervisors can support their students to the extent that the boundaries are preserved:

> We have a duty of care. So, things have happened in a student's life and so on, then you support them but I don't think it's our role to be their best friend. After they've graduated, then you've got the ability to build up a relationship and support them in that career and so on. […] there's a conflict of interest policy […] you need to actually keep that sort of distance. [Andrew, 19/08/2019]

Andrew tried to be supportive but not by adopting a Relationship orientation to the issue of persistence similar to other supervisors. He raised the ethical issue of student-supervisor 'friendship' during his doctoral studies. As also argued by Ives & Rowley (2005), friendship can obstruct a good supervisory relationship because it may prevent the ability to be critical or provide effective support. In response to the Emancipatory orientation of her supervisors, Monica represented high levels of self-regulated behaviour, such as good time-management and study habits that contributed to her persistence even without much assistance from her supervisors:

> It's always nice to go to the Faculty and work because you have to do but focus on studying. [Monica, 13/03/2020]

This comment indicated that students like Monica and Dace, with more independence and self-directedness, were better able to maintain a balance among their different commitments even with less support.

6.2.3. Enculturation approach

Another group of supervisors (Group 5) had direct involvement in supporting student persistence. Gabriela and Mary (Claudia's supervisor), indicated that they had made a conscious attempt to contribute to their students' persistence in different ways:

> Resilience or persistence is the most important skill that PhD students should develop because the doctoral journey has a lot of rejection and learning curves and challenges throughout it and without it, we cannot get to the end; in fact, persistence is what the PhD teaches you. […] I sometimes get students that are quite open with me. [Gabriela, 07/06/2019]

> Friday is like miss day and one of the students said they wanted to work in the Childcare Centre to earn some money, and I said, 'great idea but would you like to work one day a week on our activities […] and be paid for that because I said we're closer to your work?' The person said, 'that would be fantastic'. [Mary, 14/08/2020]

Gabriela remarked that persistence was not a disposition or skill to develop in the PhD program, rather, engagement in "challenging" tasks like doing a PhD can teach students to persist.

However, by adding that "I sometimes get students that are quite open with me", she highlighted that transparency in case of any trouble and asking for assistance was a condition for persistence. This idea was supported by Mary's example, indicating that if doctoral students share their concerns, supervisors would be able to support them. In this case, knowing about her students' financial difficulty, Mary offered her a research-related job "closer to [their] work" to support her. This scenario which highlights the importance of mutual understanding among the supervisory team members led to more effective solutions to the students' problems in contrast to Joker's and Catherine's cases where lack of transparency and articulation of the students' challenges, and supervisors' unawareness about the students' circumstances, sustained the problem.

Accordingly, Claudia stated that her supervisors' friendly and supportive behaviour encouraged her to consult with them on issues of personal concern, allowing her to manage her motherhood duties and academic commitments:

> Our relationship [with Mary] is very professional but having said that she always has that empathetic side to her; I feel very easy to talk to her about my personal stuff if I need to. For example, I'm a single mom […] if the shuttle bus is not working, she wouldn't ask me to come to the [campus] to meet her. […] with Gabriela, we are more like friends, which is a good mix for me because PhD is such an isolating journey so, [it is good] if you have that kind of space with your supervisor. [Claudia, 18/03/2020]

As indicated in this remark, supervisors who possess high emotional intelligence often show empathy and offer pastoral support (Lee, 2019). This feature was more evident in supervision dyads/triads who worked within Enculturation and Whole-person approaches in which the student-supervisor relationship was not too formal or distant. In the meantime, Claudia exhibited evidence of critical thinking and 'tolerance to ambiguities' by explaining how she used the challenges and uncertainties inherent in the doctoral experience as a motivating factor to pursue her goals rather than as a barrier to her persistence:

> I like challenging myself. I like living on the edge. So yeah, I saw a PhD is all about that, you're always uncertain and that's something very good for me. I become quite productive, and when everything is good and settled, I become very unproductive […] I think that's good that keeps me thinking, that keeps my creativity alive. [Claudia, 18/03/2020]

Claudia tried to demonstrate that she viewed the doctoral experience as a 'quest', full of challenges and uncertain outcomes that were rewarding (McCulloch, 2013) in the sense that

they kept her alert and "quite productive". This form of 'resilience' to challenges enables students to solve their problems (Lovitts, 2008) and allows them to think in new and creative ways (Lee, 2019).

6.2.4. Whole-person approach

Patricia and Lotus, whose supervisory approaches leaned towards both the individual student and the community (Group 6), considered good relationships with supervisors as important as with the broader community surrounding the students:

> I'm still tracking with them about their mental health, physical health, psychological health, how the relationship's going, how is their partner, are they spoiling their partner enough, are they giving enough mouths to the people around them who are helping them, you know. [Patricia, 20/06/2019]

> I keep myself very approachable and I also try to be there for them outside of academia. For example, one of my students was not able to find a house for a long time so I provided her with a reference and helped her to find a house closer to the campus. Generally, the student does not have enough credentials, so I had to give the reference. [Lotus, 19/07/2019]

Patricia's and Lotus' occasional friendly chats targeted "tracking with" the mental and social dimensions of the students' lives. For instance, Lotus, who had experiences of being an international student in Australia, exemplified providing references required to get a house in Australia, knowing that international students in a new society might not have adequate links and credentials. Through the Relationship approach embedded in a 'whole-person' orientation, these supervisors kept students alert that their lives' social and psychological dimensions were as essential as their intellectual health in reaching a higher potential to deal with the competing demands of their lives. Accordingly, Eve confirmed that her supervisors supported her participation in professional activities that they found helpful for her, rather than restricting her to focus on her thesis:

> My supervisor [Lotus] suggested that I join MERC [the Faculty's research community] because I was being a person who is very extra-curricular. So, it's another point that I want to zoom, not just on a PhD, so I need something extra, as well. [Eve, 17/05/2019]

Interviews with Eve in the second and third years of her candidature indicated how her evolving attitudes about the challenges of a PhD life had made her a more resilient individual:

> What we learned from a PhD is not that knowledge; it's how you are finding your opportunities, you're seeing your threats, [you're] converting your strength to those opportunities. That's what

> happened. Whatever the theory, whatever the new knowledge, it's side things; it's just you're growing as the intellectual or academic or professional person. I think that's what we are learning. [Eve, 18/03/2020]
>
> So basically, in second-year and third-year, I feel like we develop different kinds of intellectual networks, it's like more advanced networks […] it enhanced my confidence. [Eve, 24/07/2020]

In the third year of her candidature, Eve, who sought 'international knowledge' by joining a PhD program in a foreign country, represented evidence of taking up her supervisors' ideology, particularly Patricia's, who put forward the ideas of 'wisdom' as the ultimate goal of doing a PhD. This was also evidence of critical thinking skills – students' ability to evaluate and synthesise their experiences to understand deeper meanings (Lee, 2019). Eve contended that acquiring 'new knowledge' was the side-effect of undertaking a PhD and growing as an intellectual individual who could make the best of her 'opportunities' was the main goal of the PhD. Claudia remarked the same intellectual growth. Moreover, by taking up an academic role and communicating with other academics, she felt like a valued member of the academic community and, subsequently, more confident.

Overall, the findings provided in this section indicated that supervisors had a significant role in contributing to doctoral students' mental and physical health as a necessary condition for persistence in the program. This was mainly achieved by adopting a Relationship approach to supervision or maintaining a close relationship with the student through Enculturation and Whole-person approaches. The issue of doctoral students' persistence was addressed more effectively by the mid-career and senior supervisors who explicitly increased their students' awareness of the importance of work-life balance and engaged them in social, psychological and professional activities alongside their commitment to the PhD. On the other hand, the early career supervisors whose relationships with their students were characterised by more formality, and high expectations for self-directed behaviours predominantly supported the academic dimension of the students' lives but left them to cope with other psychological and professional dimensions of their lives. In other words, the narrow focus on the individual student and their academic progress and not seeing them in the broader context of the community with competing demands of their personal, academic and professional lives might be why their students avoided negotiating their priorities with them. These findings shed light on the importance of the mediating role of supervisors in doctoral students' persistence. It also indicated the difficulty of offering more holistic support by the early career supervisors compared with their senior counterparts.

6.3. Theoretical knowledge

The international doctoral students in this study strongly associated their feeling of competency in the program with robust disciplinary knowledge, specifically, theoretical knowledge. The development of theoretical knowledge was highly influenced by the supervision approach adopted by the students' supervisors. The first group of supervisors with a Functional approach to supervision whose students were highly guided through the process of developing the theoretical underpinning of their studies could not take full ownership of their research. Another group of supervisors – mainly early career and mid-career academics – who led their students through the Emancipatory approach asked them to identify the most suitable theoretical framework for their research. The students of these supervisors were initially lost and found it a quite challenging process but eventually managed to find their way based on their interests and values. These students assumed more ownership of their work. The last group of supervisors – mainly senior academics – who adopted Enculturation and Whole-person approaches to supervision provided their students with more directive feedback in a community-based environment; however, their students assumed full ownership of their work. Ownership of the work appeared to be closely related to students' perception of the 'originality' of their research. Table 6.3 summarises the findings of this section:

Table 6.3. *International doctoral students' adoption of theory and their perceived level of thesis ownership*

Groups	Doctoral students	Supervisor	Supervisor's approach	Student's adoption of theories	Students' perception of thesis ownership
1	Catherine	Sara	Functional	Supervisor-led	Joint ownership
2	Joker	Mina	No data	Supervisor-led	Joint ownership
3	Dace	Stephanie	Emancipation	Student-led	Full ownership
4	Monica	Andrew	Emancipation	Student-led	Full ownership
5	Claudia	Mary	Enculturation	Supervisor-led	Full ownership
6	Eve	Patricia	Whole-person	New theory-jointly made	Full ownership

When asked about the most essential knowledge and skills of a PhD in Education, most supervisors briefly touched upon the importance of reading and developing expert knowledge, most conspicuously in the early stages of doctoral students' candidature. Only half of the

supervisors, two early career supervisors (Sara and Stephanie) and two senior supervisors and one mid-career supervisor (Patricia, Mary and Andrew), stressed the development of theoretical knowledge and concepts.

6.3.1. Functional approach

As discussed in the previous sections, Sara mainly implemented a Functional approach to supervision which could be due to her student's high dependence on her. It is worth noting that Catherine's dependence on her supervisor could be due to her inexperience in the field of Education and specifically in her doctoral research topic. This was probably caused by her transition from a science discipline to Education. Likewise, Joker was highly focused on his professional commitments in his country that sometimes left him with less time for research and accordingly increased his reliance on his supervisors. Thus, Sara provided them with more directive assistance, particularly on the theoretical framework. Nevertheless, Sara expected her students to be critical in the sense that they would be able to justify their choices:

> The first phase of the research should be focused on learning about the field through extensive reading, identifying the research problem, proposing good research questions, and establishing a logic between the two. [Sara, 06/06/2019]

Sara's comment denotes that she was looking for a rational progression through tasks and that theoretical knowledge was a tool for tightening different research components. Therefore, selecting an appropriate theory was a matter of framing and presenting logical information. Two students, Catherine (Sara's student) and Joker, were reported to need considerable help from their supervisors in selecting a research area as well as the theoretical framework for their study:

> I think my supervisors always tell me, 'that's your project, you know better than us, you explain better than us' [but] I am not always confident. I feel like I really need their guidance because, you know, my research project was shaped because of my supervisors. Without their guidance, I wouldn't be able to think about [my research topic]. […] I remember before I submitted my PhD confirmation documents, my supervisors said, "make sure that your documents are good because our names are at stake". It's like giving me a warning that I should do good and not embarrass them. [Catherine, 10/03/2020]

> I can do things on my own although still under supervision. [Catherine, 01/07/2020]

> I used the framework that was taken from my supervisor. […] So, I'd love to write together like putting their names, so that they will have a sense of oh, my name is there, it's kind of go bad and it has to be good and they will push me. [Joker, 10/03/2020]

> I might be lazy, I was just like stupid in a way that my inability to be in the standard of my supervisors or others. I know you guys; some people are so good at writing but I need time to reach them. […] my progress is still bad. [Joker, 01/07/2020]

Catherine appeared to resist taking full ownership of the research project because of Sara's significant contribution to it. Confusingly, she complained that even though her supervisors tried to suggest that she owned the thesis by stating, "that's your project", they appeared worried about the quality of the research because their names were also associated with it, suggesting that doctoral thesis was an outcome of a collective experience. Adopting a theoretical framework developed by his main supervisor, Joker confirmed that a thesis produced by the supervisory team was a joint effort. He added that joint effort would lead to better outcomes since supervisors would contribute more to its quality to preserve their good "name" in academia or push their students to produce quality writing. Similar to Catherine, he considered his thesis as the outcome of a joint effort. It is noteworthy that these students did not appear to have developed enough confidence and self-efficacy – belief that one is capable of enacting behaviours required for achieving desired goals (e.g., Bandura, Freeman, & Lightsey, 1999) – in the course of their candidature. This was evident in how these students described themselves as incompetent by calling themselves, for instance, "lazy" and comparing their performance with those of the other students. However, this feeling improved as the students progressed through their candidature.

6.3.2. Emancipatory approach

The next two groups of supervisors (3 & 4) with the Emancipatory approach to supervision included Stephanie (Dace's supervisor) and Andrew (Monica's supervisor), who assumed a 'non-directive mentor' role, and provided only the initial guidance, left their students to find a suitable framework for themselves by relying on different resources available to them:

> […] It has to be developed more and more as you move on to understand why you do things; obviously, the depth of even theoretical understanding should, you know, gradually increase. [Stephanie, 12/06/2019]

> I think my role is to help the student, it's not to do the work for them. […] it's fine to not quite know where you're going. But the only way you can do that is to produce a bit written sort of summary of what you've been thinking about [Andrew, 19/08/2019]

The above remarks signify Stephanie and Andrew's effort to "encourage personal growth" by directing their students "from the known into uncharted territory", allowing them to focus on "learning opportunities" (Lee, 2020, p. 315).

Confronted with their supervisors' expectation to select an appropriate theoretical framework and also to show enough confidence in using it, Dace and Monica initially felt unsupported. Still, they steadily managed to adopt a theoretical framework by relying on different sources of support, as the following comments indicate:

> When I was trying to write the theoretical framework of my thesis, I was kind of lost at the beginning, that's not the strongest point of my supervisors. So, I felt like I didn't have anyone to rely on to build the theoretical framework of my thesis. […] I relied on my readings. […] I developed a genuine interest in philosophy, I contacted the coordinators of the philosophy department and they enrolled me in one of the units. […] and my thesis is [related to] both politics and sociology. […] I think that thesis is my own work, but I think I will thank my supervisors on the very first page of the thesis. [Dace, 13/03/2020]

> When I was writing the framework, I was lost and I was expecting more help from both of my supervisors, but this seemed too inclined […], and I've got to read the frameworks, and they didn't push on that. I don't know why because this is one of the most important things. But after that, I went to a conference […] I could see how people are actually using those frameworks. So, I have got one. I'm not confident, but it's solid enough for now. [So] I'm owning my work because, after a certain point of time, you have an idea what you want to do. [Monica, 13/03/2020]

To find a good theoretical framework, both Dace and Monica resorted to intellectual networking outside of their immediate disciplinary context. Seeking expertise beyond supervisors' assistance appeared to be rewarding. It led Dace to follow his value for 'social justice' by incorporating the knowledge of another related discipline – politics – into his work. Monica also adopted a framework that she came across at an international conference. This process, though initially challenging, resulted in a greater perception of 'autonomy' (Lee, 2019) and accordingly made both students take full ownership of their thesis. Moreover, Dace's case provided evidence that "the academic who is working within the emancipatory approach will not be seeking to keep their students within their discipline" (Lee, 2019, p. 134).

6.3.3. Enculturation and Whole-person approaches

Mary and Patricia (Groups 5 & 6), the two most senior supervisors in the study in terms of the number of completions and the experience of working with PhD students, perceived theory learning as a highly-guided process that needed to be developed thoroughly before conducting the research. Patricia provided a detailed account of how she mediated her students' learning by asking "them to look at any of the theories that [the researchers] used", for instance.

Mary was an outstanding and internationally recognised scholar for her contributions to the development of an educational theory and its associated concepts; thus, putting the theory into practice and contributing to its development was a critical goal to achieve in the program, as she remarked:

> What matters to me is when the student goes for their milestone, they can talk about what's unique about that system of concepts […] and then if the student can say, I have chosen this cluster of concepts to help me with theorising, how I'm going to analyse my data, [etc.]. This is the most perfect goal. This is the theoretical framework that we will all use because having different theories are like different lenses and different world views on the same problem, […]. So, if everybody has the same lenses then they can just talk with each other better about what they're seeing. [Mary, 14/08/2020]

'Shared focus' regarding the theories and concepts among the PhD group was vital for creating a common language that facilitated interaction among the like-minded PhD group members. Moreover, having a PhD group implied that doctoral training is a social activity because the student is invited to enter a web of relations. This practice is common in the Enculturation approach in which supervisors give "students a framework to help them complete their assignments, ensuring that experienced students are involved in passing on and monitoring the rules of the laboratory or other norms" to more novice students (Lee, 2019, p. 307). Nonetheless, there is a low tolerance of ideological differences in these groups. The supervisor could be a 'gatekeeper' to other learning resources and networks by encouraging the group members to pursue the same agenda. The effort to keep a student within a particular discipline (or research area) shows "the power of the academic in its widest sense" (Lee, 2019, p. 78).

It should also be emphasised that successful academics often attract students who want to work in their cognate area. In the same way, students interested in a particular area are attracted to academics who are experts in the same area. For example, Claudia's motivation to join the PhD studies was Mary's encouragement as one of her instructors during her Master's studies. Hence,

she expected to expand her knowledge of the same theory previously used. Along with Claudia, Eve also articulated her motivation to join the PhD program to fill the gaps in her theoretical knowledge (see Chapter 5). The following excerpts indicate that these two doctoral students also claimed ownership of their thesis despite the supervisors' directive assistance.

> I don't like half-baked ideas and half-baked knowledge. […] Our theory is set, that's where we start from. I got [my supervisor's] theory and between that, you can do anything. […] I always add my supervisors' name because, at some point in time, I've picked up their ideas subconsciously, consciously, whatever it is. […] but at the end of the day, it's my project, and that's what my supervisor says, there might be a lot of things that have happened or come from them, but there's one or two bits that are very important that belong to me. [Claudia, 18/03/2020]

> I'm actually developing a new theory like I'm combining three areas that haven't been researched all three together before so I know it's important. […] the final outcome of our PhD is our own work, it's not from peers or friends, it's something we produced […] so they highlighted the fact that, even though they are supervisors, this is two-way learning. When I do my work, I always give the credit to put their names but put my name first to build up my confidence. [Eve, 18/03/2020]

Interesting in Claudia's account is how she saw herself as a member of the broader community as it is obvious in her use of plural pronouns when talking about her experiences, such as "That's where *we* start from", and Eve's perception of her experience as "two-way learning". From Claudia's viewpoint, any contributions, however small, made her legitimate to take ownership of the thesis. Likewise, despite receiving significant directive assistance, Eve tended to give her supervisors a secondary place by putting their names after hers on any future publications from the thesis. The students' full ownership of the thesis might have come from the supervisors who commit to the idea of independence even though the commitment is rhetorical. This idea is consistent with what has been found by Carter et al. (2017). These scholars found that supervisors in Education advocated the benefits of co-supervision more than supervisors in other disciplines such as Creative Arts, Science and Engineering. In this regard, Lee (2019) states that 'originality' in the Enculturation approach is "judged first by people within the discipline" (p. 37).

The findings presented in this section confirmed that PhD students are likely to be introduced to theory in different ways. When the study's theoretical framework was built up through a linear model (from the supervisor to the student), it tended to reflect the supervisor's perspective

rather than that of the student. Catherine and Joker remained dependent on their supervisors by adopting their supervisors' theories and receiving directive assistance. On the contrary, Dace and Monica whose theoretical knowledge was constructed through their own discovery and interconnection with the broader academic community felt highly autonomous and perceived themselves as the main contributors to the research project. Claudia and Eve, guided through Enculturation and Whole-person approaches focusing on interdependence, where an individual's value is completely or partially defined in relation to the whole group or community, claimed full ownership of their work. However, they needed the confirmation of other community members to build confidence about the suitability of the theory for their research project. This lends support to Lee's (2019) argument that in cohort supervision, independence, typically representative of an Enculturation approach, is defined in terms of students' ability to "follow the discipline's epistemological demands independently", whereas, in an Emancipation approach, it refers to students' ability to "decide how to be, where to go, what to do, where to find information", as it was the case with Dace and Monica (Lee, 2019, p. 184).

6.4. Discussion

Overall, the findings presented in this chapter suggested that the supervisors' supervision approaches influenced the development of knowledge and dispositions in a cohort supervision format consisting of a student and two supervisors. Although shared cultural commonalities were perceived as an important factor contributing to the supervisory relationship by some of the PhD candidates, further evidence revealed that students were equally able to develop a positive relationship with supervisors from different cultural backgrounds.

Supervision approaches were an important factor in explaining variations in socialisation experiences for the students. Supervisors with more doctoral supervision experience tended to build a constructive relationship with their students, which resulted in their active engagement with the development of their students' KSD. On the other hand, early career supervisors expected their students to be agentic and self-directed, similar to what they had recently experienced in the traditional modes of supervision in their own PhD experiences, such as the apprenticeship model. This finding was consistent with previous studies (Lee, 2008).

The next significant finding was that most supervisors tended to promote students' disposition of *independence* or autonomy that expected doctoral students to be self-directed, confident, and competent. This is aligned with the goals of the modern PhD that defines success in the

program by the extent to which doctoral students are autonomous and confident in conducting 'independent research' (Group of Eight, 2013). Lee's (2008, 2020) framework allowed consideration of how different approaches to supervision could support students' progress on a dependence-independence continuum. The expectations and practices of the supervisors characterised all five types of PhD training proposed by Lee (2019). The Critical Thinking approach was not adopted as the main supervision approach, but it was rather used as a strategy to provoke more in-depth thinking at any point in candidature and by any supervisors regardless of their dominant supervision style. The first two supervisors (two early career academics) were oriented more toward an Emancipatory approach to supervision; however, as they found their students less autonomous, they turned to the Functional approach signified by offering directive feedback to their students. The next two groups of supervisors were toward an Emancipatory approach to supervision, with their students being receptive to this approach that emphasised individual agency and independence. The last two groups of supervisors (mainly mid-career and senior academics), oriented toward Enculturation and Whole-person approaches to supervision, promoted interdependence and tried to integrate their students into the academic community. By contrast, doctoral students were found to adapt differently and showed different levels of independence. Nevertheless, the findings provided evidence that "complete autonomy within an educational context is nearly impossible, as success in these situations is often predicated on predetermined structure, development, and progression" (Goldman & Brann, 2016, p. 12).

Persistence was found to be the second main disposition necessary for students' success in the program. Persistence refers to doctoral students' ability to continue their progress towards the successful completion of their degree despite hurdles or adverse circumstances (e.g., Austin, 2002; Posselt, 2018). Students' problems were best resolved when supervisors, similar to the students, made a deliberate attempt to nurture the disposition of persistence in their doctoral students by understanding their lives, negotiating choices available to them, respecting their priorities, and offering workable solutions. This supports that some Education supervisors enjoy the socio-emotional dimension of their career represented by learning about the students' lives, energizing conversation, and friendly student-supervisor relationships (Carter et al., 2017). On the other hand, in the formal supervisory relationships where supervisors were distant from the students' work and their personal lives, students tended to resolve the problems independently without negotiation and shared agreement among the cohort members, which brought anxiety to the students. Indeed, resolving the conflict of ideas requires an independent

approach where the two parties freely talk about their priorities (Ingleton & Cadman, 2002). An interdependent approach to reinforcing persistence was most evident in Mary's and Patricia's doctoral training models. They were very experienced professors who had the capacity and resources to support their students academically and professionally, link them to like-minded groups, and involve them in the circle of their community. However, these supervisors preferred students to devote themselves to tasks and activities that were legitimate and accepted by the norms and values of the community (Lee, 2019). Therefore, there is also the risk of restricting students to experiences that aim to preserve them within the discipline (Lee, 2019).

Finally, theoretical knowledge stood out significantly among different forms of knowledge sought by doctoral students and was emphasised by some supervisors. The first reason for perceiving theoretical knowledge as a significant component of a doctoral thesis was that the doctoral students perceived theoretical knowledge as the main indicator of their learning or intellectual growth because of the emphasis placed on theories by the academic community. The second reason might be that a theory plays multiple important roles in a thesis; it can be used to construct new knowledge, connect concepts to real research, and structure the research. Therefore, doctoral students associated theoretical knowledge with a sense of fulfilment in the program and ownership of the thesis.

CHAPTER 7. PROFESSIONAL DEVELOPMENT AND PEER INTERACTION

7.0. Introduction

The previous chapter focused on the socialising influence of supervisors on students' knowledge, skills, and dispositions (KSDs). This chapter focuses on two other significant socialising influences on doctoral students: institutional support in the form of professional development (PD) activities offered by the university and peer support. As discussed in Chapter 5, pre-entry socialisation is followed by formal socialisation that takes place not only through institutional and formal structures designed and monitored to achieve specific goals in the program (Chapter 6) but also through other socialisation or 'relatively unstructured' processes that help students navigate the formal structure (Weidman et al., 2001). The formal stage of socialisation exposes students to explicit induction and instructional arrangements (e.g., supervision, milestones), while the other structures introduce them to 'unwritten rules of the game' or tacit knowledge related to the professional culture that is transmitted to them through interaction, immersion in the new culture, and observation of acceptable behaviour (Thornton & Nardi, 1975, p. 878).

The appropriation of nuances in academic norms and values occurs through developing networks, which include supervisors and other mentors such as peers and faculty. Weidman et al. (2001) emphasise that "informal sociali[s]ation always contains peer interaction as a core component", which has a less competitive and more collaborative nature (p. 30). PD activities that are part of the institutional arrangements are also discussed in this chapter because students were able to choose to undertake the activities based on their preferences. They were formal in the sense that they were a requisite part of the doctoral program, but students were free to choose among many options.

By considering other socialisation mechanisms (PD activities and peer interaction), this chapter addresses the third research question:

How do peers and professional development activities influence the doctoral students' knowledge, skills, and dispositions throughout their candidature?

Similar to the other research questions, this one was informed by the conceptual framework of socialisation (Weidman et al., 2001). The interview and observational data collected from the student participants were analysed by drawing on three mechanisms of the socialisation process, including *interaction* with peers, *integration* with expectations of peers and *learning* the knowledge and skills required for a professional job (Weidman et al., 2001).

To address how PD activities and peers influenced the international doctoral students' KSDs, the chapter is structured into five main sections. The first section describes the institutional environment of the department. For socialisation to take place, students need a "distinct environment" (Merton, 1957, p. 164), "an environment in which professional norms are clear and about which participants agree. Second, socialisation requires opportunities for both formal and informal interactions between faculty and students" (Merton et al., 1957, p. 287). The second section explicates how peer culture and structural issues surrounding the PD activities caused international doctoral students to experience 'social and intellectual isolation' early in the program. The third section focuses on what students learned through different types of PD activities. Based on the Graduate and Professional Student Socialisation Theory (Weidman et al., 2001), students' socialisation increases over time as they advance through their candidature. Therefore, the fourth section of the chapter focuses on the students' gradual social and intellectual integration into peer and other academic communities as they progressed through their candidature. The chapter concludes with a discussion of the findings.

7.1. Institutional and Faculty environment

This section describes the program's environment, structures and institutional set-up in which the study participants are embedded. Institutional set-up at large is a system that shows how spaces, activities and tasks are allocated and directed towards achieving institutional goals. The physical building of the institution, the behaviours and attitudes held by staff, and students' induction experiences are some indicators of these perceptions. The university under study was very large and offered different types of university-wide support for doctoral students. First, it ran an Orientation week to help the students settle into the University's community and introduce them to social aspects of life in the host country and the collegiate environment of the institution (Lee, 2019). In addition to institutionally developed events for new doctoral candidates, every Faculty offered an induction package consisting of recommended activities

for international students. The Faculty admitted students to the Education doctoral research program at different times of a year and ran the induction two times a year. Students also received a large online handbook that encompassed information about all facilities and resources, including, but not limited to, general technical advice and support, access to desktop and laptop computers, access to Arts, Literacy & Numeracy teaching resources, and access to collaborative and individual workspaces. Moreover, all new students were automatically added to the subscription list of a monthly online newsletter that specified the upcoming seminars and the events running at the Faculty. The university also used an email system to communicate with the entire doctoral student body. Therefore, all information was accessible via websites and online platforms, or more informally, via interaction among the students themselves.

The Education doctoral program had a Professional Development (PD) component administered through a learning management system that recorded the students' completed activities. Students were expected to navigate the learning management system themselves. Supervisors had no access to this program and did not necessarily see it as their role to help students navigate relevant activities. The PD component required the students to complete a minimum of 120 hours of activities in two domains of 'Excellence in Research and Teaching' (60 hours) and 'Professionalism, Innovation and Career' (60 hours). The PD Workshops were often institutionally and Faculty-designed 2-hour interactive sessions that focused on skills development for students at different stages of their research candidature. Although PD activities were organised in three levels: foundational, intermediate and advanced, these levels were "a guide only and intended to help students choose activities appropriate to their needs, interests and stage of candidature" (Doctoral Program: Professional Development Mode, n.d., p. 9). While completing at least 40 hours of PD courses at every milestone is mandatory, doctoral students' performance on these courses is not assessed. In addition to PD activities, some academic seminars were designed either by the Faculty or the University's graduate association (e.g., the visiting scholar seminars) for the PhD candidates and other interested groups.

At the Faculty, there were some arrangements to foster student-student interaction and socialising students into the Faculty's environment. There was a designated PhD space where all the PhD students had access to facilities, including a kitchen, printing services, and meeting rooms. The study desks were in close proximity to enable more interaction, and students with different backgrounds were able to meet each other. The Faculty also held a student-led research community that was run by the graduate students who were selected as convenors and

contributed to designing academic seminars and social events such as monthly breakfasts and the end of year celebration parties for the graduate students. The research community also ran an annual conference where research students could present their work-in-progress in a supportive environment and receive feedback from their peers. The Faculty believed that students could enjoy these opportunities to foster relationships with other colleagues. Last but not least, the Faculty ran a Student Ambassador Program where Education students were able to join the voluntary extra-curricular activities that assisted their transition into university life. These activities include running Orientation week, peer-mentoring, writing groups and other events. It was expected that these and other arrangements at the Faculty would assist students to more easily integrate into the program.

7.2. Social and intellectual isolation

This section explains how characteristics of the environment associated with peer interaction and PD activities prevented the doctoral students from acquiring KSDs.

7.2.1. Peer interaction in PhD spaces

As already mentioned, a large space referred to as 'the PhD space', at the Faculty of Education was dedicated to all on-campus doctoral students to work in addition to a locker to keep their personal belongings. The PhD space appeared to foster bonds among the PhD candidates spontaneously as they met each other on a daily basis in this space. It accordingly fulfilled the Faculty's expectation for developing the student-directed behaviour by the doctoral students through peer support. However, the student participants' comments appeared to show a different reality, with the culture of this space developing more dependence. In particular, three participants – Joker, Eve and Claudia – reported that they did not invest much in networking with peers at the Faculty. Eve and Claudia found the context of the Faculty too formal and 'serious' for peer interaction. Eve recounted a story when she joined a dinner party where peers appeared to be very warm and friendly, but the same peers looked quite different and more serious the next day at the Faculty:

> When it comes to work, yeah, people are selfish, I guess. [Eve, 20/06/2019]

> I think we did not have any person from [my country], you know, sometimes it's so stressful because you don't talk a single word from your own language. I don't know, [Peers] are like not talking to me because I have black skin. [Eve, 20/06/2019]

Eve was found unhappy that there was no other student with her sociocultural background at the Faculty. Her remark highlighted her feeling of marginalisation that interfered with how she interpreted her peer's behaviour. Claudia also explained her experience as follows:

> Everyone is so busy with PhD studies. I have quite a few friends […] it's very funny. You need an appointment with even friends, […] it's like 'if you need something, I'm just here!' [Claudia, 22/05/2019]

Eve and Claudia's interpretation of the peers' behaviours at the Faculty as "selfish" implies the unapproachability of peers as a barrier for their intimate networking. These comments, however, can reflect a tendency to misinterpret peers' behaviour. For example, a student focused on their research might be understood as someone unwilling to communicate with others. Joker was perhaps one such student. He did not wish to "socialise a lot" with peers in the Faculty since he already had several professional networks in his country:

> I think I have no business here in Australia. I think investing more time in a friendship that will last longer is more fruitful than creating something that you know will not last. [Joker, 02/05/2019]

It can be inferred that the situated nature of Joker's aspiration, that is, maintaining his academic work in his local context, decreased his motivation to invest in networking with peers in Australia. Therefore, the potential function of the PhD space as a bustling place where international students interacted and exchanged ideas was wrong as most of them considered the PhD space only a 'workplace' and preferred to concentrate merely on their research without interruption. It was not unusual for students to complain to the graduate research office about noise or 'silent signs' appearing on the door or walls of research rooms, reminding them that it was not a social space.

Joker and Eve also pointed out another perceived problem related to the PhD space. Eve pointed to 'hot-desking' or 'desk-sharing' that, along with the non-mandatory presence of the research-only students at the Faculty, acted as a disincentive for some students, including her, to use the Faculty's spaces. With audible frustration, she reported that she had not been allocated a fixed desk or space to study and keep her materials and that she was "sick of moving to a new desk every day". Therefore, by deciding to study at home, she minimised her opportunities to meet and interact with peers in institutional spaces. Similarly, Joker was not a very frequent visitor to the PhD space and lamented about the inaccessibility of some supports and services that he immediately needed at the PhD space:

> Do we have discussion forum? […] there should be someone on the PhD [space]. When you feel you need help, [you know] somebody's there. Do we have a library? We have a big Library! We have English Connect but can we go there? [Joker, 01/07/2020]

Eve's and Joker's recounts suggest that they did not like the idea of being shunted from one place to the next. Eve preferred to have a quite personalised workspace at the PhD space, and Joker preferred to use services that were made available by the Faculty rather than general institutionally-offered services that were widely dispersed and required booking in advance (e.g. editing services offered by the Library that sometimes required a long prior booking). The difficulty of immediate accessibility to support and resources, specifically when students needed access to some resources or English editing services, could discourage their presence at the PhD space.

The formal atmosphere of the PhD space was also unappealing for the rest of the student participants – Dace, Catherine, and Monica – who valued cultural experiences embedded in doctoral education in an English-speaking country. For Dace, this included "using English all the time in a foreign country, meeting people around the world". He confirmed that peer interaction in the Faculty lacked a real feeling of connection:

> Every time you meet someone, the second thing they ask you is, "What's your research topic?" So, you're defined by what you're researching not by who you are […] I think that's sad because I mean, we are human beings before like become researchers. [Everyone's] priority is their thesis. [Dace, 07/05/2019]

It appears from Dace's remark that by interacting with peers, he sought social support to facilitate his transition to the University as a normal part of life (Jetten, Iyer, Branscombe, & Zhang, 2013) and his 'social integration' into the academic community (cf Tinto, 1993). However, even basic courtesies for greeting and meeting new students at the Faculty appeared to be strategic since 'research' was the first topic in which peers showed interest to remind him that they were in a workspace. This contradicts Weidman et al.'s conceptualisation of peer interaction as a structure contributing to socialisation since students' perceptions might be different.

In contrast, Monica was in the dilemma of willing to communicate with international friends but, at the same time, uncertain how to approach them and start a conversation. She was not confident in her intercultural communication skills:

> [For example] I don't know Chinese culture. What do they expect? Do they expect me to come up to them and talk to them? I don't know, even the Australians, they might be a little different, so I have a tough time discerning this. [Monica, 22/07/2019]

Monica adopted avoidance strategies when confronting an unfamiliar situation. This contributed to her feeling of isolation, specifically during the first year of the program. Except for Catherine, these experiences were similar to the other participants. Catherine was known as one of the most socially active students at the Faculty. She made frequent links to diverse groups of students from a variety of cultural backgrounds and disciplines, internal and external to the University. However, even Catherine perceived a flaw in her interactions with her peers. She expressed her dissatisfaction about infrequent interactions with the domestic (local) students:

> I just engage with international students because I feel like the domestic students don't engage much to international students, or I don't know or it's just my feeling. I have only few friends who are domestic, and they're basically colleagues here who are domestic students. They don't speak too much to international students. That's the saddest part! [Catherine, 01/07/2020]

Catherine's desire to communicate with domestic students could be strategic and associated with her aspiration to settle in Australia. She appeared to view communication with domestic students as part of identification and 'assimilation' within the Australian community (Sato & Hodge, 2009). This explains why she perceived the absence of interaction with the local community as "the saddest part" of her experience. Also, she may have thought that lack of interaction with locals would limit her understanding of some values and rules that could be invisible to international students, thus restricting their socialisation in the Australian context (Weidman et al., 2001).

In addition to the challenges that related to the Faculty set-up, two students - Dace and Eve - attributed the difficulties they experienced early in the program to lack of information or misinformation, which was partly due to missing the Orientation. As Dace described:

> I didn't have Orientation. So, you are here in the country (Australia), you're new probably the first time that you are abroad, you come to the campus, you don't even know where the campuses are. And there is no one to explain it to, you know, no one. I saw that the campus is [P] because my supervisors are based on [P campus]. They said, "Okay. So I had to live there" which was not true. […] And in [P], it was like almost no one was there, was lonely, very lonely. I could have lived [in the main campus], come here and just meet them every fortnight there. That's another thing that [the university] could help us with; we don't have enough

> information. I don't know why [This university] takes for granted so many things for PhD students. [Dace, 07/05/2019]

Similar to Dace's experience, Eve did not receive any Orientation and started a very isolating PhD trajectory:

> In the first six months, I already nearly came to depression because, I was very isolated, I felt moody because I had no one to go when I was down! I still have very few friends. […] I didn't know how I can look into professional development activities, how I can access the booking system to register until an international student helped me… In my culture, if I'm a visitor to a new setting, the people in that particular community greet the visitor and give them everything but [here] it's totally the opposite. [Eve, 17/05/2019]

Eve's participation in the Faculty's academic and social events was delayed for a couple of months since she had no idea how to register for the courses using the Faculty's online booking system. Neither was she able to network with peers from different cultural backgrounds, probably due to her lack of intercultural communicative competence. Her problem remained unsolved until an international peer helped her manoeuvre through the program's online environment and showed her how to book her interested courses. These instances of feeling lost and forced to be more independent than they expected at the beginning of their study made the transition into the program a negative experience for Dace and Eve. This suggests that new students might be more dependent and need support specifically at the beginning of their studies due to undeveloped 'self-regulation skills', which makes provision of peer support or external mediation necessary (Zimmerman & Schunk, 2011).

The findings presented in this subsection revealed that despite the Faculty's effort to provide an online structure conducive to self-direction by the students, most of the participants, who were international and from under-represented countries, did not have a positive encounter with the institutional structure. Half of the students (Dace, Eve, Monica) experienced social isolation, particularly during the first year of their candidature. Merton (1957) argues that one of the main factors associated with students' perception of the organisational structure is the extent to which professional norms are explicit and about which students agree. Some of the students, particularly the newcomers, saw the PhD space as a place to socialise, learn about other students' culture, and befriend them. However, the PhD space had the strategic goal of being used as a workspace for others. The unmet expectations of Joker and Eve encouraged them to stop using the institutional spaces for any academic or social purposes. This confirms that the institutional set-up can have either inclusionary or exclusionary effects. The overall

perceived problems associated with the Faculty set-up contributed to the students' feeling of social isolation and, at the same time, dependence on others to navigate the program.

7.2.2. Structure and content of the PD activities

As discussed previously, the modern PhD training in Australia aims to encourage self-directed learning, a process that might be more difficult for some students than others (Gardner, 2010). PD activities were found to have a negligible influence on student participants' KSDs, especially at the beginning of their candidature, because they had difficulty being self-directive in a new system with which they were unaccustomed. Most students needed assistance to navigate the program despite being given opportunities to select their own direction.

First, Joker preferred to communicate with his ethnic colleagues, but he admitted that even if he decided to interact with all groups of students, the Faculty's teaching and learning spaces did not promote peer networking. He described the PD workshops as one-off seminars where students "just sit next to each other" and listen to the lectures with barely any real discussions or meaningful interactions among the workshop's participants that could ultimately establish any ties among them. Moreover, since these workshops were offered institution-wide, a student could attend a workshop and not encounter a known face among the crowd. Observations such as these do not support the idea that attending training workshops fulfilled the dual objectives of enhancing students' research and academic skills and giving them opportunities to interact with peers. In contrast, some scholars such as Weidman and Stein (2003) state that "colloquia in which students are both presenters and discussants could foster collegial relationships among the students" (pp. 653-654). Above all, many of these activities were offered online and completed by individual students, minimising chances of any communication and troubleshooting by peers or the Faculty. Despite several advantages, the online mode of learning has been shown to discourage interpersonal interactions, be less engaging, and reduce the acquisition of knowledge and skills (Lee & Martin, 2017). Therefore, the structure and operationalisation of the PD workshops offered little potential for interpersonal interaction among peers.

All doctoral students enrolled in the PD mode were given the freedom to complete the PD activities of their own choice based on their self-identified needs. Freedom of choice or the ability to choose among alternatives is usually a sign of independence and an indicator of students' success and satisfaction with the program (Devos, Boudrenghien, Van der Linden, Azzi, Frenay, Galand, & Klein, 2017). However, the student participants were not found to use

this incentive to make appropriate choices. For instance, no student participant appeared to be aware of the progressive structure of the PD activities (foundational, intermediate, advanced), causing some of them to participate in activities that were far below or above their current level, as indicated by the following remarks by Eve and Monica:

> When we try to register for a workshop in the PD platform, we see no classification, so we randomly sign up for whatever workshop that is available to us. [Eve, 20/06/2019]

> I think I didn't match with them [other students in the workshop] because this software is totally new to me. [Monica, 29/07/2019]

As suggested by these remarks, students could easily miss the level of PD activities that was often noted in the activity description. These examples suggested that the expectation to show self-directed behaviour too early in the program did not suggest the feeling of autonomy, if not making the students even more confused. In contrast, providing explicit and adequate instructions on how to perform the program requirements is very important because new students may find the initial information confusing (Ali & Kohun, 2007).

PD activities aimed to improve the students' research skills and, importantly, were designed to enhance their transferrable skills. Some of these workshops were: *Discovering your strength, Effective time management, and Developing cross-cultural intelligence* – a workshop designed to teach students how to manage their behaviour in international contexts. However, one of the student participants, Eve, suggested that some of these activities were of little use because they did not cover the students' needs. She outlined an occasion during the second year of her candidature when she was a member of the Faculty's research community that confronted a conflict that remained unsolved for a long time since the community members lacked relevant skills to cope with the issue:

> You are going to the seminars like 'communicating effectively', so you know how to move on with people [but] there are no seminars [telling] us how to respect different cultures. You get that tutorial if you start to teach! [They] should add how to grow within a different or diverse culture, how to accept the different worldviews, … [Eve, 2nd interview]

Eve implied that although the PD workshops seemingly addressed important topics, they lacked depth and rigour to equip students with hands-on skills that could be readily applied to their immediate academic and social life during their candidature. She also reported that some of the essential subjects that could potentially facilitate students' transition to professional contexts (e.g., workshops on professional behaviour in a workplace) were designed for the staff, and

doctoral students could not participate in them unless they were contracted as a tutor. Many doctoral students already have extensive professional skills and identify themselves with a professional role and may engage in several professional activities during their candidature as they try to integrate into the academic community. Hence, Eve implied that the Faculty needed to offer a set of hands-on skills (e.g., how to respect and interact across diverse cultures) that students needed the most during the early months of the program to facilitate their transition to the new environment.

On the other hand, students also find the workshops helpful if they could relate them to their needs, similar to the example provided by Claudia:

> Some of the things are relevant, […] I don't know how effective but some online ones, they're very good like for example, one I did recently was about emotional intelligence, how to communicate professionally and things like that, those have been very helpful. [Claudia, 18/03/2020]

This provides further evidence that the students were satisfied with PD activities when the knowledge gained in these seminars could be readily applied to their work to improve their performance (Rockinson-Szapkiw et al., 2014).

Negative perception about the effectiveness of most PD activities, which was sometimes due to the students' inappropriate way of completing them in the absence of clear guidelines, encouraged a few of them to finish the activities during the first year of their candidature. Catherine completed all of the PD workshops (120 hours), and Dace completed most of them (100 hours) in the first year of the program. Both of them implied that completing PD activities while undertaking the doctoral research was more distracting than supportive, as the following remark indicates:

> I finished all the workshops in my first four months because I really wanted to focus on the research, and I don't want to be like juggling between two things. I think I was influenced by one of the colleagues here who said, "You should finish the number of hours, then focus on your research, there might be no other time when you've been a second year because you'll be very busy with data". [Catherine, 23/05/2019]

> The very first thing [the academic] told me was, "make sure to complete your 120 hours of professional development very quickly. I have students who are in pre-submission and now they are in trouble because they haven't completed the 120 hours". That remained in my head. So, in my first year, I completed 100 hours so that later on I could focus on my research once I

> collect my data. […] The ones about professionalism are completely useless like, skills for the 21st century, mindfulness for academic success, […] they're very boring. [Dace, 21/05/2019]

These comments also suggested that new students usually take senior colleagues' or academics' advice, which might contain information about the program's most important components (Weidman & Stein, 2003). Here, it appeared that there was a negative reputation associated with the PD activities that made them be perceived as a 'distracting' or 'boring' component of the doctoral program. This contrasted with the institutional goals for which these activities were designed; PD activities aimed to "add to the depth and/or breadth of the program" (Doctoral Program: Professional Development Mode, n.d., p. 4). In this way, Catherine and Dace used their freedom to focus on the doctoral research by first completing the PD requirements that they perceived to interrupt their primary focus, which was the thesis.

On the other hand, Joker, Claudia, Eve and Monica complied with the program's requirements and completed a minimum of 40 hours of PD workshops at each of the three milestones. This timeline, suggested by the University, supports doctoral students through the timely completion of the PD activities throughout the three years of their candidature. Compliance with the program's direction might be preferred by the students who favoured the Functional approach or those like Joker whose professional commitments did not allow completing all the activities in a short time.

In addition to the problems mentioned above, a source of dissatisfaction with the PD activities, as perceived by Dace, Joker and Claudia, was the low frequency of offerings, which made it difficult for them to enrol when offerings were booked entirely within a short time. Dace explained that he took some of the workshops too early in the program because he worried that he might not be able to take them the following year when he needed those skills:

> I'm sure that in the future if I'm going to need, for example Nvivo workshops or SPSS, it's very difficult to find one spot on those workshops […] maybe if [the university] could offer them more often I can do that. [Dace, 07/05/2019]

> There are many development hours like once in a month, […] maybe because we only have [one academic advisor] […] I don't know why we have only [her] in the Faculty. I don't think the university offers a lot of opportunities. It's so limited. [Joker, 21/05/2019]

> Sometimes it's full, sometimes it doesn't match up to the days. I'm working on certain days, the days that I'm interested in, I just do some online things, to make up the hours before the milestone. [Claudia, 18/03/2020]

Monica's frustration with the PD workshops was related to the intensive nature of some workshops that covered a massive amount of knowledge within a single session. She described her experience of attending a day-long (7 hours) Nvivo workshop, which only had a short lunch break in between:

> The second half was devastating! None of us could get more from it […]. They went really fast. [Monica, 29/07/2019]

Day-long workshops are usually designed for the convenience of the student population who have a limited presence on campus and want to get the entire content within one session. However, it appeared that minor considerations had been made concerning the participants' learnability.

This subsection highlights that the student participants found the PD activities challenging to navigate. Moreover, being given the freedom to choose when they were not ready did not necessarily improve their performance as they needed support to make appropriate choices.

7.3. Learning through the PD activities

7.3.1. Activities in the excellence in research and teaching domain

As mentioned earlier, PD activities are designed in two general domains: Excellence in Research and Teaching and Professionalism, Innovation and Career. Although not directly stated by the student participants, the data analysis revealed that all the students were actively participating in the workshops related to the former domain. This is consistent with several studies that have confirmed that students tend to appreciate courses that are "structured in a manner that [enable] them to build skills and prepare for the dissertation" (e.g., Rockinson-Szapkiw et al., 2014, p. 9). The doctoral students appeared to find the research-related activities more relevant to their research and successful completion of their degree. Activities in this domain were designed to enable students to a) critically evaluate and select methods most suitable for their research; b) produce high quality written work for submission and apply effective strategies to secure external funding; and c) critically evaluate a range of educational theories for teaching in higher education.

Dace, Eve, Joker and Claudia commented on the extent to which the PD activities could contribute to the advancement of their knowledge and skills. In particular, Dace, who did not find his supervisors' mediation adequate to develop the theoretical underpinnings of his study,

was hopeful of bridging this gap by participating in relevant PD activities in the research and teaching domain:

> What I have learned the most from this program has been from my supervisors, honestly, from no one else. […] I would like workshops [like] Are you working with feminist theories? This is for you. Are you interested in using more than one? This is for you. Be careful; not all the theories work in a good way. So, in this workshop, you will learn how to use theories that can work well together, which others you have to avoid […]. We also need workshops on data analysis, these are some techniques that you can use if you're using interviews; then consider these ones. We want to show you a transcript of an interview […]. You see [there are] endless possibilities […] but what we receive is just how to write a paragraph, what is a thesis! [Dace, 07/05/2019]

Dace shows his expectation for more advanced and more specific knowledge of both theories and data analysis methods. He expected the PD workshops to explicitly introduce him to the available theories and respond to more advanced issues such as theories that work together effectively that doctoral students might come up with while undertaking their research. Moreover, he expected to be provided with practical research skills, such as conducting interviews. However, most of these seminars were perceived as "very superficial", meaning that they were generally designed to cater to the basic knowledge on the topic. As explained in Chapter 6, Dace was eventually assisted the most through networking with a few experts external to the Faculty and relying on his extensive readings to improve his theoretical knowledge. A similar expectation for advanced and more specific knowledge was put forward by Eve:

> Let's say, we go for a class or a seminar to study [or] use whatever, but it's enabling us to sharpen our already existing skills. [Eve, 18/03/2020]

Eve, who had three years of professional experience in her research area, implied that doctoral students with professional experience have already mastered the basic knowledge of the field – the knowledge often presented in the PD workshops; hence, they expect to be presented with more advanced knowledge in a doctoral program. It appeared a sound expectation since, in doctoral education, students move from general to specific knowledge as they attempt to build expertise in a particular subject area or to fulfil a particular role (Weidman et al., 2001). Moreover, most doctoral students in the social sciences and humanities work on very specific projects, often designed and progressed by the contribution of their supervisors; therefore, more specific knowledge and expertise might be required (Gardner, 2008b; Weidman et al., 2001).

Also, many doctoral students have prior solid knowledge and skills; therefore, basic knowledge and skills could not accommodate their needs for more sophisticated specific theoretical and practical research knowledge.

Writing groups were the second most popular activity in the research domain run by the Faculty of Education. The four female student participants in this study had participated in these groups. The groups were popular, particularly for international students who lacked confidence in advanced academic writing skills and/or had supervisors (e.g., Monica's and Claudia's) who did not provide feedback on language issues. These students were encouraged to seek assistance from other resources such as the writing groups or editing services offered by the University's library. In the absence of coursework in the program, the writing groups were friendly spaces where the same group of students regularly met and exchanged knowledge and information with each other and, as a result, developed a sense of belonging (e.g., Guerin, 2014).

Catherine was the only participant who participated in the writing groups regularly throughout the course of her candidature. It was in this context that she found peer assistance quite helpful in improving her academic literacy skills. Participation in the writing groups was difficult for the rest of the participants due to lack of 'flexible course option', limited empty slots to participate (Monica), household commitments (Eve), and difficulty of commuting to and from the campus (Claudia). Therefore, despite the advantages of these groups, maximum student participation and learning were not possible at the time of data collection (with the start of the lockdown due to the pandemic in 2020, many online writing groups were formed that increased students' participation in these groups).

In short, supervisors were considered the first source of knowledge for the doctoral student participants because they needed very specific knowledge and skills related to the subject of their thesis. Students considered the PD activities in the research domain as the secondary source of help when the guidance provided by the supervisors was not sufficient, not as their primary source of learning. They reported that they were not able to benefit from them as they expected specific knowledge that could be applied to a certain research area. However, two female students expressed more satisfaction with the writing groups not only because of their immediate relevance to their research but also because "close-knit cohort groupings of student peers facilitate communication and support" (Weidman et al., 2001, p. 14).

7.3.2. Activities in the professionalism, career & innovation domain

The professional development activities in the Professionalism, Career & Innovation domain were different from the workshops described in the previous section. They were designed to enable students to communicate and work with others effectively. Activities in this domain were related to four areas, which enabled students to a) develop resilience and leadership skills; b) develop interpersonal communication skills and utilise multiple means of communication to share information; c) apply the innovation and commercialisation process to their research; and d) understand a wide range of career pathways and apply career planning strategies (Doctoral Program: Professional Development Mode, n.d.).

All the participants overall exhibited little interest in courses outside of their expertise. They were dissatisfied or uncertain about the contribution of the content of the PD workshops in the career domain to their post-PhD situation or future career prospects. The reason was the very specific needs of every student, especially those in the middle of their career:

Joker could not simply relate to these workshops, which aimed to connect academia to industry:

> I don't need the industry, lessons about working or preparing for interviews. Why? I have a government job but I finish [the PD activities] anyway because I need the hours. Now if the university knows this, they should be sad. Why? Because I'm not getting anything from that but I do it anyway. [Joker, 21/05/2019]

The role of anticipatory socialisation was highlighted in this remark. As discussed in Chapter Five, Joker was a credential seeker, and he already had a full-time governmental job in his country as an academic; therefore, he was not able to see any value in the career-related workshops, which were mainly presented general interviews or communication skills to assist students with job applications. However, he had to complete them as part of the program requirement.

Catherine expected to get the most from the PD workshops in professionalism and career domain because she had developed the long-term goal of staying in Australia, and the career-related information was vital for her transition to a workplace in the new country upon her graduation:

> Professional development did not really help me understand, or gave me choices or enough information about what will happen after the PhD. I don't have the knowledge to engage in other areas. It's just in my own small world. […] It's very limited. I even don't know what I

> end up […] I think out of ten, probably three important points is the whole thing that can be used in real life or outside world after PhD. [Catherine, 10/03/2020]

Catherine believed that the PD courses did not provide detailed information about possible future career pathways. The offerings were not compatible with Dace's professional needs, either:

> I just tried to do some of them online like random things, like doing podcasts or using any kind of software that I won't need. [Dace, 07/05/2019]

The above examples highlight that the university-designed PD workshops were not necessarily catering to students in the middle of their careers, such as Joker, or those who were rather certain about their future career in academia or elsewhere, such as Dace. Importantly, similar to what was found about the workshops in the research domain, the needs of these students were so specific and less likely to be catered for by the general content of the workshops.

Despite arrangements made by the Faculty to allow doctoral students to regulate their learning and behaviour, some of them felt lost as the arrangements ignored the amount of assistance that students initially needed. Moreover, much of these arrangements were representative of the Functional approach, which suggested dependence on a structure rather than real independence (Lee, 2008; 2019). Another reason was the mismatch between the content of the PD workshops and what the students expected to learn. Doctoral students' dissatisfaction was observed in both the research-related and career-related activities in terms of both level and content.

7.4. Social and intellectual integration

Integration refers to "the extent to which the individual shares the normative attitudes and values of peers and faculty in the institution and abides by the formal and informal structural requirements for membership in that community or the subgroups of it" (Pascarella & Terenzini, 2005, p. 54). Section 1.1.1 indicated how special characteristics of the Faculty set-up and PhD space, such as the unapproachability of peers, created an atmosphere that most of the six student participants in the study experienced social and intellectual isolation. This phenomenon is typically more evident in the early stages of the program as students try to find ways to integrate into the program and interact with faculty and peers. This section builds on the 'social and intellectual isolation' section (7.2). It explains how the student participants overcame the feeling of isolation as they progressed through the second and the third years of their candidature. Findings revealed that they managed to network with two groups: the most

accessible peer groups and professional groups. Also, they reported more satisfactory socialisation experiences.

7.4.1. Networking with the most accessible peer groups

To overcome the social isolation that most of the student participants perceived, particularly during the first year of their candidature, they eventually tried to communicate with peers who shared similar cultural and ethnic characteristics as theirs as they progressed through the next years of their candidature. It is useful to recall that all the participants except Joker were the only representative of their ethnicity at the Faculty at the time of data collection. Hence, a 'sense of belonging' that has a key role in integrating students into the program was proved hard to achieve, particularly for underrepresented populations like the participants in the study, exacerbating their feelings of marginalisation. Peers, specifically those with linguistic similarities, were found to be the most accessible group to interact with the student participants.

After a year of isolation, Dace, who had initially settled in an isolated campus due to misinformation moved to a larger campus where the main PhD space was located, and he managed to meet and build "a good relationship with the Spanish-speaking community". From his perspective, interaction with peers who shared the same background with him was more satisfactory for social purposes, "because we share our first language that heals me out like to speak to them." This probably helped him to feel a greater sense of belonging in the Faculty's environment. However, it might not be an enriched intercultural experience that he initially anticipated experiencing by communicating with other international students from different cultural backgrounds.

Similar to Dace, Monica appreciated interacting with international peers; specifically, the space that they gave her did not invite personal questions such as, "Why don't you stay with your husband?" She was happy to report that "[International students] actually ask me about my study". Nevertheless, the difficulty of communicating with international peers due to her poor intercultural competencies drove her to build a small network of peers who shared more or less similar ethnic backgrounds with her. She was of the view that social and informal events such as celebrating cultural events at the Faculty had the potential to create a friendly space for intercultural interactions and learning about different cultures, rather than the PhD space that was a workplace. She gave a positive example of an international friend who celebrated their New Year at the Faculty "displaying some foods and cultural things" when she found the

chance to start a conversation with her and learn more about her culture. She described her experience as “enjoyable”.

In a similar way, Eve and Claudia found themselves in a space where they felt that they did not have a lot in common with their peers. Eve was still experiencing intellectual isolation. She stated that finding senior peers who shared the same research area with her was a challenge:

> The major challenge for me is my research area is very niche that means very rare in Education Faculty […] I had no person to have, you know, a conversation. [18/03/2020]

It is clear from this remark that Eve’s social isolation somehow emanated from ‘intellectual isolation’, as well. Intellectual isolation refers to the absence of an academic research community that works on similar research areas as students (Skakni, 2018). In such circumstances, students may need emancipatory support or very specific support given only by one’s supervisors, who are the main source of direction for the project. This can also be attributed to the nature of research in different disciplines, with humanities being of a more isolating nature (e.g., Lee, 2020; Gardner; Weidman et al., 2001), whereby individual students work on stand-alone projects. Inevitably, Eve made friends with a few international friends because she was in desperate need to navigate the program. However, she described the experience as being “locked into several specific people”, meaning that this small network of friends comprising of a few international students was not expanded to embrace new peers.

In contrast, Claudia did not feel isolated because she had occasional meetings with a group of peers from her background external to the Faculty. Moreover, her weekly meetings with her PhD group kept her even in more regular contact with her colleagues than with her supervisors:

> I think it’s just me [in the Faculty]. Those who are mostly from our country go for engineering or biochemistry! I did meet [my country’s] community once in a while. We’re talking our own language, we share food, we bring home-cooked [ethnic] food, everybody eats, and we talk about a project, what’s happening, […] and all the stuff. [My colleagues] are Australians, one is Caucasian, but others are different ethnicities, but they’re Australians. I don’t have many international friends like same status. [Claudia, 16/07/2020]

It appears that Claudia had two separate networks of friends that fulfilled different functions, and these were responsive to her social and academic needs. On the one hand, she interacted with an ethnic group of students with whom she could identify for social purposes. On the other, she interacted with a local group of colleagues for academic purposes. This latter group also reinforced her belongingness to their academic community (Pascarella & Terenzini, 2005).

This form of peer interaction was not self-initiated but rather supervisor-directed. As explained in Chapter Six, implementing a cohort model of supervision linked Claudia to a group of local students and ‘mentors’ who were expected to support each other even in the absence of the main supervisor (Lee, 2019). The fact that Claudia referred to her peers as ‘colleagues’ signified the collegial relationship.

In short, different networking patterns with peers exist and are important in the informal socialisation of doctoral candidates. A group of underrepresented student participants, including Dace, Monica and Eve, who did not have prior experience of living abroad, found it challenging to communicate with international peers, and inevitably, engaged in communicating with a small group of peers who shared, more or less, similar socio-cultural backgrounds with them to overcome the feeling of isolation and alienation. This suggested that cultural factors might have a role in shaping interactions among peers. Hence, the students’ self-directed effort for networking ended up with most of the participants communicating with the most accessible target group: a small group of students with shared cultural and linguistic characteristics. Although this brought more satisfaction and an increased sense of belonging for the international students, it represented limited multicultural networking patterns. This finding implies that the presence of students from a variety of backgrounds may create a multicultural environment but does not guarantee multicultural networking if culturally diverse students find it difficult to interact with each other.

On the other hand, another group of participants including Joker, Catherine and Claudia, with prior experience of living in Australi, did not find it too difficult to communicate with peers. Joker voluntarily communicated with peers from his background, which also constituted a large proportion of students at the Faculty. Therefore, unlike the rest of the participants, he did not feel isolated since his networking pattern was in line with his personal disposition. Catherine and Claudia indicated adequate intercultural competencies to communicate with other international and domestic student populations, respectively. A significant difference between these two student groups was that the latter group had undertaken their Master’s studies in Australia and, as a result, had prior experiences of socialisation into an international context, preparing them to study and work in this context. It was likely that this group were transferring their prior intercultural skills acquired before their enrolment in the doctoral program into the context of the PhD program. This prior familiarity with the environment's norms, values, and characteristics potentially facilitated their peer interaction in the new program.

Overall, findings indicated that all the Education doctoral students except Claudia worked on stand-alone projects and were not members of a research community. Accordingly, they could not benefit much from group processes such as peer learning (Pyhältö, Stubb, & Lonka, 2009). However, communication with ethnic groups with whom the international students did not require advanced intercultural skills contributed to their sense of belonging and inclusion. These networking patterns signified social integration as the students communicated with peers mainly for social rather than academic purposes. These findings were in line with those of Weidman and Stein (2003), in which the most frequent type of interaction with peers was social in nature. Social networking is a crucial socialisation mechanism as it can pave the way for engagement in intellectual and academic purposes.

7.4.2. Networking with professional groups

At the time of the third interview, three of the six students – Catherine, Dace and Joker – were developing their professional skills by finding part-time academic jobs and engagement in professional roles. This also enabled them to network with professional groups from the mid-second year of their candidature. Catherine and Dace managed to develop their professional skills by starting to work in the context of the new country. Catherine fulfilled several professional and social roles at the university and Faculty level; she worked as an academic English facilitator (a position related to her expertise in TESOL) and an ambassador, which connected her to colleagues and apprenticed her to the Australian university environment where she was hoping to work upon completion of her studies. Meantime, she maintained strong connections with her ethnic groups. For instance, despite having many academic commitments, she was engaged with the Association of students from her country at the university. She was also in touch with her 'co-teachers' in her country. Interaction with peers of her ethnic background was a form of identification in an international context for her:

> Even if I go to the US, I also look for an ethnic community. So, it's like my identity is attached to [my country]. [Catherine, 01/07/2020]

Although Dace found it difficult to interact with international peers at the Faculty for social purposes, he managed to develop a professional network of peers or colleagues after he started to work as an Academic English facilitator during the second year of his candidature, similar to Catherine. Adopting a professional role enabled him to network with international colleagues and to develop further cultural competence that subsequently increased his confidence and self-efficacy (Gardner, 2007; McAlpine et al., 2020).

Joker made a student-directed endeavour to form a professional reading group that he called a 'discussion club' to facilitate negotiation and exchange of ideas surrounding 'Vygotsky's socio-cultural theory', the theoretical framework adopted for his study. The participants of this group were ethnically similar peers to Joker, who met each other for academic purposes and discussion of ideas. In the following excerpt, he explains what the mission of his self-initiated group was:

> I think I started something here, a discussion Club. […] I invited five other PhD students who then joined four or five meetings where we talked about the theories of Vygotsky using Finement Technique. Then I talked to them "Hey, do you know there is this technique of learning?" Maybe, we're fooling ourselves that we understand Vygotsky. So why don't we use this technique, so we know that there are holes in our understanding". So, I started that, and it runs very well and everybody says, "Okay. This is a nice discussion." It's not like reading groups where one very knowledgeable person talks and we got to listen. It's just because PhD students with the same level of understanding are talking very freely. […] we stopped doing that because people are getting busy. [Joker, 07/01/2020]

This initiative was an opportunity for the group to evaluate their understanding of the theories. The process was more like co-mentoring, where the information exchange took place among students with more or less the same level of knowledge. This example showed Joker the desire for an engagement in critical thinking by understanding different perspectives about knowledge and assessing them to promote their general understanding of the theory and detect the areas of conflict, misunderstanding or gaps in their knowledge. Nevertheless, this initiative stopped after a few sessions as the peers got "busier" and could no longer attend and contribute to it. Nonetheless, he intended to continue his effort. As described earlier, Claudia was also exposed to intensive learning of a theory in a supervisor-led group of like-minded people where more senior members mentored the new members. Hence, it can be concluded that since Joker's was a student-initiated event, peers did not feel committed to prioritising and pursuing it, suggesting that students might value participating in groups that, though student-initiated, enjoy the Faculty support, as well.

7.5. Discussion

This chapter examined the socialisation of doctoral students through two socialisation structures – peer interaction and PD activities – that establish an ambient environment to meet students' basic needs. The findings supported the idea that "institutional culture, inclusive of academic programs and the peer climate, are core sociali[s]ing forces for graduate students"

(Weidman & DeAngelo, 2020, p. 63). In this study, the overall influence of peer interaction and PD activities on the students' socialisation was detrimental, unlike the results found by other scholars (e.g., Weidman & Stein, 3003). Since these structures did not contribute to the doctoral students' integration, they were not found as leaving much impact on the KSDs, either. The faculty's direction and guidance are particularly important at the beginning of the university studies when doctoral students struggle to navigate the program and make friends in a new cultural environment. The findings indicated that the set-up of the PhD spaces and professional development activities were confusing, and two students even missed support systems such as the orientation. This made it quite difficult for them to make informed decisions concerning different dimensions of a PhD life, for example, what campus to stay or what course to complete. The students' own dispositions can also exacerbate their isolation. That the student participants were not easily able to relate to their peers in their candidature could be the isolated experience of being a research-only PhD student. This "can result in a student spending most of their candidature working in isolation from other students, precluding opportunities for comparisons of progress and can easily lead a student to think that no one else has their problem(s)" (Kim, 2018, p. 149).

Some aspects of the institutional set-up appeared to make the socialisation of the student participants a challenge. First, lack of 'other-directed instructions and guidelines' delayed the students' development of self-directed strategies due to confusion caused by forcing them to make sense of the structure by themselves too early in the program. Second, workshops designed to promote the doctoral program by enhancing students' transferrable skills were perceived as a peripheral and un-integrated component of the program. By feeling that the PD activities were not fully integrated into the program, "students continue to take courses as detached, individual units, one course separated from another both in content and peer group, one set of understandings unrelated in any intentional fashion to what is learned in another setting" (Tinto, 1997, pp. 601-602). This can affect students' overall perception of the quality of the program in a negative way because, as indicated in Chapter Five, doctoral students participate in a doctoral program with the hope to cover the gaps in their knowledge and skills. Weidman et al. (2001) also confirm that both "the quality of the program and concomitant experiences affect the thoroughness and success of the total sociali[s]ation process" (p. 13).

Based on the findings, the desired peer networking patterns of the international doctoral students were to some extent distinctive. Despite the Faculty's effort to provide an atmosphere conducive to spontaneous peer interaction, most student participants remained in limited

contact with their peers. Half of the students eventually clustered around their ethnocentric peers, whereas other students involuntarily and voluntarily communicated with other international students. These findings were consistent with those of the previous studies that showed international students feel isolated and tend to interact with other international students or with students from their similar background than with local students (e.g., Sato & Hodge, 2009; Solem et al., 2009). This situation is even worse for underrepresented students who are sensitive to the institutional set-up, and find fewer opportunities to interact with their fellow peers (Daniel, 2007).

The role that personal communities, including peers, play in each other's socialisation has been acknowledged in the literature (Weidman et al., 2001). Peers in this study failed to argue the nuanced ways peer context could be beneficial. Ironically, older students at the PhD space hindered the new international students' socialisation, as this study suggested. This may explain why the expectation for independence with the perceived implicit or too self-directed support systems was far-reaching, and students remained dependent on their supervisors. This finding is not in line with those of some other studies which indicated that students interact with peers more than with Faculty, which contributes to their mental health and academic progress (e.g., Nettles & Millet, 2006; Virtanen, Taina, & Pyhältö, 2017; Weidman & Stein, 2003). In the absence of perceived efficient peer interaction to exchange important information, a central service system within the Faculty to provide timely support and access to resources have the potential to facilitate student engagement. In this regard, Pascarella and Terenzini (2005) maintain, "[because] individual effort or engagement is the critical determinant of the impact of college, it is important to focus on ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage student engagement" (p. 602).

The findings presented above are not surprising when the doctoral research programs are compared to training-based North American models because the former programs lack intense contact among students (Jenssen & Jetten, 2015). Besides, Gardner (2008b) argues that in the North American doctoral training model, the 1-2 years coursework stage allows students to network with their peers. On the other hand, a characteristic of the research-based apprenticeship model is the absence of courses that enable students to network before starting their research projects. The modern PhD appears to sit between the North American and the traditional Australian apprenticeship model of PhD training due to incorporating some PD activities and workshops. However, the participants of this study reported that the

predominantly online and lecture-based nature of the PD workshops, which could be completed individually in the online format, hardly provoked any meaningful interactions that could lead to long-term relationships and, subsequently, integration into the program.

Finally, the student participants networked with the most accessible peer groups, the majority of whom shared a similar ethnicity with them. Some research findings show that too much networking among ethnic groups can continue to disadvantage international students even later on because it reduces their effort to interact with other heterogeneous groups of students (Jenssen & Jetten, 2015). Lack of peer support implicitly suggested more dependence on the students' supervisors (Cotterall, 2015). However, the interactions with a social nature helped students overcome their social isolation and feel they belonged to the research community. The students' integration was the most evident as they started the third year of their candidature. This was when half of these students took up professional roles and started to work. Indeed, through engagement with real professional activities, they started to acquire knowledge and skills. Socialisation through informal structures not only occurs by observing 'acceptable behaviours' but also by taking up those roles to understand and 'internalise them. This is when learning happens, often at the later stages of candidature, corresponding with the 'personal stage' of socialisation – the theme of the next chapter (Weidman et al., 2001).

CHAPTER 8. PERSONAL SOCIALISATION – THE OUTCOMES

8.0. Introduction

This chapter is focused on the last stage of socialisation, referred to as the 'personal stage' (Weidman et al., 2001). The chapter addresses the fourth research question:

> *What values, expectations and aspirations do doctoral students have towards the end of the PhD candidature?*

Again, this question was informed by the conceptual framework of socialisation devised by Weidman et al. (2001). This framework drew, in turn, on Thornton and Nardi's (1975) definition of personal socialisation as the stage in which "individuals and social roles, personalities and social structures become fused" (p. 880). It is proposed that students 'reconcile' any incongruity between the self-image they held upon entrance to the program with the professional 'self-image' they have at the final stage, at which point they can fully take up their new roles. As such, doctoral education is positioned as preparation to join the professional world – a transformation that takes place progressively by participation and immersion in that role over an extended period of time. This transformation is characterised by a change in students' self-conception, higher expectations for themselves to seek formal recognition, a stronger focus on their specialty area, more involvement in scholarly activities, and the production of academic outputs.

This chapter examines the interconnection of past, present and future in relation to students' experiences (cf Weidman et al., 2001). In other words, it explores how the fusion of doctoral students' pre-entry and post-entry experiences might have oriented them towards new values, expectations and aspirations (Weidman et al., 2001). This is done by analysing the interview data as a primary data source and observations as a secondary data source. It is worth reminding that observations were done only during the first part of the data collection period and before the COVID-19 lockdowns. A comparison of the students' values, aspirations and expectations has been provided in Table 8.1.

Table 8.1. *International doctoral students' values, aspirations and expectations in the pre-entry vs personal stages of socialisation*

	Values		**Aspirations**		**Expectations**	
	Pre-entry	Third year	Pre-entry	Third year	Pre-entry	Third year
Joker	- promoting himself (social mobility) - serving his community	- no change	- to become a guru - to serve the community through his Foundation	- no change	- to gain a credential	- no change
Catherine	- social mobility (through a better economic situation)	- no change	- to migrate to Australia - to become an academic with specific expertise	- to stay in Australia - to remain as an English language teacher	- to obtain expertise knowledge	- to find an English-teaching related job
Eve	- social mobility by obtaining international knowledge	- no change	- to become an academic in Education	- to leave academia - to migrate to Australia	- to obtain a professional impact	- to find a 'practice-based' job in Australia
Dace	- social justice - cultural experience by studying abroad	- no change	- to make a change for a good cause through his research	- cultural experience	- to obtain something that helps him to have a social impact	- to stay and work in Australia for a couple of years
Claudia	- improvement of early childhood education	- no change	- leading the field of early childhood education in her country	- leading the field of early childhood education anywhere	- to upgrade her educational leadership skills by improving her theoretical knowledge	- she was still undecided
Monica	- learning and research	- no change	- to become an academic in her country	- to become an academic in Australia	- to gain research expertise	- to follow a post-doc

The chapter consists of a case by case analysis of the data related to each participant. Each section analyses the changes or stability in participants' values, expectations and aspirations, followed by a discussion section. It is of note that the process of collecting data from the participants in the third year of the program occurred when the participants were subject to a series of extended lockdowns due to the outbreak of the COVID-19 pandemic. This affected the socialisation experiences of these students and led to the university granting a 3-month extension to their studies.

8.1. Joker

An analysis of the interviews with Joker in the third year of his candidature indicated a lack of change in his values, expectations, and aspirations at the pre-entry stage of socialisation. As discussed in Chapter 5, Joker participated in the doctoral program with the expectation of gaining a valuable credential to sustain his full-time academic job in his home country. His values included social mobility by obtaining a higher degree outside his country, which could promote his status in society and make him more successful in serving his community. Hence, he was aspired to become a guru that was a community position. During the COVID-19 outbreak, he understood his primary duty to lie with tackling misinformation in his country, and this created tension with the completion of his thesis, as the following quotation indicates:

> I developed this kind of principle in my head, 'I want to finish [the PhD], but I don't want to gain some academic merit or ranking or whatever'. […] As an educator, I care about the conspiracy theories and the misinformation and the lack of awareness happening in [my country], and that has been influencing me so much. […] I have an organisation, and people believe in that organisation. I need more flexibility. I applied for two months extension. I told my supervisors about this. I do a lot of things on the internet, and one of them is raising funds; I'm buying protective gear. […] I honestly believe that what I do is more crucial time-wise.

Evident here is a tension between Joker's academic commitments as a student and his professional role as the director of his foundation. Joker's engagement with his PhD did not increase throughout his candidature, unlike what is typically expected of doctoral students (Weidman et al., 2001). He was already a valued member of his academic community in his home country. As he stated, investment "to gain some academic merit or ranking" was not supposed to bring him any further advantage other than maintaining his current job. Nevertheless, he was moving toward finalising his PhD. In the meantime, he emphasised that 'flexibility', offered by granting students an extension of time to complete their studies, enabled

him to stay committed to his professional responsibilities while acknowledging the seriousness of the situation created by the pandemic.

Moreover, it is clear from his remark that his aspirations centred on being an 'educator' who was worried about the consequences of 'misinformation' on people during the pandemic. Joker's understanding of his role involved being morally accountable to saving people's lives by informing them about the COVID-19 virus and going beyond to raise funds and do philanthropic actions, such as buying masks and protective clothing. These activities aligned with his self-perception as a *guru*. He was proud of being seen as a guru that is a very respected 'community position' in his country. Being seen this way was strongly motivating for him to return to his country after completing his degree.

Joker's values remained firmly tied up with his country and his desire to provide service to his ethnic community. As he said:

> I'm doing a project, rebuilding a school in my Island. I was happily writing a proposal for two days, which means I didn't do a PhD thing on that two days. It's a proposal for money, so that's an example of how I prioritise that. My scholarship wants me to finish the PhD, but my country or my home doesn't say finish the PhD; it says, 'learn so you can improve the lives of people.

As a student on the host University's scholarship, he was required to complete his studies in a timely manner. However, his abiding values are to "improve the lives of people", which caused him to prioritise his professional role over his academic role. Nonetheless, despite these tensions, he appeared to stay committed to both responsibilities.

8.2. Catherine

Catherine's socialisation throughout her candidature appeared to be an iterative process involving shifting aspirations and expectations due to changing socioeconomic circumstances. With her extensive experience in teaching English to primary school children, Catherine was hoping that a PhD qualification would provide her with social mobility and be a pathway to becoming a university teacher in Australia. However, by reflecting on and re-evaluating the competency requirements that determined her subsequent actions or steps, she revealed her preference to pursue her 'original interest', teaching in primary education, and her expectation to remain an English teacher. The following excerpt indicates her post-entry aspirations and expectations:

> I want to go back to my original interest, my teaching with primary students, so that's one thing that I'm thinking about, maybe I can work as the primary school teacher, as an English teacher or not just primary but working in a university is competitive. I'm not sure; there are problems now because of the pandemic, there are a lot of university lecturers with no jobs, and we're still looking for a job. My very first thing in mind is to work in a primary [education] because it really fits into my 15 years experience. [01/07/2020]

As denoted by the above comment, Catherine stepped back from her expectation to be a university lecturer by getting a doctoral qualification once she realised the complexities of securing an academic position in higher education in Australia compared to primary education. As a result, she indicated that her aspiration of living in Australia was being prioritised over her aspiration to be a recognised expert in her new research area. She initially attributed this problem to the job market due to the COVID-19 pandemic; however, by admitting that English teaching in primary education "really fits into [her] 15 years' experience", she implied that she would be a better fit for a career that she already had extensive expertise in regarding the subject knowledge and the education level. Moreover, being a school teacher was more consistent with her value (Chapter 5) to leave an impact in the early years of children's lives. She anticipated that she would be more successful in a career into which she was already socialised and recognised as an expert rather than in an insecure role of a novice academic. A shift in her initial aspiration from becoming an expert to becoming an English teacher in Australia could be due to the realisation that obtaining a doctoral qualification might not lead her to her desired university job since securing an academic position in HE was quite challenging competitive in Australia. Moreover, she had already paid the cost of becoming a thriving primary school teacher through years of service and professional experience, whereas transforming herself into a higher-education expert would present her with new challenges.

In addition, Catherine showed considerable interest in her expertise in TESOL and was searching for multiple job opportunities where this knowledge could be applied:

> I also like to work in English setting like where I can apply my TESOL because I did Master in TESOL. So, I want to work in a language center or teach refugees English language, […] [01/07/2020]

Catherine's decision to pursue her original interest in TESOL and to find a career pathway that led to English education was an adjustment made to accommodate her intention (aspiration) to migrate to Australia after graduation. She wanted her family to come and live with her in Australia, so she brought her son to Australia in the second year of her candidature. Therefore,

securing an English-related job in Australia with a growing international population where there is always on demand for TESOL teachers was a safer option for Catherine, especially considering her aspiration to migrate.

Meantime, she reported that she did not suffer from the consequences of the pandemic. In line with her interest in TESOL, she was making the best of the opportunities brought on by the online teaching and learning platforms and worked as an academic English facilitator at the university's language center.

8.3. Eve

Like Catherine's, Eve's doctoral trajectory was characterised by changes in her expectations and aspirations at the personal stage. As described in Chapter 5, at the pre-entry socialisation stage, Eve highlighted that earning an international degree for social mobility was the value that inspired her to pursue a doctoral degree in Australia. Moreover, she expected to obtain more professional impact in her research area, especially because she had prior experience as an environmental consultant. After her degree, she intended to return to her country, where she would be able to secure a full-time position in her prior workplace, a tertiary institution. In the personal stage, however, she reported that she aspired to leave academia and to migrate to Australia. Therefore, she expected to find a 'practice-based' or 'field-based' job in Australia. Several factors were responsible for shifts in Catherine's expectations and aspirations. First, Eve expressed great concern about the long-term economic influences of the COVID-19 on employment opportunities. She questioned the whole relevance of working in academia when academic jobs were globally less in demand or harder to secure. She observed:

> Since the COVID-19 [outbreak], like now, we are going to a recession, it will be like a negative hit for the white-collar professions. So, the priority will be less for us, in my knowledge, that is a warning insecurity I have. […] I prefer my country, I don't have this mental pressure from people for [my] different skin [colour]. I am intended to live here because my husband likes here, if I go back to [my country], I have a good reputation job, I have a good salary and I have my family there. [24/07/2020]

Eve who initially valued 'international knowledge' and expected to obtain it in the PhD program and utilise it to advance her country, was found to be changing to safer options. She showed her doubt about securing "a good reputation job" and "a good salary" in her country. An economic downturn caused by the pandemic that had already resulted in significant job losses and a reduction of staff, especially in the so-called 'White-collar' jobs, led her to

contemplate the possibility of staying in Australia, which in turn, imposed its own challenges. Second, it appeared that cultural differences were not appealing to her. By stating that in her country, she would not have the mental pressure of dealing with differences (such as 'skin colour'), she implied difficulties surrounding her socialisation in the host country's culture, which could impose some challenges for her employment, as well. Nonetheless, Eve's aspiration to stay in Australia was further encouraged by her husband's desire to move to the host country. Although Eve stated that she would remain in Australia to respect her husband's decision, her explication of the current economic circumstances and worries about securing an academic position appeared to be a far influential factor in her decision to stay in Australia.

Third, Eve's post-entry professional experiences influenced her decision to stay in academia. As with other doctoral students in this study, her professional activities increased in the third year of her candidature when her supervisor offered her an opportunity to teach a course at the university where she was a doctoral student. By assessing the characteristics of her new role as a teaching assistant compared to her pre-entry role or self-image as a consultant, she realised that the academic profession was not what she desired to engage as her future career:

> The academics work so hard even within the summer break, like [they have] no break at all, even on Saturdays, they write like books, I just don't want to spend my thirties worrying on publication. I know it is a good career, no matter which career you do, you have to be hardworking, but I don't want that stress. I don't want deadlines every day in my life. So, I thought I will shift my career to a like more practice-based, more field-based job.

By engaging with the actual practice of different academic roles, students can develop insights into both advantages and drawbacks of an academic career (Jablin, 2001). Eve's teaching experience provided her with a window into the realities of being an academic, enabling her to better understand the career requirements. This was in contrast to her expectations of a flexible career that would afford a greater work-life balance. Characteristics such as allocating much time to publications, or working to deadlines that could be the source of much stress and anxiety, convinced Eve to try to secure a 'practice-based' job similar to her previous professional experience or even a job outside of the Education sector. To some extent, this finding is consistent with both Joker's and Catherine's aspirations. At the post-entry stage, these students showed interest in jobs that they held at the pre-entry stage.

8.4. Dace

Dace's values remained the same during his candidature in the program and only changed in terms of priority at the personal stage. This change in priority led to new expectations and aspirations. He valued improving social justice in his society through his research and increasing his 'cultural experience' by studying abroad. He expected to acquire more knowledge of his field so that upon returning to his country, he could apply the international knowledge to the education system with the hope of reducing inequalities. However, the changing circumstances surrounding his visa requirements brought him new expectations that related more closely to his second aspiration of cultural experience and included the possibility of staying and working in Australia:

> I was convinced that I finish my PhD and I will go back to [my country] immediately. So before, I had the commitment to go back, it was not an option. […] Now, I see the possibility of staying here in Australia and trying to get a full-time job, maybe staying for a couple of years after I graduate and eventually going back to [my country] or to a different country. I would love to work in different countries, like staying here in Australia for a couple of years and then go to Russia and work there for a year; then go to Japan worked there for a year. I like travelling, working, experiencing new cultures and eventually going back to [my country].

Dace had already maintained that learning about different cultures was the main pull factor that inspired him to study abroad because he could get a good education in his own country. He was the only participant whose study was funded through an organisation in his country rather than the host university or government, which committed him to return upon completing his degree. However, with this restriction removed, he aspired to travel to different parts of the world. He first expected to stay in Australia, find an academic position and work for a couple of years before moving to another country with the same goals in mind. The value he placed on cultural experiences and associated aspirations did not appear to negate his desire to return and serve his country: he commented that he should "eventually [go] back to [his country]". He did not appear to have developed a new career aspiration besides continuing the same "research road" in the field of ELT that he was on at the pre-entry stage of socialisation.

At the time of the third interview, Dace appeared to have higher engagement with his studies. He reported to have maintained the same efficient academic progress as before the lockdown:

> I made much of the progress that I would do without a lockdown and sometimes even more because I play soccer for two teams, I train during the weekdays, I go to the gym and not having those possibilities allowed me to stick to work.

The restrictions caused by the pandemic enabled Dace to focus more on his studies than his extra-curricular activities, such as sports. Furthermore, he appreciated the extension given to all the doctoral students by the Faculty that served as a time for reflection and an improvement in the quality of his research. Compared with his initial networking experiences with peers in the first year of his candidature that resulted in connecting to a small ethnic group, he was now communicating mainly with his colleagues at the university's language center, where he worked as an English facilitator.

8.5. Claudia

In the last interview, Claudia appeared to hold the same values, aspirations, and expectations that she had at the pre-entry stage, but within broader scope. This means that her main value at the personal stage was still related to improving the quality of childhood education; however, she was inspired to contribute to her area of interest at any place in the world where she would find an opportunity to work, not necessarily in her own country or in Australia. By participating in the doctoral program, she expected to upgrade her educational leadership skills that required an improvement in her theoretical knowledge. However, similar to the pre-entry stage when she reported that she had joined the PhD program to find her place in Education, she appeared to be still trying to discover spaces where her knowledge and skills could be used:

> Education that I'm undertaking should have good perspective. That's what I think. Even if I decide to go back to the non-profit work that I had, I'm having it in my mind; I'm trying to map out like where I can apply [that knowledge].

She was optimistic about her future in light of the knowledge and skills she had acquired during the doctoral program. She saw possibilities of pursuing her previous work at the international non-profit organisation related to the education of children, and she was also cognizant of discovering where her theoretical and practical knowledge could be applied.

Similar to other student participants, Claudia's previous professions were a potential career pathway to follow post-PhD. As mentioned earlier, this could be due to the professional image that these students had developed of their perceived fit or suitability in relation to the jobs they had experienced. Similar to the other participants, Claudia took up different professional roles of the discipline in the third year of the program, which gave her an insight into her fit with

some specific jobs (Chapter Five). In the following excerpt, she exemplified one of these roles and evaluated her fit for this role:

> I worked as a research assistant for my supervisor […] I'm still thinking probably I would like to do a little bit of more research. […] I'm looking at getting into universities and research and stuff like that but I think as I've gone on with my PhD, that priority has gone down because I don't want to stress myself too much…. I might be overqualified for being a primary teacher.

Similar to Eve, Claudia found her research assistant role monitored by her supervisor a quite rewarding experience, so she still liked to learn more. In the meantime, the hidden realities of an academic position, such as time pressures and workload, were unveiled, causing her to perceive academic careers as too stressful to handle. Therefore, her initial expectation of becoming an academic at university in her cognate area of educational leadership gradually diminished. In her second interview, she emphasised her responsibility to look after her only daughter. Therefore, it appeared that her career decision was also based on her self-concept as a single mother. This implies that women's career trajectories can be affected by occupational barriers and childcare responsibilities (Morgan & Foster, 1999). This may be why they seek a flexible job to ensure a balance between their personal and professional roles (Offerman, 2011).

On the other hand, she implied that the aspiration to become an academic motivated her to pursue her doctoral studies. Securing her previous position as a primary school educator while having a doctoral qualification made her "overqualified" for the position. Therefore, she was uncertain about what else she could do with her doctoral degree. She hoped that her investment in the doctoral qualification would bring her an appropriate career. This expectation was similar to what she expected at the pre-entry stage, "[PhD is] never for me to find a job […] but if PhD gives you an added advantage to find better jobs, why not!" At the time of the last interview, she was still undecided about her future plans.

8.6. Monica

The interview with Monica during the third year of the program showed that she still sought and valued 'learning' as a means of social mobility. In line with her learning values and a love for research, she expected to obtain research expertise during the program. However, similar to Claudia, she expanded the scope of her aspiration from becoming an academic in her country to Australia due to globally changing socioeconomic circumstances. In light of her changing aspirations to stay in Australia for a couple of more years, she expected to start a post-doc with her main doctoral supervisor.

The following remark indicates why Monica aspired to stay in Australia in the personal stage of her socialisation:

> Because of the COVID-19, I don't think that my country will be in a good position to recruit academics for a really long time because the COVID-19 patients are rising, and I cannot go back because then that would mean I cannot come back [to Australia]. I'm open to options now, in here I have an option to work in Australia or anywhere in the world. […] I'm willing to give it a few more years. Yeah, I begin my life as an academic because it's going to take me at least five to six years. Paths to Academia is not that straight. It's going to take years to get to that point.

In this remark, Monica highlighted that due to declining employment opportunities in her country during the pandemic, she had to select the safer option of staying in Australia, where career opportunities were more abundant. Monica had no career prospects other than becoming a successful academic in her country, similar to the faculty who had inspired her to follow the research path. However, she indicated an increased awareness of academic professions' challenging and competitive reality. She considered the process of becoming an academic to be much easier in her country than in Australia, where it takes at least five years post-PhD to get a lectureship. Hence, the decision to stay for a few more years in Australia meant accepting the challenge of working in the new culture. She had a strategic plan in moving towards her goal, as indicated in the following comment:

> I told my supervisor that I don't want to go back, now things have changed, and I have changed my plans accordingly. I won't be looking for options only in [my country]. I have been discussing with my supervisor, and we are creating a plan to prepare my thesis for a postdoc.

This remark implies that her context-specific expectation of staying in Australia upon graduation also affected her initial aspiration to become an academic in her country, leading her to the new aspiration of undertaking a post-doctoral study with her main doctoral supervisor. This decision was in line with 'learning' as her principal value for undertaking doctoral study.

She appeared to be distressed compared to the other participants during the lockdown and reported having experienced increasing uncertainty about career aspirations by the end of the program. The feeling of uncertainty was partially related to the insecurities brought by the COVID-19 pandemic. In this regard, she explained:

> I don't really have a clear vision like what I'm heading to […] also I'm confused about the relevance of my PhD after the COVID-19 situation […]. So, it's kind of false, very sketchy now, so it's taking a bit of time to get over these stuff. […] After the COVID world, which is the new normal, I kind of realise that, you know, face to face teaching might not be happening for a very long time in [her country] or anywhere in the world. So, the new normal is going to be on digital or whatever. You know, I don't want to make my study an obsolete one. [I'd like to] just give a hook to my future employers that my research can have these kinds of implications.

Monica's main concern was about the immediate applicability and contribution of her doctoral research in light of the demands of the transforming educational contexts. She was investigating teaching science in the classroom; however, the prominence of online teaching and learning during the pandemic gave her an idea that focusing on online teaching might have been a more up-to-date research agenda. In contrast with the aspirations of the other participants whose main concerns were about securing an appropriate job that fitted their professional experiences and expertise, Monica's localised research topic was logical in light of the fact that she was preparing to undertake a post-doc. Moreover, this difference may lie in the level of professional experience that other participants had. Most of the participants had taken up different roles such as that of a counsellor, educator, English instructor, director of an organisation, and as a result, had developed broad horizons trying either to enhance an existing career or make a transition to a different career (Offerman, 2011). On the other hand, Monica, who did not take any professional roles even in the third year of the program, appeared to be immersed in her academic life and engaged in preparing herself for a 'researcher role'.

8.7. Discussion

The chapter examined doctoral students' values, aspirations and expectations at the personal stage of socialisation (the final stage) in their doctoral quest. Findings indicated changes in the international doctoral students' values, aspirations, and expectations. As discussed earlier (Chapter 5), at the pre-entry stage, all the student participants – except one who aimed to migrate to Australia and one who was undecided – intended to return to their countries and find an academic position at a university. However, at the post-entry stage, four students aspired to migrate to Australia and have a safer lifestyle (e.g., job security). These shifts resulted from the students' pre-entry influences such as their prior professional experience, post-entry influences including formal and informal socialisation processes in the host institution and society, and the wider context of the global market (Nguyen, 2018). For the student participants

of this study who were representative of a non-traditional student sample (Offerman, 20101), pre-entry or anticipatory socialisation appeared to have a key role in their post-entry expectations. Four students were aspired to secure an academic position upon completing their degree and return to their countries; however, at the post-entry stage, they reported that they intended to pursue the same careers that they were engaged in pre-PhD. This finding confirmed how theorists like Weidman et al. (2001) conceptualise doctoral socialisation as a process that starts before the onset of doctoral education. At the same time, it appeared that the traditional values that considered serving one's own country by acquiring a higher education degree were changing since the students increasingly positioned their aspirations in light of the societies' new challenges. To elaborate, four of the participants who initially intended to return and find a job in their countries preferred to secure a safer lifestyle by seeking to stay in the host country where job opportunities (academic or non-academic) were more abundant than in their own countries.

Doctoral students initially attached two main values to doctoral education. The values – that underwent a significant change – included upward social mobility and serving one's community. As they advanced through the program, they realised in a variety of ways that doctoral education was not necessarily a springboard to success. For example, a participant who did not have extensive professional experience realised that obtaining a doctoral qualification would not necessarily lead to a job in academia. Moreover, the increasing number of HE graduates, the majority of whom wanted academic jobs, implied that securing an academic position would be quite a competitive and challenging task. This problem came to the surface mainly in the face of the pandemic and its global economic downturns when many academics, particularly casual staff and academics on short-term contracts, were forced to leave academia or seek employment outside the sector (Croucher & Locke, 2021). Hence, the international doctoral students realised that obtaining a doctoral degree did not guarantee social mobility by securing a high position. In this regard, Burlutskaia (2014) explains that given the increased accessibility of higher education, it "no longer fulfils the function of differentiation, of selecting the best… no longer gives them tangible advantages in finding a job or determining their salary" (p. 59).

Despite the competitive nature of academia, two of the doctoral students decided to stay in Australia, where job opportunities were more abundant, and the socio-economic impact of the pandemic was less severe than in their own countries. This finding endorses the recent report that the *pandemic* has prompted a significant *change in* the geography of work (International

Labour Organisation (ILO), 2021). Findings also indicated that some changes in students' profiles or an accompanying family member might lead to the adoption of new aspirations, suggesting that aspirations and expectations are context-specific. For instance, one participant's aspiration to migrate to Australia was reinforced by her husband's desire to stay in the country. A change in another student's visa requirements led him to re-prioritise his aspirations. The intention to stay in Australia by all the participants implies that sometimes the characteristics of the host country or "pull factors" such as its economy is stronger than "push factors" or characteristics in one's own country and lead individuals to shift their values, aspirations and expectations (Mazzarol & Soutar, 2002, p. 85). It was also observed that the participants firmly attached themselves to their communities, and serving these communities was one of their key values. However, although reinforced by economic reasons, their decision to migrate was indicative of developing "global citizenship" traits in international students. By developing intercultural competencies, they were able to connect themselves to wider environments around the globe (Hendershot & Sperandio, 2009).

Most of the international doctoral students appeared to incline towards the same professions that they held before joining the program; however, the scope of their values, expectations and aspirations extended to more global arenas (Nguyen, 2018). For instance, one student who was a primary school English instructor in her country preferred to follow the same path in the context of Australia. Levine and Hoffner (2006) state that having career experiences in an industry (e.g., educational industry), even if they are part-time, provides opportunities to establish professional networks and motivation to pursue that profession. This may explain why the participants tended to orient towards their prior professional roles even when their original aspiration was to do something different. Moreover, they could practice further professional roles, such as teaching during their candidature, to evaluate their congruence or fit with the new roles. Of course, their perceptions of new roles were filtered through their prior professional experiences (Jablin, 2001). Pursuit of the careers that they used to hold was a common career pathway to follow by the participants due to their perceived fit for the jobs compared with other roles they experienced during the program. This can also explain why the students with experiences outside of academia did not feel disappointed knowing that they might need to leave academia. On the other hand, one student with no professional expertise felt concerned at the advent of the pandemic and described her circumstances as having 'no future'. Lack of professional experience prevented her from thinking of other alternatives provided that she was not able to pursue her only career aspiration – to become a researcher.

As explained in Chapters Six and Seven, as students advance in the doctoral program, they increase their involvement and engagement in academic and scholarly activities (cf Weidman et al., 2001). Two students explicitly reported developing international knowledge and theoretical knowledge, which facilitated their doctoral trajectory in the third year of their candidature. The main consequence of participation and engagement in practices of the discipline during the post-entry experiences was the opportunity to practice and obtain awareness of different academic roles. This, accordingly, helped students to develop a more realistic view of their aspirations because the direct experience of taking up a role in a professional environment provided the students with first-hand information about the career and enabled them to decide whether they could imagine themselves in that career (cf Jablin, 2010). By re-evaluating their aspirations in light of the new understanding of the requirements of academic roles, three of the students expressed their doubts about the suitability of an academic position for them. This step back was mainly due to the perceived hardship and time-consuming nature of academic positions, making them seek more "flexible" careers. These findings support Offerman's (2011) argument that the changed student profile has increased "expectation for flexibility as they balance work, study and personal life" (p. 26). In particular, she emphasises that the universities need to address female married or single parent students' multiple and conflicting demands of family, work, and university.

Finally, some changes in doctoral students' values, expectations and aspirations were related to specific circumstances caused by the global COVID-19 pandemic rather than the students' experiences with the program. This provided immediate evidence for the timely arguments that a doctoral degree should prepare the candidates for a changing and unprecedented future. For example, Croucher and Locke (2021) argued that in the post-COVID era, governments would rely on areas of expertise relevant to economic and social recovery. This fact was recognised by the participants and could be an additional factor in why they aspired to migrate and choose a more secure lifestyle.

CHAPTER 9. DISCUSSION: VALUES, ASPIRATIONS AND EXPECTATIONS REVISITED

9.0. Introduction

This study explored the experiences of international doctoral students to understand how they were socialised into the norms and values of an Education doctoral program. A qualitative case study design was utilised to explore the doctoral student experiences in a research-intensive university in Australia. The program under examination was a new model of doctoral training referred to as the modern PhD, which involved writing up a thesis and undertaking PD activities. The international doctoral students' experiences were examined through the lens of graduate and professional student socialisation (Weidman et al., 2001). The main findings of the study were obtained by analysing different data sources that answered the four following research sub-questions:

1. *What values, expectations, and aspirations do doctoral students have as they begin their study?*
2. *How do supervisors influence the doctoral students' knowledge, skills, and dispositions throughout their candidature?*
3. *How do peers and professional development activities influence the doctoral students' knowledge, skills, and dispositions throughout their candidature?*
4. *What values, expectations and aspirations do doctoral students have towards the end of the PhD candidature?*

This chapter is structured in five sections. The first section summarises the research and discusses the main findings according to each research question. The second section analyses the findings against the existing literature on this topic. The theoretical and empirical implications of the study are presented in the third section. The study's limitations and direction for future study are the themes of the fourth section. The thesis ends with a conclusion.

9.1. Summary of the finding

9.1.1. Pre-entry stage: Values, expectations, and aspirations of the doctoral students

The first research question focused on the doctoral students' values, expectations and aspirations at the pre-entry stage of socialisation or before they joined the program. Findings provided evidence for Weidman et al.'s (2001) argument that socialisation of students into graduate schools starts before they enter a doctoral program. The student participants attached two values to doctoral education. Participating in doctoral education in Australia was of value first because it promoted the students' upward social mobility because, in many societies, HE signifies success in life (Burlutskaia, 2014). Second, participation in doctoral education potentially contributed to the advancement of knowledge and development of the students' home community and society. Other researchers have also found students' tendency to aspire for careers that give them a chance to benefit society (e.g., Ko & Jun, 2015). These values are local (or national) in nature and root students in their local communities. Orientation towards the local values is apparent in the participants' selected research problems are often situated in the local context of their lives. Moreover, selecting an Australian university as a source of advanced knowledge shows that Australian qualifications are perceived as high quality by the international students compared to universities in the students' home countries (Azmat et al., 2013).

For three participants, pursuing a PhD program continued a Master's degree in an Australian university. These students had more precise expectations due to their prior knowledge and experience of completing a graduate degree outside their home countries. For the other three participants, the expectation to be admitted to a doctoral program was directed by their academic and professional networks (e.g., their previous instructors) at the pre-entry stage of socialisation (Weidman et al., 2001). Therefore, the choice of the study abroad destination is not a random act but rather is a conscious decision made based on students' real-life experiences as well as their personal and professional communities who are the main source of encouragement and information for pursuing a doctoral study (Weidman et al., 2001).

All the participants of this study (except one student) were the only representatives of their ethnicity at the Faculty at the time of the study. Also, based on their demographics, all of them were considered non-traditional (Offerman, 2011). All the doctoral entering students were between the late 20s and late 30s; the four female participants were married; one was a full-time employee, and others (except one) had between three and over ten years of professional experience and aimed to enhance their existing careers by completing a doctoral degree. Therefore, their perceptions of the fit with different prospective professional roles could be filtered through their prior professional experiences (Jablin, 2001; Weidman et al., 2001). The

student participants' career aspirations at the pre-entry stage were limited to the professional and mainly academic roles that they already held before joining the PhD program. Similar to their values, the students' career aspirations were local in the sense that they had a desire for a "full-time tenure-track faculty position" at the same universities where they already work or used to work. In line with a considerable body of literature, becoming an academic or securing a teaching position in HE continues to be the main aspiration of students entering a PhD program (e.g., Anderson & Anderson, 2012; DeWine et al., 2021; Edward et al., 2011; Golde & Dore, 2001; Grim et al., 2021; Jazvac-Martec, 2009).

However, findings of this study go beyond, showing that some of the students with working experience had already gone through a process that can be called 'vocational anticipatory socialisation' (Jablin, 2001), during which they acquired functional information and the pertinent knowledge and skills about their professional roles and their workplace. Hence, pre-entry socialisation experiences of entering doctoral programs may indicate previous knowledge about "the behavioural, attitudinal, and cognitive expectations held for a role" that can potentially affect their experiences in the program (Weidman et al., 2001, p. 12). To elaborate, some students have already developed a career pathway and just expect to get further training in the program to promote their job (e.g., Heflinger & Doykos, 2016). The four students with more extensive professional experiences also appeared to have made an emotional investment in and felt committed to their chosen careers. This could suggest an intention to remain in the field (Bruss & Kopola, 1993; Weidman et al., 2001, Weidman, 2006).

For some students, the choice of obtaining a degree from a specific university was an act of fulfilling the expectations of their prospective employers who recruited employees from institutions affiliated with them. Only one participant whose existing experiences were not confined to the academic domain reported being open to new career opportunities inside or outside academia and in different sociocultural contexts. This indicates that having some professional experience outside of academia and familiarity with non-academic professional contexts can prompt more non-academic aspirations.

Collectively, the participants' values, expectations, and aspirations could be traced back to their life experiences before joining the doctoral program in Education and pointed to the pursuit of specific expertise. Therefore, each doctoral candidate may be directed towards different resources they anticipate needing to promote themselves in their career trajectories. By participating in a doctoral program, they are often inspired to develop a perceived gap in their

existing knowledge. In this sense, doctoral education is viewed as a site to gain the resources that students need to uphold their desired professional roles (Weidman, 2006). However, consistent with Azmat et al. (2013), universities are not adequately aware of students' aspirations that could be quite specific.

9.1.2. Supervision of the doctoral students

The second research question explored socialisation outcomes derived from supervision and conceptualised as knowledge, skills and dispositions (KSDs). Despite the student participants' perceived advantage of cultural similarities with supervisors, it was found that supervisory relationships were more dependent on the supervision approach rather than cultural similarities. This finding is not consistent with what has been reported by previous studies in which cultural differences were found as the source of difficulties in student-supervisor relationships (Doyle et al., 2018; Kim, 2018, Lim, 2018).

Student participants in this study were engaged in cohort supervision, meaning that at least two supervisors guided their research projects. Overall, two dispositions of *independence*, *persistence*, and *theoretical knowledge* were cultivated during the international doctoral students' supervision. Two supervisory groups (1 & 2) were mainly directed by early career supervisors who either relied on their own experiences as a PhD student or followed the institutional guidelines and gave directive assistance that coupled with their students' dependence on them resulted in the Functional approach. Secondly, they relied on the Emancipatory approach with emphasis on 'self-directedness'. Students of these supervisors could not achieve high 'independence' compared to the other groups because they needed more moderated support and feedback. Moderate support implies that the support given to the students should be adequate for the problem they experience. To elaborate, one student needed supervisor support to balance his academic and professional life but he was left to sort out the problem by himself. By contrast, too much reliance on the supervisors' when working on their theoretical frameworks left them not to take full ownership of their thesis.

The next two groups, comprised of an early career and a mid-career supervisor (group 3) and an early career and a senior supervisor (group 4), primarily adopted an Emancipatory approach to supervision and, by offering non-directive feedback, tried to challenge their students to find their own pathway. Although experienced some challenges and frustration initially, the students of these supervisors aligned well with the Emancipatory approach, became more autonomous, experienced higher persistence, and adopted their own theoretical frameworks.

Since the Emancipation approach relies more on equal power relationships to support students' perception of self-efficacy and self-worth, it is not surprising that students who have largely led their projects claim full ownership of them (Lee, 2019). A difference was found between these two groups considering the disposition of 'persistence'. The early career supervisor leaned towards the Relationship approach and less formal student-supervisor relationship to enable her student to have a healthier lifestyle by encouraging student's participation in extra-curricular activities. On the other hand, the mid-career supervisor in group 4 was more concerned about maintaining a professional relationship with his student.

The two last groups (5 & 6) were supervised by mid-career and senior academics who aimed at creating a trustful, friendly and supportive atmosphere suitable for their students' engagement and development through the Enculturation, and Whole-person approaches. These supervision approaches promoted interdependence and paid attention to the psychological and physical health of the students and the supervisors' deliberate attempt to nurture the disposition of persistence by understanding more about the personal lives of their students, negotiating options available to them, respecting their priorities, and offering viable solutions (Ingleton & Cadman, 2002). This was an interesting finding that students in the Enculturation group (#5) who adopted her supervisor's theoretical framework and students in the Whole-person group (#6) who made a three in collaboration with her two supervisors reported being able to claim the full ownership of her work. The reason was that the fundamental concepts of ownership or autonomy were defined differently in each approach to supervision. To elaborate, autonomy in the Enculturation approach follows "the discipline's epistemological demands" that is accepted by the other members of the community (Lee, 2020, p. 184), and this entitles the students to full ownership of a work.

Different supervision styles practiced by the supervisors, as explained above, have not only consequences for students' learning but also indicate the tension that supervisors sometimes experience between their personal and professional roles. For example, they may desire to work toward a high-quality thesis, but institutional obligations, such as pressure for timely completion or students' characteristics, may force them to limit students' experiences. In response to these tensions, supervisors have their own preferences. Some scholars confirm these findings. Lee (2019) reported the results of several initiatives in Norwegian universities where more experienced supervisors adopted a Relationship approach to supervision. Lee (2008) explains that supervisors may also experience tension between their own career development and that of the students. This can hold for early career academics, in particular.

Compared to their early career counterparts, senior supervisors have both the capacity and resources to support their students academically and professionally, connect them to like-minded groups, and include them in the circle of their disciplinary communities. Nevertheless, this support may come in exchange for the complete dedication of the students to tasks and activities accepted by the norms and values of their own communities (Lee, 2019). Though useful, this act risks restricting students to experiences that aim to preserve them in the discipline (Lee, 2019). In other words, it appears that supervisors with the Enculturation approach recruit "students who are likely to be able to complete, who will work well with [their] existing team and who are able to do the work at the right level [… and] to make supervising them much easier" (p. 184).

Collectively, the findings provided evidence that doctoral students' background does not prepare them for self-directedness early in the program. Challenges such as familiarity with the host language and culture, anxiety (Gardner, 2008a; Lim, 2018; Lovitts, 2005), lack of readiness for self-directed study, inability to integrate into academic communities, among other things, suggest dependence. Moreover, one of the reasons why "no two students experience graduate or professional school in quite the same way" (Weidman et al., 2001, p. 2) is their exposure and peculiar responses to different supervision styles. Students have different levels of autonomy that can facilitate or debilitate their progress through the completion of their thesis. Supervisors may also switch to different supervision styles based on the responses they receive from their students. Nevertheless, students might have the best experience when their doctoral training aims at interdependence or a middle stance between dependence and independence. Reciprocity or exchange of ideas can be observed in supervisory relationships (e.g., Enculturation), where doctoral students and their supervisors assume more equal relationships that benefits all the parties involved.

9.1.3. PD activities and peer interaction

The third research question addressed the development of the KSDs through engagement with two socialisation structures. Some structures have a key role in the overall socialisation of doctoral students because it is by immersion into these structures that students "receive behavioural clues, observe acceptable behaviour, and, it is hoped, respond and react accordingly" (Weidman et al., 2001, p. 14). The findings supported the idea that academic climate is a key factor in the institutional culture where students develop professionally. Institutional culture and arrangements in this study affected the other components of the

program, including the PD activities. They reduced the potential for peer interaction that influenced the overall experiences of the students in the program in what mostly appeared to be a negative way.

The perceived unfriendly atmosphere of PhD working spaces at the university due to the unapproachability of senior peers may have inhibited the new international students' social integration. In the absence of peer support, students may rely even more on their supervisors. The findings further indicated that even the self-initiated peer groups such as the reading groups might fail if the departmental culture is not supportive or collaborative. Thus, the study's findings are not consistent with those of other studies, which reported that in doctoral programs, interaction with peers prevails the interaction with the faculty (e.g., Nettles & Millet, 2006; Virtanen et al., 2016; Weidman & Stein, 2003). However, they support the idea that departmental climate might be a disciplinary issue because the disciplinary culture determines how scholars within a particular discipline work with each other. For instance, similar to the findings of this study, Solem et al. (2009) found that the relationship among students in the discipline of Geography was supportive but not collaborative.

The existing literature on doctoral student socialisation acknowledges the role that peers play in daily experiences of each other and these may have potential socialisation outcomes (Gardner, 2008, 2010; Weidman, 2010). However, this study did not find this to be the case. International doctoral student participants experienced difficulties transitioning into the program, navigating the program, and networking with peers at the PhD space. These circumstances were challenging because three participants were new to Australia and had inadequate intercultural competence to network with international students. Therefore, they did not experience a sense of belonging to the Faculty. Developing as independent learners have largely been attributed to perceived peer support (e.g., Flores-Scott & Nerad, 2012; Guerin, 2014; Pascarella & Terenzini, 2005; Weidman et al., 2001). In the absence of peer support, students can experience social isolation that limits their involvement in social and academic activities of the Faculty even further.

The study also showed that the international doctoral students' engagement in PD activities was not positive, either because they perceived the PD activities which were focused on promoting their transferrable skills, as a distraction or marginal component of the program. Moreover, early freedom for self-directed behaviour when students still needed more direction and assistance did not allow them to complete the activities in a meaningful way and with

awareness about the contribution of these activities to their skill-building (e.g., Rockinson-Szapkiw et al., 2014). This study confirmed the findings reported by Walsh et al. (2010) in UK and Heflinger and Doykos (2016) in the US maintains that the students found the PD activities a distraction. Considering the type of PD activities, students believed that research skills contributed more to their research or career development. Moreover, in the case of non-traditional students who intend to upgrade their career by advancing their current knowledge of the field, the topics of the PD workshops may be either irrelevant or represent the basics that they already knew.

Based on socialisation theory (Weidman et al., 2001), students' socialisation increases as they advance in the program. Similarly, the findings of this study showed that as the international students advanced to the second and the third years of their candidature, they managed to expand their networks, particularly with two groups: those peers who shared a similar language with them and those who were considered as their colleagues. The findings from the present study are consistent with those of the previous studies that showed international students tend to interact with other international students or with students from similar backgrounds rather than with local students (e.g., Sato & Hodge, 2009). Although this promotes students' sense of belonging and fulfils some social and psychological needs, it may not contribute to their intercultural understanding and opportunities to make friends with local Australian students.

However, in the third year of the students' candidature, when they initiated their professional engagement mainly through teaching, they developed professional networks with their colleagues at the workplace. This is what Weidman et al. (2001) describe as a stage when students start to feel "less student-like and more professional" (Weidman et al., 2001, p. 13), suggesting that students develop a more professionally-minded self" (Gardner, 2010, p. 65). This finding provided evidence that non-traditional students may build professional rather than personal networks that align with their professional mindset (Levine & Hoffner, 2006). Moreover, they value actual engagement in authentic activities rather than career-related workshops that may (or may not) contribute to their professional development.

9.1.4. Personal socialisation: Values, expectations and aspirations revisited

The fourth research question examined doctoral students' values, expectations and aspirations in the third year of the program or at the personal socialisation stage to identify any transformation in their initial values, expectations and aspirations. Overall, there was a shift in doctoral students' aspirations from local to global. Four students aspired to migrate to Australia

to have a safer lifestyle and job security. By staying in Australia, they expected to get a quality education, cultural experience, and international knowledge. The shift in aspiration and expectations of the students emanated not only from the students' pre-entry influences, such as their professional experience, but also the post-entry influences such as students' training in the program and recent changes in the global market before and after the COVID-19 pandemic. The pre-entry influences were made explicit by students' decision to pursue the same careers they were engaged in before starting their PhD education. This finding supported the idea that doctoral student socialisation begins before students join a PhD program (Weidman et al., 2001).

These findings imply that, given the popularity and accessibility of HE, it "no longer fulfils the function of differentiation, of selecting the best… no longer gives them tangible advantages in finding a job or determining their salary" (Croucher & Locke, 2021, p. 59). Therefore, the social mobility values that doctoral students often attach to doctoral education is no longer an advantage and cannot guarantee success. For example, students knew that securing an academic position would be quite difficult and competitive. At the time of this study, this problem was fully observed in the face of the pandemic and its global economic recession, pushing individuals to seek employment outside the Education sector (Croucher & Locke, 2021). These unprecedented circumstances, subsequently, may change the traditional values such as serving one's country by participating in a PhD in a developed country. Many students studying abroad start to position themselves within the context of a different country with different cultural norms, values, and language. Though fortified by economic reasons, the decision to migrate can be indicative of developing "global citizenship" mindset by the student (Hendershot & Sperandio, 2009). The student participants of this study realised that contributing depended on securing a job and having a stable lifestyle, which was more feasible in an advanced country than in the students' home countries in the post-pandemic world. Thus, one of the major preferences for staying in the host country is a perception of having a more secure lifestyle. Mazzarol and Soutar (2002) argue that when characteristics of the host country or "pull factors" such as its economy are stronger than "push factors" or characteristics in one's own country, the transformation of values, aspirations and expectations may take place (p. 85). Other factors such as changes in students' profiles or an accompanying family member or a change in students' visa commitments can make students re-think their future. This embarks on the timely arguments that a doctoral degree should prepare the candidates for a changing and unprecedented future. Croucher and Locke (2020) noted that in the post-COVID era,

governments would rely on areas of expertise relevant to economic and social recovery. Recognition of this fact by the student participants could be an additional factor for their aspiration to migrate to the host country for a more secure lifestyle.

Findings indicated that the international doctoral students tended to orient towards the same professions as experts. One reason was that doctoral education allowed them to take up some professional roles such as teaching to assess their congruence or fit with the new roles. For instance, two students – Claudia and Eve – who were engaged in teaching, perceived the realities of an academic position very challenging; hence, they decided to look for flexible careers or pursue their previous careers because they had already been socialised to those roles and perceived their fit for those careers. On the other hand, the only student participant with no prior professional experiences at both pre-entry and post-entry stages appeared concerned that if she did not manage to enter academia and become a researcher, what else she might be able to do. In other words, limited professional experience prevented her from thinking of other alternatives. Accordingly, by participating and engaging in practices of the discipline during the formal and informal processes, students had the chance to practice different academic roles and get a more realistic view of their aspirations (cf Jablin, 2010). The step back from the primary aspirations is also supported by Offerman (2011), who posited that underrepresented students have "expectation for flexibility as they balance work, study and personal life" (p. 26).

In sum, the findings suggested that students' professional experiences have a prominent influence on their career decision-making processes than their academic and professional training during the doctoral program. These findings provide important insight into the pre-entry socialisation processes as a factor that affects students' aspirations and perceptions of professional educational roles. Moreover, towards the end of the program, the student participants were anxious or uncertain about their prospective career, including the decision to leave academia and the decision to migrate to a developed country. It is of note that financial security has a paramount effect on the expectations and aspirations of students, particularly those coming from developing countries (Harris, 2005). Aspirations to migrate and work in Australia, particularly for students from Asian countries, is a viable pathway to achieve social mobility, as well (Azmat et al., 2013)

9.2. Discussion of the findings

Literature on the experiences of international doctoral students in Australia is scarce, and this study was an attempt to fill this gap. The findings of this qualitative case study provided an in-

depth insight into the socialisation processes that international doctoral students from underrepresented countries experience in Australia. This group of students experience some challenges over the course of their candidature as they socialise into the norms and values of their discipline and the broader contexts of the institution and the new country. To date, some dimensions of these experiences have been studied elsewhere. For example, numerous studies have focused on the institution's role on doctoral students' experiences (Gardner et al., 2012, Jazvac-martec, 2009; Pascarella & Trenzini, 2005). This study, however, drew on a holistic model of socialisation (Weidman et al., 2001) that considered multiple factors in an attempt to provide a fuller picture of doctoral students' experiences. As presented in the previous chapters, the international doctoral students' experiences were affected by their demographic background and life experiences before joining the program, post-entry engagement in a series of structures embedded in the program, including supervision, peer interaction, and professional development training. The effect of these structures was discussed in relation to any transformation reported in the students' values, expectations and aspirations throughout their candidature.

The following section is a discussion of the major insights of the study. It outlines the challenges experienced by the underrepresented students and then introduces interdependence as a more realistic objective of PhD education. Finally, it re-conceptualises socialisation into doctoral education in light of doctoral student experiences in contemporary times.

9.2.1. The underrepresented student population and their challenges

Similar to other studies, this study suggested that students with certain demographics experience socialisation differently from the majority of the mainstream population. However, it went a step further to indicate that, despite the internationalisation of HE, and HIs' efforts to diversify the student population, the makeup of a Faculty may represent some dominant groups. For example, in Australian universities, international students from particular countries like China or India and neighbouring countries like Indonesia are considered mainstream because their population in the programs is high. This makes it easier for students from these ethnicities to build communities and networks of support. Conversely, underrepresented students feel more isolated and alienated, and this requires programs to pay more attention to the needs of these students.

One of the contributions of this study is to highlight the experiences of underrepresented students in a nuanced and fine-grained way. International students, including underrepresented

populations, increasingly join academia. Although universities offer arrangements such as orientations and inductions for new students, this may not be sufficient for underrepresented groups of students whose profile is different from that of traditional students (Offerman, 2011). As the findings of this study indicated, socialisation into doctoral education can be a more complicated and challenging process for this group of students. Thus, the social and academic lives of many of these students may be inhibited from the inception of their doctoral studies.

One of the main difficulties the underrepresented student population faces is the mismatch between how universities cater to international doctoral students' needs and how students interpret the services offered to them. Although particularly the high ranking universities (such as the university under investigation) invest a lot into providing the students with modern facilities to cater for their needs, this may not be visible to students. For instance, it was observed that the Faculty under investigation provided modern PhD spaces – equipped with many facilities that students needed, such as the internet, computer, lockers – that were thought to be conducive to students' engagement, learning and interaction. It was also assumed that peer networking and social interaction could naturally occur among students in these spaces. However, the strategic use of the spaces as a 'workplace' and the perceived unapproachability of senior peers could lead to feelings of isolation amongst underrepresented students and a desire to work from home.

Unlike extant literature on the social and academic contribution of peers to doctoral student socialisation (e.g., Austin, 2002; Bragg, 1976; Gardner, 2010; Golde, 1998; Lovitts, 2001; Nerad, 2012; Tinto, 1993; Weidman et al., 2001), peers were not always a source of positive support. The perceived formal behaviours of peers could be a negative socialisation experience for doctoral students. However, another side of the issue may be the new students' inability to network with peers. Gourlay (2011) argues that 'the features of 'shared repertoire', 'mutual endeavour' and 'expert-novice interaction' that characterise Community of Practice (Lave & Wenger, 1991) do not pre-exist in academic departments. New students may be confused, not knowing how to approach others, or find the environment individualistic, leading them to experience physical and professional isolation. As pointed out by Pascarella and Terenzini (2005), "individual effort or engagement is the critical determinant of the impact of college, it is important to focus on ways in which an institution can shape its academic, interpersonal, and extracurricular offerings to encourage student engagement" (p. 602). Overall, students in the modern PhD program could achieve what they needed and felt more satisfied and integrated into the program. However, it may notably take longer for underrepresented students to

socialise because they have to deal with further challenges and invest more time familiarising themselves with the normative context of the program and for successful networking with peers.

9.2.2. Interdependence

Undertaking a PhD education is a social activity by nature, and acknowledging interdependence reinforces students' awareness of others and their relationships. In particular, socialisation of the doctoral students cannot be effective if engagement in PhD activities and peer networking are assumed to be quite self-directed and is not initiated or reinforced by the Faculty. It is worth mentioning that interdependence, which suggests interconnectedness, does not contradict independence – frequently cited as the ultimate goal of the PhD. Indeed, interdependent students who work within PhD groups or other disciplinary communities learn to cooperate with other students and colleagues and receive support from them and develop the ability to work independently. Fine and Glendinning (2005) argue that the concept of 'interdependence' has been negatively loaded, and it may denote a lack of an individual's capacity to perform a task independently. However, from a social perspective, interdependence is a "universal and valori[s]ed condition of humanity" (p. 611). Interdependence should not be viewed "a unidirectional activity in which an active care-giver does something to a passive and dependent recipient" but rather as a "social care" that is "the product or outcome of the relationship between two or more people" (p. 616). "From this perspective, both recipients and providers are intrinsically involved in the creation or 'production' of care" (p. 617).

The main goal of doctoral Education has predominantly been defined in terms of development as an independent scholar. However, the central insight of the present study is that 'interdependence' is a more feasible goal to achieve. Institutions provide a structure through which their main objectives, including the timely completion of the thesis, can be precisely monitored, negating the notion of independence and freedom. Modern doctoral programs such as the modern PhD investigated in this study align with tenets of the Functional approach that is highly structured. As Lee (2019) argues, "functionality is all-surrounding" and "without an organisational framework, there can be no accredited qualifications awarded" (p. 206). Functionality (or 'performativity') suggest rigidity and inflexibility that makes the creation of original knowledge challenging (Lee, 2019). It also limits the autonomy given to the students denoting that independence can be an idealistic assumption.

However, within a Functional all-surrounding framework, supervisors can bring the key qualities of their doctoral training approaches such as critical thinking, friendship, sense of belonging and autonomy back to the center. As the study's findings demonstrated, there is no common understanding of ‘independence’, and the meaning attached to this concept varies according to different approaches to supervision. For instance, in the Enculturation approach, whose main concern is belongingness to the disciplinary community, independence is characterised by the students’ membership, their active role in disciplinary communities and awareness about the culture and responsibilities governing the communities. In contrast, independence in the Emancipation approach, which aims at ‘personal growth’, is indicated by the students’ ability to take the initiative, select the best choices for themselves and find their future path (Lee, 2019). This leads students to have different perceptions of autonomy and experience it differently.

There is much evidence that supervisors often tend to direct their students based on their own experiences or preferred doctoral training approaches (Lee, 2008) and provide different levels of assistance. Nevertheless, some students determine how much assistance and the freedom they need. To elaborate, giving students freedom based on the wrong assumption that they are able to proceed without any further support can make them even more confused. Lee’s (2008) study indicated that supervisors, specifically early career academics, usually adopt one of the main supervision approaches she proposed along with the inescapable Functional approach because they also need to adhere to the standards (2008, 2020). This is another reason for the tension between independence and dependence (Lee, 2008). Typically, senior academics with more experience working with PhD students and more resources and connections to address the individual and communal needs of the students adopt more flexible supervision styles than their early career counterparts. In this sense, if a student needs more support, supervisors may decide to meet them more frequently, or otherwise, if the student needs less support, a supervisor may choose to meet them less often. This was in line with the findings of other studies (e.g., Lee, 2008).

Many supervisors appeared to feel a special sense of responsibility to offer pastoral care to the international students. For instance, it has been observed that supervisors resort to the Relationship approach when dealing with a student’s persistence. They may also incorporate an Enculturation approach so that the student can benefit from the help of others in a community. The first two approaches, Functional and Emancipatory, may appear more rigid than Enculturation and Whole-person approaches as the student's and supervisors' boundaries

are sharper. Critical thinking is also observed in many forms, like when supervisors try to read about the student's research problem to offer good advice. Typically, "it is a sensitive and timely combination of approaches that will lead to the most successful outcomes for the research student" (Lee, 2020, p. 182). For instance, for dependent students who need step-by-step guidelines and are not able to handle critical feedback, a relationship approach with some appropriate self-disclosure can be helpful.

9.2.3. Revisiting socialisation into doctoral education

Despite the great popularity of socialisation models (Austin, 2002; Gardner, 2008, 2009; Mendoza & Gardner, 2010; Weidman, 2006; Weidman et al., 2001), there is growing evidence that they are not able to account for all the doctoral students' experiences in the graduate program. Notably, different socialisation models were proposed specifically during the 1990s and 2000s, all of them evolving around socialisation and integration of doctoral students into the academic culture of a specific discipline and any professional role(s) for which the degree prepares the students. However, with globalisation and the subsequent internationalisation of HE, the objectives around completing a PhD cannot be assumed. In light of the changing demographics of the students, findings yielded from this study indicated that navigating the dominant institutional and departmental culture in research-based PhDs or its modern variants such as the Professional Development mode is challenging for non-traditional students, including international and underrepresented students populations. Following that, it was revealed that socialisation models could not completely account for students' differences in a program. This observation is in line with other researchers who questioned the applicability of socialisation models (e.g., Weidman et al., 2001) to students with specific profiles (e.g., Daniel, 2007; Golde & Dore, 2001; Goupal, 2011; Twale et al., 2016).

Thus, a significant contribution of the study was to reveal the narrow scope of doctoral programs as a space for preparing students for entry into a wide range of professions after graduation. Considering the non-traditional students, many of these doctoral candidates have quite specific aspirations, which emanate from their professional histories, and might not be known to the institutions. That is why they may not find some mandatory program requirements, such as the PD activities relevant to their needs. This may raise the issue of 'forced assimilation' that could be especially true of the non-traditional student population. Accordingly, it causes dissatisfaction because many students perceive the expectation for a quality program based on the extent to which the program meets their needs. As the findings

of this study showed, underrepresented students did not enrol in the PhD program hoping to start a new career but rather to enhance their status within the existing professions. This means that the already-held idea that doctoral education is an entrance to the professional world no longer holds, considering the changing profile of doctoral students.

Jablin (2001) argues that individuals gather and process job-related information from an early age. Once they accept a position at a particular organisation, they build up work-related characteristics that are expected of them in that workplace. Those work-related characteristics are also sought by individuals in the future job alternatives they may take up. In other words, doctoral students with professional experiences or those in the middle of their career have already been socialised into or even developed a self-image related to the jobs they used to (or still) hold. Accordingly, this helps them evaluate the congruence of their self-image with other job alternatives. In other words, even if they try to find a new career, they assess it against their previous career because satisfaction with an already-held career is related to subsequent career satisfaction (Moss & Frieze, 1993).

This perspective also alters the conceptualisation of socialisation to integrate or become a legitimate member of the academic community. Although limited interaction with peers may be due to characteristics of the program environment and restrictions caused by the academic community, in-depth investigation indicates that students in the middle of their career may be very strategic in the type of network they make. Students with professional experience are already members of their professional communities. For these participants, the sense of belonging and integration in communities is related to professional networks rather than peers in the program. As observed in this study, doctoral students' networking with peers in the program could be quite strategic. For instance, they may voluntarily avoid networking with peers in the program because they have already invested in and are members of professional communities outside of the institutional context.

Knowledge acquisition in doctoral programs is another significant issue to consider when dealing with the socialisation of the new generations of doctoral students. Weidman et al. (2001) argue that knowledge acquired in postgraduate studies is very specific, suggesting that doctoral students do not feel confident entering any profession other than the one they have been exclusively trained. Most knowledge and skills that doctoral students acquire during their doctoral studies are discipline-specific. These specific knowledge and capabilities are crucial

for students to progress academically and professionally in their chosen field. This type of knowledge is highly evident among research communities.

Moreover, for many non-traditional students in the middle of their career who have already acquired the basic knowledge and some practical knowledge of their field, doctoral education is a space where they learn more advanced and sophisticated knowledge. Supervisors are typically one of the major sources of knowledge. However, as indicated by the findings of this study and in line with previous research, many academics in HE continue to assume academic roles for students, or like one of the senior academics in this study, recruit only candidates who intend to become an academic (Anderson & Anderson, 2012; Gardner et al., 2012). In his socialisation model, Austin (2002) theorised that doctoral students are "keen observers and listeners". In HE departments, students are exposed to role models whose primary responsibility is research. These unintentional modellings convey messages mainly about the academic roles to the students. Moreover, through the processes of socialisation, many students take up the norms and values of the research universities (Anderson, 2012). Therefore, if today's doctoral programs aim to prepare students for a particular profession or diverse professions in a dynamic market, faculties need to explicitly expose students to diverse forms of scholarship."Without an explicit curricular emphasis on socialising students to varied contexts and careers in higher education, and lacking mentorship in faculty responsibilities outside of research, doctoral programs risk a failure to meet the diverse faculty needs of […] higher education" (Anderson & Anderson, 2012, p. 248). A similar comment was made by Nerad (2012), who defined an expanded and effective doctoral education as one that takes place in multiple environments.

Finally, todays' doctoral students graduate in the context of doubt and flux caused by unprecedented incidents that have global impacts on their personal and professional lives. Graduate students might be initially ambivalent about their future, and their doubts can increase as they proceed towards degree completion. Although PhD programs may prepare students for a dynamic job market, global forces can abruptly and strongly reshape students' preferences (Group of Eight, 2013). To elaborate, unprecedented circumstances such as the COVID-19 breakout and the resulting economic depression are among factors that exacerbated the feelings of uncertainty and job insecurity among recent graduates, encouraging them to look for the safest career option. For example, this convinced doctoral students in this study that sustaining a profession with experience and expertise has a lower risk of unemployment or failure than trying to start a new career in a different sector, specifically in a new country. These new

realities contradict the popular definition of socialisation on which this research was based. Weidman et al. (2001) defined socialisation as "the processes through which individuals gain the knowledge, skills, and values necessary for successful entry into a professional career requiring an advanced level of speciali[s]ed knowledge and skills" (p. iii). This definition positions students within one discipline only and confines students mainly within the walls of institutions without referring to broader global sociocultural contexts in which people and institutions are situated.

9.3. Implications of the study

This study contributed to the growing body of research that explains what factors and experiences are essential for international doctoral student socialisation in light of the broader sociocultural shifts occurring concerning the goal of the research doctorate. Based on the findings of the study, the post-entry experiences (engagement in formal and informal structures) that are highly emphasised in theories of socialisation are integral aspects of doctoral education. However, for a non-traditional student group in the middle of their career, pre-entry socialisation, specifically their professional experiences, was also an essential dimension of socialisation. This indicates that doctoral student socialisation starts prior to joining the doctoral program (Weidman et al., 2001). Thus, when theorising doctoral student experiences in HE, theorists need to pay attention to students' profile and pre-entry socialisation factors such as their professional background and their values, aspirations and expectations, the dynamics of the departmental environment and the culture of the institution.

The demographic shifts among the doctoral student population have implications for institutional practices. As universities continue to admit diverse students and try to improve the diversity culture, orientations and inductions need to be revised in light of the students' demographics and ongoing evaluation of students' needs and circumstances. Second, universities can monitor that all students receive adequate cultural awareness training to ensure that new international students are not negatively affected by the new dominant culture and further withdraw from the activities because they find little in common with others. Some of the training may come in the form of PD offerings that may not be completed by the students who might have other priorities. This makes it necessary for the departments to look back and ensure that students receive the support offered to them in the way it is intended. Third, the feeling of perceived marginalisation or social distance between international students and Australian students can be due to limited opportunities within the program for contact. To

improve this situation, faculties are recommended to set up peer mentorship programs involving first-year underrepresented doctoral students and their senior peers in the program. The makeup of the mentorship groups can include international and local students' pairs to bridge the social distance that has already been detected in Australian universities both in this study and previous research (Jensen & Jetten, 2015; Sato & Hodge, 2009).

The PhD in Education is often structured to encourage individual work and attainment, leading some students to assume that social interaction and integration does not contribute to their success or career aspirations. Compared to North American PhD training-based models that incorporate a coursework stage in some doctoral training, there was no intense contact among the students in the modern research-based PhDs and did not allow students to network with their peers (Gardner, 2008b). The PD activities and workshops that were predominantly lecture-based and online created few opportunities for meaningful peer interaction and increased participation in the program. Hence, events that promote peer interaction (rather than one-off events) should be designed and initiated by the Faculty. Interpersonal relationships are a good indicator of how well different students fit the institution (Weidman et al., 2001).

Findings pertinent to supervisory approaches utilised by supervisors in this study also suggested that some highly focused approaches on students' development and self-direction might be more isolating than approaches such as Enculturation that pay equal attention to both the individual and wider doctoral community. Findings also implied that students who are involved in academic communities could get more support and experience fewer challenges. Therefore, supervisors are recommended to incorporate more interactive models of supervision that are less reliant on the supervision team. Moreover, it was found that although supervisory groups and cohorts are in place, students still benefit the most from their main supervisors. The senior supervisors were found to develop more effective relationships with their students than their early career counterparts. Therefore, similar to student mentoring, some scholars recommend peer mentoring between senior and new academics to build confidence and a stronger sense of professionality (Kensington-Miller, 2017). Likewise, departments need to reconsider the idea of "self-help" and transform in favour of "community-based approaches that engage all members of the departments" (Solem et al., 2009, p. 290).

These findings cast a new light on the role of universities in preparing doctoral students for the contemporary job market. This study provided evidence that the increasing number of non-traditional students that join academia may be in the middle of their careers and require specific

and advanced knowledge; therefore, they may not benefit from the PD offerings. In addition to students, many supervisors also find these activities peripheral and perceive their primary responsibility to enhance their research skills. Above all, the strong emphasis of the research programs on research skills, theoretical knowledge, writing and publication as the main indicators of learning or intellectual growth suggest that PD activities – often presented as online self-study courses that are not assessed –may give students this message that research skills are far more important than career-related or skills workshops. Anderson and Anderson (2012) extend this argument by stating that research programs do not implement mentorship for a teaching role, either. They argue that "the primary goal of socialising students into scholarship based on today's professionate is not to prepare future full-time academics". This calls for a more in-depth investigation of the goal of research programs and what they prepare the students for. It appears that to avoid taking a "one size fits all" approach and more efforts to understand the goals and aspirations of different groups of students can assist doctoral programs to develop more personalised approaches to training doctoral students.

9.4. Limitations of the study and future directions

This was a small-scale study, and data were solely collected in a Faculty of Education at one university. Despite this limitation, this study provided a unique opportunity for international doctoral student experiences to be investigated. The in-depth approach allowed examination of different dimensions of a student's life rather than limiting the focus to one dimension such as supervision or employability. The participating students raised important issues, providing detailed and rich depictions of their situated experiences. In addition to doctoral students, the study also incorporated the voices of supervisors involved in students' daily socialisation.

Increasing participation of non-traditional students in doctoral programs is a new reality that future research can continue to explore. The study sample, though representative of the underrepresented population, lacked complete diversity because all the participants of this study except one were Asians and all the female participants of this study were married except one who was a single mother. A greater diversity of perspectives could be obtained by investigating the socialisation processes of a larger sample of doctoral students in geographically diverse programs at different universities that may represent different student demographics such as single female international students with a broader range of academic and professional backgrounds. For instance, since this study only addressed Education students, it would also be a worthwhile study to extend to different faculties within the same

or other universities. It would also be worthwhile to explore and compare the socialisation processes of different dominant international groups such as Chinese and Indian in Australian universities.

This study provided rich triangulated data from interviews, focus-groups, observations and documents. Future researchers may be able to incorporate journal or diary writing into their design to capture a more fine-grained understanding of how students are coping with the challenges of transition into the research-based doctoral programs. Also, further work is certainly required to disentangle the complexities in socialising doctoral students to different careers through professional development activities. The findings of this study indicated the six participants' dissatisfaction with the PD activities. This aspect would be of interest to survey PhD students widely to gauge whether the findings of these six are universal across the university for international students.

9.5. Conclusion

This study provided a much-needed examination of underrepresented doctoral student socialisation in a modern doctoral program from the students' perspectives. The study also considered socialisation in light of the changing landscape of the PhD as a pathway to prepare independent graduates who could join a dynamic job market. Therefore, the study explored the main concerns and issues that affected doctoral students' socialisation in the program. To understand students' professional socialisation, the study drew not only on demographics of the doctoral students but also their values, aspirations, and expectations prior to the beginning of the program compared with those towards the end of the program. The findings proved that socialisation is lifelong and flexible and can stem from an individual's experiences both before and after training in a program. The study added further evidence to the literature that the university is not at the centre of the socialisation process, unlike socialisation models such as Weidman et al. (2001). This study tried to show that socialisation is a dialogical and reciprocal process between the student, the institution, and the broader socio-cultural context in which they are embedded. However, the extent to which students can exercise self-direction depends on the program's flexibility, goals, and the expectations of different stakeholders that interact with the doctoral students, such as their supervisors. Students are engaged in ongoing interaction with the institution and personal and professional communities embedded in the broader, constantly changing society which may shift their values, expectations and aspirations. This dissertation provided empirical evidence towards a deeper understanding of different components of a doctoral program that facilitate or debilitate doctoral student socialisation.

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APPENDICES

Appendix A: Ethics Approval

Monash University Human Research Ethics Committee

Approval Certificate

This is to certify that the project below was considered by the Monash University Human Research Ethics Committee. The Committee was satisfied that the proposal meets the requirements of the *National Statement on Ethical Conduct in Human Research* and has granted approval.

Project ID: 17467
Project Title: Socialisation in the Discipline of Education: A Case Study of International Doctoral Students in Australia
Chief Investigator: Professor Paul Richardson
Approval Date: 14/03/2019
Expiry Date: 14/03/2024

Terms of approval - failure to comply with the terms below is in breach of your approval and the *Australian Code for the Responsible Conduct of Research*.

1. The Chief Investigator is responsible for ensuring that permission letters are obtained, if relevant, before any data collection can occur at the specified organisation.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash letterhead and the Monash University complaints clause must include your project number.
6. Amendments to approved projects including changes to personnel must not commence without written approval from MUHREC.
7. Annual Report - continued approval of this project is dependent on the submission of an Annual Report.
8. Final Report - should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected completion date.
9. Monitoring - project may be subject to an audit or any other form of monitoring by MUHREC at any time.
10. Retention and storage of data - The Chief Investigator is responsible for the storage and retention of the original data pertaining to the project for a minimum period of five years.

Kind Regards,

Professor Nip Thomson

Chair, MUHREC

CC: Miss Maliheh Rezaei

List of approved documents:

Document Type	File Name	Date	Version
Supporting Documentation	Observation Checklist	12/02/2019	One
Supporting Documentation	Observation Form	12/02/2019	One
Supporting Documentation	Document Summary Form	12/02/2019	One
Supporting Documentation	Student Interview Protocol - 1 & 2	15/02/2019	One
Supporting Documentation	Supervisor Interview Protocol	15/02/2019	One
Focus Group questions	Focus-Group Protocol	15/02/2019	One
Consent Form	Consent form_Supervisor	20/02/2019	One
Supporting Documentation	Advertisement-Participant recruitment	28/02/2019	2
Explanatory Statement	Explanatory statement for students-Revised version#4	04/03/2019	Four
Explanatory Statement	Explanatory statement for supervisors-Revised version #4	04/03/2019	Four
Consent Form	Consent form_Students-Revised version 3	04/03/2019	Three

Appendix B: PhD students' individual interview protocol

First interview

1. Tell me about your social, cultural and academic background please. (e.g., degrees, disciplines, areas of expertise, thesis topic, etc.)
2. Tell me about your work experience? (e.g., type of work; positions; responsibilities)
3. What is your motivation to apply to this PhD by research program in Education in Australia?
4. Describe experiences in your life prior to college or during college that influenced your view of the education profession.
5. What are some things you have liked and enjoyed so far? What are some things you have found difficult or frustrating?
6. a) Describe your relationship and connection to the following people and the effect (if any) they have had on your socialisation into the program; b) How do you interact with these networks (face-to-face, social media, etc.)? c) How do they support your personal and professional life?
    - Family
    - Friends and peers
    - Supervisor(s)
    - Student associations (e.g., MPA)
    - Professional communities and associations
    - (current or prospective employers)
    - Others
7. What do/did you expect to get from this program for your personal and professional development (knowledge, skill, aspirations, etc.)?
8. What educational activities are you involved at this stage of your study as part of the requirement of the program.

Appendix C: PhD students' group interview protocol

Second interview

The following eight key questions prompt open discussion:

1. How do you assess your progress and success in this program?
2. What are the dispositions, knowledge and skills that you have (have not) acquired and can exhibit so far?
3. On average, how much time, energy and practice do you invest in order to be a successful PhD student and satisfy the requirements of the program?
4. What have you learned from your candidature that you believe is of value to your prospective career?
5. What type of support (academic, emotional, professional, etc.) do you get from your supervisor?

Appendix D: PhD student interview protocol

Third interview

1. Describe your educational, social and cultural experiences over the second year of your enrolment in this university.
2. What are some things you have liked and enjoyed so far? What are some things you have found difficult or frustrating?
3. Describe your experiences in this program that influenced your view of the field of education and your career prospects (if any).
4. a) Describe your relationship and connection to the following people and the effect (if any) they have had on your socialisation into the program; b) How do you interact with these networks (face-to-face, social media, etc.)? c) How do they support your personal and professional life?
    - Family
    - Friends and peers
    - Supervisor(s)
    - Student associations (e.g., MPA)
    - Professional communities and associations
    - Current or prospective employers
    - Others
5. Has your relationship and connection to these groups changed over time? How (are you more/less involved in interaction with any of the above people or groups?
6. Describe your progress in the program over the past year. What knowledge or skill have you acquired? (Has involvement in the program changed your predispositions about what constitutes a good PhD student and a professional in the field of education? Have your career aspirations for the future changed?)
7. How do you evaluate the educational activities that you have been involved in over the past year as part of the requirement of the program?
8. Do you have any further comments about the questions that I have asked you today?

Appendix E: Supervisor interview protocol

1. What do you consider to be an ideal PhD program in education?
2. What are the values, ethics, and beliefs of your discipline that are emphasized to students?
3. What formal and informal role expectations (attitude & behavioural clues) are emphasised to students in the Education discipline?
4. What are the habits of mind, attitudes, and skills a PhD in education should have or exhibit?
5. What sources and facilities are provided to a PhD student by the department or university to achieve this ideal and fulfil their role expectations?
6. Explain the role of other stakeholders such as students, peers, faculty and other professionals in the socialisation of students.
7. How do you (faculty, department, etc.) encourage and facilitate student involvement in activities of the department?
8. What indications become prevalent to you when students are successfully identifying with the professional role of your discipline? What competencies do they show?
9. How do you contribute to increasing a student's identity with the professional role of your discipline? At what point do you consider the student a practitioner of your discipline?
10. Are there any challenges specific to the international students only? How do they overcome them?

Appendix F: Observation form and field notes

Date: 04/04/2019

Participant: Catherine

Other people present in the environment (e.g., teacher, peer) and their role: (e.g., supervisor, facilitator)

14 guests (postgraduate students at the Faculty including me)
Two supervisors: Sara & Caitlin
Panel members: X, Y, Z

Setting (Class / Small group / Pairs / Individual / Other)

Event: *Confirmation milestone, a formal event at a meeting room in the Faculty of Education*

Features of setting

Heterogeneous/diversified
In the sense that the members were not from the same sociocultural background, nationality, education level, imbalanced power relationships, etc.

Norms and values of the setting/context

☒ Formal ☐ Informal
☒ Professional ☐ Casual
Formal and professional because Confirmation is a formal event and a milestone based on which the performance of the student over a year would be assessed.

Activity type-What strategies they use to do it?

☐ Working on written assignment (e.g., proposal, paper)
☒ Interacting (e.g., discussion, friendly talk)
☒ Working with technology, equipment
☒ Presenting, acting
☐ Tutoring peers
☐ Others
The activity was a formal presentation which involved presenting Jacky's research and answering the panel's and the audience's questions.

Purpose of the activity-What are people trying to achieve?

☒ Interactions
☒ With supervisor/teachers – academic / instructional / professional – panel members
☒ With other students – academic / instructional / professional –
☐ Other
The main purpose was to pass the first milestone and to get confirmed.

Additional information

A sample of field notes and the following co-interpretation of data by the student participant

Descriptive field notes	*Reflective field notes*	*Co-interpretation*
The guests followed the participant's presentation but no question was raised by the audience once the presentation was done.	The guests were there only to support their friend emotionally in this stressful event. Although milestones are public events, the guests might have been invited by the participant to feel more confident.	There is an unwritten rule among peers at the Faculty that they attend each other's milestones so that their friend does not feel alienated. The purpose is not to challenge her by asking her a question.