Exploring the Career Aspirations of Women Doctoral Students: A Longitudinal Qualitative Study

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Abstract

This thesis explores how women doctoral students imagine their post-PhD futures, and how doctoral experiences shape career aspirations. Situated in literature highlighting the persistence of gender inequality in academia, and gendered post-PhD career choices, this research illuminates the factors which influence aspirations, and the role of the PhD in the 'leaky pipeline'. Using qualitative methods – interviews, research diaries, and letters to future selves – within a longitudinal framework, it explores how academic careers are perceived over time, and how shifting personal priorities shape imagined futures. Using possible selves theory and the concept of horizons for action as theoretical tools enables analysis of individual agency and academic structures. Adopting a three-dimensional narrative inquiry approach, underpinned by feminist research principles, places participants' stories at the centre of the thesis.

These methodological and theoretical approaches make visible the structural barriers that participants perceived to pursuing academic careers, including the pressure to publish and the prevalence of insecure contracts. The research makes explicit how gendered issues pose barriers, including perceived incompatibilities between family and academic life. These issues hindered participants' sense of belonging to academic communities and their ability to develop academic identities. This research demonstrates how the doctorate acts as a litmus test for an academic career, allowing participants to observe what being an academic involves, and judge whether or not academia is ‘for’ them. It has implications for the higher education sector, current and future doctoral students, and those involved in doctoral education and support.

This research makes four key contributions to knowledge. Firstly, it addresses the gap in knowledge about women's experiences of doctoral study, and their career aspirations. Secondly, its cross-disciplinary approach contributes to literature on academic cultures. Thirdly, it adds to knowledge about how PhD students develop feelings of belonging to academic communities. Finally, my introduction of the career savvy concept contributes to literature on doctoral students' career development. This research also makes methodological contributions through its longitudinal perspective and use of letters to future selves, and offers a theoretical contribution in combining possible selves theory from psychology with the sociological concept of horizons for action.

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Chapter 1

Introduction

1.1 Starting at the beginning

In September 2013 I began a part-time Master's degree in research methods, whilst working full-time in a related field. The idea for my doctoral research emerged from this initial work. In my first seminar, I became aware that everyone else had come prepared with a research topic in mind, whereas I had simply come along hoping to learn more about how to 'do' research. Grasping for a subject to focus on in my assignments, given my interest in feminism and experience working in higher education, I decided to undertake research which explored the career experiences of senior women academics.

Whilst this research provided interesting insights, I became conscious that the experiences of women further down what has been called the 'leaky pipeline' (Barinaga, 1993), were likely to determine whether or not they became senior academics, or academics at all. When my colleague completed her PhD but decided not to pursue an academic career, I was curious about her decision. I had thought that an academic career was what doing a PhD was *for*, and couldn't understand why anyone would embark upon such a long and difficult path only to then leave academia. I wondered what it could be about doing a doctorate that could be so off-putting. I wondered if women experienced doctoral study differently to men. I didn't have the opportunity to explore these questions during my taught postgraduate degree, but my curiosity remained. In October 2014 I became a woman doctoral student myself, and started to try and answer these questions.

1.2 Locating myself

"To understand oneself and others, we need to understand our own histories and how we have come to be what we are." (Chamberlayne, Bornat and Wengraf, 2000, p.7)

By locating myself within this research, I make clear where I am speaking from (Jackson, 1998). In doing so, I am responding to Sikes' (2010, p.19) call to action: 'ethical practice demands that a researcher…states where they are positioned with regard to their work. Thus they should explain why they are interested in a particular topic, how it relates to them and their experiences'. It is therefore important that I reflect on the impact my own doctoral journey has had on my research. It would be impossible for me to undertake this research objectively, if indeed there is any research which can be said to be so. My experience of undertaking doctoral study and my own career aspirations cannot be removed from a study which examines the experiences and aspirations of my peers. Despite being what some might refer to as an 'insider-researcher' (Adler and Adler, 1987; Dwyer and Buckle, 2009), my experiences of doctoral study are not the same as my participants', and nor are theirs the same as each others'. We are all shaped by our class, ethnicity, and educational background, and have different desires and priorities for the future, which have shifted over the course of the last three years. These issues of difference are discussed in more detail in section 3.2.3 of my methodology chapter.

My own journey towards doctoral study was not planned. My decision to apply for a PhD was a result of happenstance; I was unhappy in my job, and was motivated by a love of studying which I had re-discovered in my part-time Master's degree. Simultaneously, I had the good fortune to meet a number of academics who encouraged me to pursue my research interests further. Once I had decided to apply, I was surprised by how determined I became to pursue both doctoral study and an academic career. This was just as well; during the application process for the PhD I lost my job as a result of an organisational restructure. My experience of commencing doctoral study is inextricably bound up with being made redundant. On being offered the chance to do a funded PhD in my mid-twenties, my life, and the way in which I viewed myself, fundamentally changed. I had a potential career ahead of me, a chance to take on a different identity; one that I badly wanted.

After experiencing doctoral study first-hand, my expectations, experiences and conceptions of what a doctorate *is*, and what it is *for* have changed. My own aspirations have evolved and changed, shaped by the people I have met and the

experiences I have had over the last few years. Despite having undertaken this study, and being personally implicated in this research as a woman doctoral student, I remain intrigued by why it is that high-achieving women engaging in doctoral study do not – or cannot – necessarily imagine themselves as academics. I remain committed to doing academic research which aims to illuminate the reasons for this, and which works to open up possibilities for change.

1.3 Introducing the research problem

This thesis explores how women doctoral students' career aspirations are shaped and changed by their experience of undertaking doctoral study. Here, I use aspirations to refer to individuals' particular career ambitions, but with an understanding of aspirations as affective, incorporating highly personal hopes and dreams rather than being simply rational career ideas or plans. I also use the word doctorate throughout this thesis to relate specifically to the PhD, rather than to professional doctorates, and all participants were studying for a PhD rather than another kind of doctorate. This thesis is concerned with identifying why participants may not view an academic career as possible or desirable. This thesis is concerned with identifying why participants may not view an academic career as possible or desirable. Here, the phrase academic career refers to the long-term participation of individuals in academic roles; specifically research and teaching within universities. Yet the notion of 'career' itself may be challenged (Sellers, 2007), particularly in relation to women's experiences, as it implies linearity and straightforward progression. As Bagilhole and White (2013, p.9) note: 'in academia gender identity has been constructed on the model of a typical male career trajectory- undergraduate degree, PhD, perhaps a post-doctoral fellowship in another country, lectureship, senior lectureship, associate professorship and professorship'. Academic careers are far from homogenous, and women academics' career trajectories continue to be different to those of men. Thus within this thesis the term academic career is used, but with a critical understanding of the range of experiences that this can encompass.

This thesis engages with a number of issues relating to academic careers and the higher education landscape. These include perceptions of the purpose of doctoral study, the increasing neoliberalisation of academic working practices, and persistent

gender inequality within the academy. Below, I outline the implications of these issues for my research.

The UK doctorate is only 100 years old (Park, 2005), yet it has undergone a series of transformations since its origins in the early twentieth century. Traditionally, the PhD has been viewed as an 'academic apprenticeship' (Wellington, 2013, p.1492). Indeed, writing the doctoral thesis has been likened to the process of cabinet-making under the supervision of a master carpenter (Rugg and Petre, 2010). Yet doctoral education underwent significant changes after the Roberts Review (2002). The review argued that the UK government should encourage scientists and engineers to engage in postgraduate study, in order to fulfil the needs of the labour market and boost the economy. However, it criticised the lack of provision of adequate skills training for doctoral students, and argued that PhD students were poorly prepared for careers in academia or in other sectors, such as business. Thus, there has since been a growing emphasis on skills and training within doctoral degrees (Park, 2005). For example, the UK based organisation supporting the professional development of academic researchers, Vitae, has recently introduced an interactive online tool called the Researcher Development Framework (Vitae, 2010) which enables individual research students and staff to record their engagement with professional development and career-related activities. Based on the principles of the Roberts Review (2002), this tool has become a requirement for many doctoral students, with institutions and research councils alike making the completion of this framework mandatory for new doctoral students.

This move to focus on skills development, along with the introduction of professional doctorates in the 1990s (see Anderson *et al*., 2015), has meant that the doctoral qualification is now perceived in a number of different ways. Park (2005, p.189) acknowledges this, referring to the 'new variant PhD' in his discussion of the variability of doctoral qualifications. With an increasing number of PhD students seeking employment outside academia due to competition for academic jobs (Grove, 2014a) and the allure of better-paid and more secure employment in other sectors (Lynch, 2007), many within the higher education sector now consider the doctorate as 'an advanced knowledge and skill set for employment and careers beyond the university'

(Neumann and Tan, 2011, p.602). The PhD has also been described as a 'labour market qualification' (Park, 2007, p.17). This modern view of the doctorate is considerably different to the traditional view which considers the PhD as an academic apprenticeship (Park, 2005).

While conceptions of the doctorate and what it is for have changed over time, McAlpine and Emmioglu (2014, p.1) note that ‘while the doctorate was once perceived as preparation for an academic position, internationally more than half of all graduates leave the higher education sector whether by choice or lack of opportunity'. Further, a report from Research Councils UK (Diamond *et al.*, 2014) notes that the number of doctoral graduates who remain in higher education and work as researchers has declined over time. Despite the fact that many PhD graduates will not pursue academic careers, institutional policies often maintain 'assumptions about [the PhD] as preparation for an academic career' (Neumann and Tan, 2011, p.602). Park (2007, p.8) observes that this is often related to PhD supervisors' perception that they are 'training apprentice researchers'.

The traditional conception of the PhD that many academics have contributes to the lack of advice that doctoral students receive about careers outside of academia (Vitae, 2017; Wellcome Trust, 2013). The Higher Education Academy (2015), whose report based on the most recent national Postgraduate Research Experience Survey (PRES), found that only a third of respondents had received advice on career options during their studies. Yet the assumption that PhD candidates are motivated by the prospect of an academic career is not unfounded; in the same survey, the Higher Education Academy (2015) reported that two thirds of respondents envisaged a career in academia after finishing their PhD. Thus, it appears that a significant proportion of doctoral students imagine an academic future, but are also not fully informed about the full range of other career options available to them after the PhD.

Despite many doctoral students aspiring to academic careers, studies have found that those who pursued academic research careers after their PhD were less satisfied than those who went on to have careers in other sectors (Diamond *et al*., 2014; Vitae, 2013a). A report undertaken by Research Councils UK found that of various

occupational groups, those working in research in higher education were least satisfied with their role, and showed 'particular concern over job security and career prospects' (Diamond *et al*., 2014, p.23). This is supported by the findings of the Council for Science and Technology (2007), whose report into the experiences of early career researchers highlighted significant job dissatisfaction, due to a perceived lack of career prospects. Thus, a significant concern for those aspiring to become academics is the instability of employment within the higher education sector, complicated by a changing economic context and an uncertain political landscape. Research has found that there has been a significant increase in the number of short-term, temporary academic roles advertised by universities, indicative of the 'casualisation' of academic labour (Lopes and Dewan, 2014; UCU, 2016). The Res-Sisters (2016) argue that the early academic career stage is becoming increasingly characterised by precariousness, often placing individuals under significant financial pressure. Moreover, studies have found that women are over-represented in these insecure positions (Gill and Donoghue, 2015; Morley, 2013; Reay, 2014).

It is perhaps no surprise, then, to learn that some doctoral graduates perceive that they will be happier in careers outside academia (see Wellcome Trust, 2013). The conditions within which individuals engage in academic labour have changed considerably in recent years, as the rise of neoliberalism – defined here as 'a political and economic rationality characterised by increasing individualisation, withdrawal of the state and introduction of market logics and rationality into ever more spheres of life' (Gill and Donoghue, 2015, p.2) – has created a business-focused, competitive culture within universities. Academics must acquire research funding, produce research which demonstrates impact, as well as fulfil the increasing requirements of the Research Excellence Framework (REF) and the new Teaching Excellence Framework (TEF). The pervasive 'publish or perish' culture puts individuals under pressure to 'produce and keep producing' (do Mar Pereira, 2016, p.103). Contemporary academic careers require individuals to continually demonstrate how they are meeting these various demands, creating a culture of performativity (Ball, 2003).

For early career academics in particular, increased competition for jobs means that they must engage in these performative behaviours from an early stage (Archer, 2008).

This pressure has translated into the PhD student population, who perceive the need to undertake a range of additional career-related development activities during their doctorate in order to acquire necessary experience (Churchill and Sanders, 2007; Matthiesen and Binder, 2009; Stoilescu and McDougall, 2010). This process of continually engaging in career-building activities has become known as 'playing the game' of academia (Archer, 2008; Parsons and Priola, 2013; The Res-Sisters, 2016). Hancock (2014, p.1) has described this process in relation to game theory, arguing that 'throughout the course of their PhD, doctoral scientists are involved in a game, played in reference to…desired career outcomes'. The view of academia as a 'game' that needs to be played, with rules that are often unwritten (Parry, 2007; Rugg and Petre, 2010) has led to negative perceptions of academic careers, particularly amongst doctoral students and early career academics (Mason, Goulden and Frasch, 2009; McAlpine and Emmioglu, 2014; Wellcome Trust, 2013).

As with the massification of undergraduate higher education (Scott, 2005), postgraduate education has similarly expanded (Pole, 2000), and there has been a significant rise in the number of PhD students in the UK in recent years, with 25.7% more students enrolling in doctoral programmes in 2015-6 than in 2006-7 (Universities UK, 2017). There has been a significant increase in competition for academic jobs (Grove, 2014a; Royal Society, 2010), and Wolff (2015) argues that this is due to the volume of PhD students seeking academic jobs outnumbering the positions available. Yet higher education researchers have simultaneously stressed the importance of continuing to recruit new academics. Park (2007, p.13) observes that 'maintaining a reliable supply chain of researchers is crucially important, particularly in today's knowledge economy'. This concern is echoed by the Council for Science and Technology (2007) who observe that the current generation of academics will need to be replaced by skilled researchers. Further, Coates and Goedegeburre (2012) express concerns for the future of the higher education sector if potential academics continue to exit the academy in favour of other sectors. Describing the situation in Australia – but which reflects the UK context – they argue that there is a need to increase the attractiveness of the academic profession to prospective academics, given the number of PhD graduates choosing to work outside academia after their doctorate (*ibid*, 2012).

This study explores how the career aspirations of women doctoral students are informed by and reflect these changing conceptions of the purpose of doctoral study, and perceptions of academic careers. It is interested in examining how participants perceive the prospect of taking on an academic identity, and how their aspirations may be changed by the experience of doctoral study, which often involves new 'ways of being' (Morris and Wisker, 2011, p.3). The context of this research is the gendered nature of UK higher education (Knights and Richards, 2003). This study is situated within literature which illuminates the persistence of gender inequalities in higher education; women continue to be under-represented in senior roles and in science, technology, engineering, medicine and maths (STEMM) disciplines (Equality Challenge Unit, 2016). Previous studies have identified gender inequalities within the process of studying for a doctorate itself, finding that women students may have less positive experiences of doctoral study than male students due to gender discrimination and feeling 'other' as women doctoral candidates (see Lee and Williams, 1999; de Welde and Laursen, 2011; White, 2004). Further, recent media articles have highlighted the persistence of sexual harassment within higher education institutions (see Batty and Bengtsson, 2017; Weale and Batty, 2017), which I discuss in detail in section 2.2.2.

Research highlights that the experience of undertaking doctoral study can discourage women students from pursuing an academic career (Guest, Sharma and Song, 2013; Hatchell and Aveling, 2008). Studies conducted by the Royal Society of Chemistry (2008) and the Wellcome Trust (2013) identified gendered patterns in the post-PhD career aspirations of doctoral students, with women being far less likely than their male peers to want to pursue a career in academia after completing their studies. The implications of this inequality extend beyond the individuals themselves, with potentially damaging consequences for higher education institutions. Rice (2012, p.1) claims that ‘universities…will not survive, because we have no reason to believe we are attracting the best and the brightest’. Thus, whether or not women doctoral students aspire to academic careers has implications for the future of higher education. It is therefore crucial to examine what happens during the doctorate which affects these initial aspirations. Other than some studies in STEMM subjects (see Hatchell and Aveling, 2008; Royal Society of Chemistry, 2008), little work has been done to understand why women choose not to remain in academia after the PhD. This study

will explore this question across disciplines, addressing this gap and knowledge and making it a valuable and timely piece of research.

1.4 Introducing the study

This research was funded by a studentship from Sheffield Hallam University's Faculty of Development and Society. Thirteen participants were recruited from two UK institutions in one city in Northern England. Participants were recruited across subject areas, as I was interested in seeing whether women's experiences of doctoral study differed across subject areas, and how disciplinary cultures shaped career aspirations.

My approach to the research uses a narrative inquiry framework, underpinned by feminist research principles. In taking this approach, I continue a tradition of using narrative inquiry within feminist research (see also Maynes, Pierce and Laslett, 2008; Woodiwiss, Smith and Lockwood, 2017). My feminist approach to narrative inquiry holds that women's stories are inherently valuable and deserve to be told. My use of narrative inquiry to frame my study is informed by a constructionist epistemology, which maintains that participants' stories are constructions of reality, which are influenced by my position as the audience for these stories. Thus, my role as the researcher influenced the research process; the stories that participants told me would not be told in the same way to someone else. As Sfrad and Prusak (2005) highlight, narratives are always told differently, depending on the audience. Participants' stories were told to me within our researcher-participant relationship, and within the context of this relationship I subsequently constructed narratives of their experiences using Clandinin and Connelly's (2000) restorying approach, which I discuss in detail in section 3.9.2. Participants' stories can thus be understood as co-constructed, something I discuss in more detail in Chapter 3.

In this thesis, I explore the lived experiences of participants. I do not use this term in its phenomenological sense which would pertain to 'actors' accounts of social reality' (Scott, 1996, p.64), but rather in a way which attends to the emotions, reflections and negotiations which participants experienced during the doctorate. I use qualitative methods to enable insight into 'what lies behind, or underpins, a decision, attitude, behaviour or other phenomena' (Ritchie, Lewis, Nicholls and Ormston, 2007, p.28),

utilising a combination of qualitative methods, including semi-structured interviews, research diaries and letters to future selves. The research design is longitudinal, using the interview method at different stages of the PhD, and collecting data through research diaries for the duration of participants' studies (see Table 1 for a summary of data collection activity). I conducted two interviews with each participant, one in their first year of study, and another in their second year. I did so in order to explore how the cumulative experiences of doctoral study shape participants' aspirations during the PhD, noting that most of the existing studies on doctoral students' aspirations (for example Birch, 2011; Brailsford, 2010) are conducted at a single point in the PhD experience. The longitudinal perspective I have used within this study constitutes one of my methodological contributions to knowledge.

Alongside interviews, the data collection method of letters to future selves was used to capture the hopes, fears, expectations and perspectives that participants had at the start of the doctorate. This future-oriented method allowed participants the freedom to imagine their futures, and produced valuable insights into their desires for the future, both in the short-term, during the PhD, and in the long-term, after completing it. In addition, research diaries were collected for the duration of the study. My approach to analysis utilised Clandinin and Connelly's (2000) narrative analytical process of 'restorying' (see Chapter 3) in order to maintain individual, anonymised, accounts of individuals' experiences (see Appendix 3 for an example). These restoried accounts have not been able to be included in full due to space constraints, and have limitations in that they are the product of my perspective on participants' stories. This study conceptualises participants as narrators of their own lives (Chase, 2005), emphasising individual agency in identity construction (McAdams, 1993; Polkinghorne, 1988; Woodward, 2003). Yet, it is important to attend to the contexts within which stories are constructed (Plummer, 1983) and illuminate the factors which have both enabled and constrained the stories that participants are able to tell about their pasts, presents and futures. Further, it is crucial to acknowledge the inherent tension of viewing participants as narrators, when the writing of this thesis has necessitated the narration of their stories through my own perspective. I reflect on this tension further in Chapter 3, using feminist epistemology to outline my position within the research.

Table 1 Overview of data collection activities

First Year (Oct 2014- Oct 2015)		Second Year (Oct 2015- Oct 2016)		Third Year (Oct 2016- Oct 2017)
January 2015	Letters to Future Selves collected	January 2016	Second interviews	
Research diaries completed (started February 2015)				
March 2015	First interviews			

1.5 Introducing the participants

In this section I give short accounts of participants' backgrounds prior to starting their full-time PhDs in autumn 2014, and summarise personal information about each participant, in order to provide a useful overview for the reader (see Table 2). There were 13 participants in total, from two institutions within one Northern city in the UK. Antonia is in her mid-twenties, studying for her doctorate in Engineering at Modern University. Prior to the PhD, she was a Master's student at a university in her home country. She is an international student from Europe and has no caring responsibilities. She is in a relationship, with her partner living in her home country.

Sally is in her mid-thirties, studying for her doctorate in Sports Psychology at Modern University. Before the PhD, she worked in the charity sector before later returning to academic study. She completed a Master's full-time the year before the PhD. She is in a relationship, with her partner living abroad, and has no caring responsibilities.

Jessie is in her mid-thirties, studying for her doctorate in Public Health at Modern University. Prior to the PhD, she had a successful career as a market researcher in the public sector. She is married and has two children under five.

Liz is in her mid-fifties, and is studying for her doctorate in Health Sciences at Modern University. Before starting the PhD, she studied for her undergraduate and Master's degrees at a different university. She had previously had a career in the NHS prior to this but retired early due to ill health. She is married, with no caring responsibilities.

Bella is in her early twenties, and is studying for her doctorate in Psychology at Modern University. Prior to getting her place to do the PhD, she studied for her undergraduate degree elsewhere. She is single, with no caring responsibilities.

Chloe is in her late twenties, studying for her doctorate in Social Policy at Modern University. Prior to the PhD, she studied for her Master's degree. She worked in marketing and communications before this, studying part-time for her undergraduate degree. She is in a relationship and is co-habiting, with no caring responsibilities.

Emily is in her early twenties, studying for her doctorate in Engineering at Modern University. Prior to the PhD, she was a project assistant at a European university and had completed a Master's before this. She is single and has no caring responsibilities.

Harriet is in her early twenties, and is studying for her doctorate in Biology at Redbrick University. Before the PhD, she did her undergraduate degree at the same institution. She is in a relationship, with no caring responsibilities.

Freija is in her mid-twenties, and is studying for her doctorate in Geography at Redbrick University. Prior to the PhD, she worked as a policy officer in a university for a short time. She completed an undergraduate and Master's degree before this, at a different university. She is co-habiting and is engaged, with no caring responsibilities.

Martina is in her mid-twenties, and is studying for her doctorate in Politics at Redbrick University. Prior to the PhD, she worked as an administrative assistant for an EU wide NGO, having completed her Master's degree before this. She is an international student from Europe and is in a relationship, with no caring responsibilities.

Eleanor is in her mid-twenties, and is studying for her doctorate in English at Redbrick University. Before the PhD, she did an undergraduate degree at a different university before working for a year to save for her Master's degree – again at a different institution. She is in a relationship and is co-habiting, with no caring responsibilities.

Jane is in her early twenties, and is studying for her doctorate in Conservation at Redbrick University. Prior to beginning the PhD, she worked as a self-employed consultant, having completed her undergraduate degree before this at a different university. She is in a relationship and is co-habiting, with no caring responsibilities.

Pepper is in her early twenties, and is studying for her doctorate in Engineering at Redbrick University. Prior to the PhD, she studied for her undergraduate degree at a different university. She is in a relationship, with no caring responsibilities.

Table 2 Key characteristics of participants

Institution	Name	Discipline	Fee Status	Ethnicity	Marital Status	Care Commitments
Modern University	Antonia	Engineering	International	Other White	In a relationship (distance)	None
	Emily	Engineering	Home	White British	Single	None
	Sally	Sports Psychology	Home	White British	In a relationship	None
	Jessie	Public Health	Home	White British	Married	2 children
	Liz	Health Sciences	Home	White British	Married	None
	Bella	Psychology	Home	White British	Single	None
	Chloe	Social Policy	Home	Other Mixed	Cohabiting	Older parents
Redbrick University	Harriet	Biology	Home	White British	In a relationship	None
	Freija	Geography	Home	Other White	Engaged	None
	Martina	Politics	International	Other White	Cohabiting	None
	Eleanor	English	Home	White British	Cohabiting	None
	Jane	Conservation	Home	White British	Cohabiting	None
	Pepper	Engineering	Home	White British	Single	None

1.6 Aims and Research Questions

In addition to addressing the specific research questions outlined below, my research has several broader aims. This study aims to explore the career aspirations of women doctoral students, and how these aspirations change over the course of the doctorate. Given the lack of women in senior academic positions, this research aims to examine how women's experiences during the doctorate contribute to what has been termed the 'leaky pipeline' (Barinaga, 1993). In this study, I use a narrative approach to represent women doctoral students' experiences, noting the importance of bringing women's stories to the surface (Personal Narratives Group, 1989). As part of my analysis, I produced narrative accounts of their lived experiences of the doctorate (see Appendix 3 for an example).

This study aims to illuminate the lived experiences of women doctoral students. By drawing attention to factors affecting the career aspirations and choices of women doctoral students, it is hoped that this research can be used by higher education institutions, academics and supervisors to inform their support of women who are undertaking a doctorate; a qualification which is 'historically gendered masculine' (Carter *et al*., 2013, p.342). I hope that my findings will encourage institutions and individuals to recognise women doctoral students' multiple identities and external commitments (Brown and Watson, 2010; Churchill and Sanders, 2007), and the gendered barriers that they face within academia. My overall aim is to illuminate the stories that women tell about their doctoral experiences. Within this, I am particularly interested in identifying answers to the following three research questions, which have been developed in relation to the literature that I discuss in the following chapter:

1. What shapes women's career aspirations?
2. What influences do academic, peer and personal environments have on participants' career aspirations?
3. What sorts of barriers do participants perceive to pursuing an academic career?

This study aims to benefit the women who have participated in my research. As Leavy (2011) highlights, giving participants the opportunity to share their experiences can be a valuable experience. Birch and Miller (2010) argue that the research interview may

be a cathartic and potentially therapeutic encounter for individuals, enabling participants to learn from their experiences. Moreover, Chase (1996) argues that by taking part in research examining the cultural contexts of individual experiences, participants gain a deeper understanding of the phenomenon under study. Thus by engaging in this study, participants have reflected on their doctoral experience in a way which they may not have done otherwise, and therefore may gain a deeper understanding of the issues which have influenced their experience of doctoral study.

In this first chapter, I have outlined some of the contextual issues which have informed this research, such as perceptions of doctoral study, the increasing neoliberalisation of academic working practices, and persistent gender inequality within the academy. My research questions derive from my consideration of these issues, and echo my commitment to doing research which focuses on women's lived experiences, and attending to the ways in which individuals use stories to describe their experiences.

1.7 Contributions

This research makes four key original contributions to knowledge. As well as adding to knowledge about the lived experiences of women doctoral students and their perceptions of academic careers, this research also makes methodological and theoretical contributions. Firstly, it addresses the gap in existing knowledge about women's experiences of doctoral study; Leonard and Becker (2009) have observed the lack of research about doctoral education which is undertaken from the perspective of students. In my analysis, I illuminate participants' career aspirations, exploring how their experiences during the doctorate shape their aspirations. Secondly, its cross-disciplinary approach allows the impact of academic environments on individual's career aspirations to be examined, and makes a valuable contribution to literature on academic cultures. It therefore takes forward existing work on the impact of academic disciplines and their tribes and territories (Becher and Trowler, 2001). Thirdly, it adds to knowledge about how doctoral students develop feelings of belonging to academic communities, and indicates the significance of belonging for these students. Finally, it offers a valuable contribution to knowledge on doctoral students' career development through my introduction of the concept of career savvy.

This study also makes a methodological contribution through its design in two respects. First, the longitudinal approach allows change over time to be explored, an element lacking in many other studies of doctoral experience. This addresses calls for longitudinal explorations of doctoral students' career intentions (see Baker and Lattuca, 2010; McAlpine, Amundsen and Turner, 2014; Wellington and Sikes, 2006). Second, it makes a significant methodological contribution in its use of letters to future selves, within which participants conceptualise their imagined futures at the end of the doctorate. This is an innovative method not often utilised in academic research (see van Gelder, Hershfield, and Nordgren, 2013 for an example in Psychology).

This thesis also offers a theoretical contribution to knowledge through its combination of possible selves theory (Markus and Nurius, 1986), derived from psychology, with the sociological concept of horizons for action (Hodkinson and Sparkes, 1997). These concepts are used together in order to position participants both as agentic, but also as constrained in constructing their aspirations by societal factors such as gendered expectations. These theoretical concepts have not been used in conjunction before, and using them together constitutes a unique theoretical contribution to knowledge in relation to women doctoral students and career aspirations.

1.8 Structure of thesis

In the next chapter, I review a range of literature which provides the background to this research, examining academic, media and policy documents to situate this study within a wider context. In Chapter 3, I describe my methodological approach, outlining the research design and process, details of the theoretical framework used, and my approach to data analysis. In this chapter, I reflect on the feminist research principles underpinning my approach to the research, and discuss issues such as the location of the researcher in the research process, as well as drawing on debates around power and reflexivity. I will also detail the ethical issues that I have negotiated in this research.

The following four chapters derive from my analysis of the data. In Chapter 4, I examine how women doctoral students imagine and construct various futures at the start of their doctoral journey, by analysing their letters to their future selves. Drawing on possible selves theory (Markus and Nurius, 1986), I explore the multiple possible

futures that participants imagine. I argue that contrary to the view of doctoral students set out in governmental and institutional policies, doctoral students are not as career-driven at the start of their PhD as might be expected from this literature. Rather than viewing the doctorate as an 'academic passport' (Noble, 1994, p.2), participants instead viewed the PhD as a personal rite of passage, wherein they expected to experience significant change. The PhD was also viewed as a time in which career plans could be formed. This chapter addresses the first two research questions. By examining their letters to their future selves, insight is gained into the factors that shape participants' career aspirations, as well as understandings of how academic, peer and personal environments influence these aspirations.

Chapter 4 explores the fantasies that participants constructed about the future. In contrast, Chapters 5-8 focus on the realities of participants' lived experiences of the doctorate. Chapter 5 attempts to understand participants' initial aspirations on starting the PhD. I discuss the extent to which participants engaged in academic career-related skills development, and how they acquired career-related knowledge. Through developing the concept of 'career savvy', I show how participants' understanding of academic careers was largely acquired tacitly through interactions with peers and academics. I argue that the career savvy concept is key to understanding how individuals negotiate career development during the doctorate, and provides insights into how some may be better placed than others to play the 'game' of academic career-building (Archer, 2008). Chapter 5 addresses research question two, generating an understanding of how academic, peer and personal environments influence participants' aspirations, and illuminating the strategies individuals employed to try and fulfil these aspirations. It also addresses research question three, highlighting the barriers that participants perceived to pursuing an academic career.

In Chapter 6, I examine the academic environments within which participants studied, and outline how institutional, disciplinary and departmental cultures influenced how participants developed a sense of belonging to their academic communities. I argue that women doctoral students' ability to construct future academic identities, or possible selves (Markus and Nurius, 1986), is shaped by how far they feel they belong in academia. Further, I contend that participants' interactions with workspaces, peers,

and supervisors significantly impacted on their sense of belonging, and these encounters are highly influential in shaping what individuals consider to be possible. This chapter speaks back to research question two, generating understandings of how academic, peer and personal environments influence aspirations.

Chapter 7 explores how participants perceived the prospect of becoming an academic, and how these perceptions informed their career aspirations. I explore the barriers that participants encountered to developing an academic identity, drawing on literature from feminist researchers to illuminate how these barriers were often gendered. I argue that expectations of academic career success are inherently masculine (Knights and Richards, 2003), and combined with the rise of neoliberalism within higher education, this has produced an 'ideal academic' (Lynch, 2010, p.58) who is free from caring responsibilities and able to wholly dedicate themselves to academia. I contend that participants felt that taking on the identity of this ideal academic, with all the related expectations, was not an appealing prospect. This chapter addresses all three research questions, providing insight into the factors shaping participants' career aspirations, generating an understanding of how different environments influence these aspirations, and illuminating perceived barriers to becoming an academic.

These chapters examine the various contexts within which participants study, from individual workspaces to institutional cultures. Within these chapters, I argue that participants' tacitly acquired knowledge of academia was crucial in shaping whether or not they perceived academia as a possible – or desirable – future. In these chapters, I attend to participants' agency in constructing their individual aspirations, but simultaneously examine how participants' experiences of doctoral study and perceptions of academia were shaped by factors outside their control.

Finally, Chapter 8 draws together the previous chapters to elicit some common elements from participants' stories. I reflect on my findings, highlight how I have addressed each research question, and consider the broader implications of this research. I outline my contributions to knowledge, reflect on the challenges and the joys of undertaking this research, and conclude by considering the limitations of this study and exploring possibilities for further research.

Chapter 2

Literature Review

2.1 Introduction

The context of my research necessitates a focus on the 'contemporary academy' (Gill, 2009), as it constitutes the broader environment in which doctoral education takes place. Thus, I consider pertinent scholarship which is concerned with the impact of marketisation and neoliberalism on the academy, and how these forces have shaped the nature of academic labour and contemporary academic careers. This literature is considered in relation to how women doctoral students perceive academic careers, and how they negotiate their own potential academic futures. This study is framed within the wider context of higher education in the UK, within which fewer women hold senior and leadership positions, where women are in the minority in subjects such as science and engineering, and wherein fewer women than men undertake doctoral degrees (Equality Challenge Unit, 2016). Thus, I draw on multiple, intersecting bodies of literature in order to situate my research.

The literature review is structured in two halves. The first half focuses on research which explores the experiences of women in the academy. I start by considering literature which views academic institutions and disciplines as gendered, using the work of feminist researchers such as Leathwood and Read (2009) to critique the so-called the 'feminization' of the academy. Within this, I examine how the gendered nature of the academy impacts upon the career experiences and trajectories of women academics, and discuss the ‘leaky pipeline’ (Barinaga, 1993) whereby fewer women are found at increasingly senior levels of academia. In the second half of this literature review, I consider the effect of studying in this environment on women doctoral students, examining the few empirical studies which interrogate the experiences of women doctoral students. I discuss research which has examined the motivations and aspirations of doctoral students, and use literature on the 'enculturation' (Delamont, Atkinson and Parry, 1997, p.533) of doctoral students into

academia to argue that the doctorate is a site of formative experience wherein academic identities may, or may not be constructed.

Within my review of these literatures, I have focused on studies which examine higher education in the UK, but also include research from Australia, the U.S and Europe. The marketisation of higher education is an international phenomenon (Ball, 1998), and the individualising, competitive academic environment produced by a neoliberalised academy is experienced by academics and students across higher education sectors, thus making studies about academic identity development from outside the UK relevant. The literature selected is mostly from academic sources, though grey literature including policy documents as well as media articles and blog posts are also utilised, as they highlight the topical nature of relevant debates. The literature I draw on ranges from key studies conducted in the 1960s and 1970s to contemporary research, in order to show the perennial nature of some of the issues discussed.

2.2 Higher Education as Gendered

In this section I examine some of the key arguments which pose higher education as gendered. Firstly, I discuss the history of higher education institutions and how they were founded on the basis of traditional gender roles. Academic institutions were created for men, and traditionally academics were men who had wives at home to take on the domestic workload (see Baker, 2012; Ward and Wolf-Wendel, 2016). Williams (2001) refers to these traditional academics as ideal workers, because they were able to dedicate themselves fully to their academic work due to this domestic support (see also Demos, Berheide and Segal, 2014). Secondly, I consider research which highlights gender differences within student and staff populations, as well as how different kinds of academic work such as research and teaching, and academic disciplines have traditionally been – and to some extent still are – viewed as masculine or feminine (Cotterill, Jackson and Letherby, 2007; White, 2013). Despite sector-wide initiatives such as Athena SWAN[1] (ECU, 2015) aimed at addressing gender stereotypes

[1] Athena SWAN is a national scheme run by the Equality Challenge Unit which aims to address gender inequality in academia and increase the representation of women at all levels. Introduced in 2005, it initially was limited to addressing issues of gender inequality in STEM subjects, but since 2015 has been extended across disciplines. Both individual institutions and departments are eligible to apply for an Athena SWAN award, which requires them to state the actions they are taking to address gender inequality, and awards are given at either the level of Bronze, Silver or Gold. For more information see http://www.ecu.ac.uk/equality-charters/athena-swan/about-athena-swan/

and reducing inequalities, significant gender differences persist, with fewer women than men in senior roles, and in traditionally male-dominated roles such as the physical sciences. Yet despite this, some individuals perceive the academy as becoming increasingly feminized (Leathwood and Read, 2009) – something I discuss in relation to the broader literature on women's experiences within higher education. Finally, I consider research which has examined women's experiences of sexism within the academy. I draw on studies which illuminate the persistence of overt and covert sexism (de Welde and Laursen, 2011) within academia, arguing that this environment constitutes an unappealing future workplace for women doctoral students.

2.2.1 Gendered institutions

Joan Acker (1992, p.567) defines 'gendered institutions' as institutions where 'gender is present in the processes, practices, images and ideologies, and distributions of power in the various sectors of social life'. The history of these institutions shapes these processes, practices and ideologies, and within the context of academic institutions, Delamont (2006, p.179) observes that women are 'newcomers to higher education'. The historic exclusion of women from higher education until the early twentieth century has made the position of women academics problematic, as they exist in opposition to this traditional conception of an academic. The Canadian scholar Sandra Acker (1980) was one of the first to note the otherness of women in academic institutions, commenting on their under-representation in senior academic roles, and highlighting the lack of research on their lived experiences. She argued that the ruling ideas of universities are male, because men traditionally wielded all the power within these institutions. Feminist researchers have continued to refer to universities as masculine institutions (see Letherby, 2003; Stanley, 1997), observing how the male origins of these institutions have shaped academic disciplines, processes and even the terminology used; Bagilhole (2007, p.25) argues that the 'common language of the university is masculine'. Anderson and Williams (2001, p.2) highlight how universities are not only gendered, but are also racialised and classed institutions: 'higher education has traditionally been the preserve of white, middle class, male academics. Those who do not possess these racial, class and gender identities are…constituted as 'other''. Morley and David (2009, p.2) go further, arguing that women's academic

identities are ‘forged in otherness, as strangers in opposition to (privileged) men's belonging and entitlement'.

Universities have been called 'greedy institutions' – a term coined by Coser (1974, p.4) – in that they demand unwavering dedication to work, and 'exclusive and undivided loyalty' (see also Acker, 1980; Hey, 2004). Academic roles are structured around the concept of the 'ideal worker' (Williams, 2001); an individual who has no responsibilities outside of their job and is free to fully dedicate themselves to their work (see also Lynch, 2010; Ollilainen and Solomon, 2014; Probert, 2005). The increasing neoliberalisation of academic working practices mean that individuals are under increasing pressure to 'perform' as academics, with significant pressure to produce high quality publications for the REF (do Mar Pereira, 2016). The demands of contemporary academic careers, such as attending research and teaching events which may be held on weekends and evenings, as well as the increasing pressure to produce publications – can be seen as universities becoming increasingly 'greedy'. Gill (2009) discusses these demands with particular reference to time, highlighting how academics are expected to be contactable via e-mail at all times, as well as increasingly be physically available to students.

This increased 'greed' of academic institutions disproportionately disadvantages women, as they remain more likely to have multiple demands on their time outside work, including caring responsibilities, and therefore are less likely to be able to fulfil these expectations (Bagilhole, 2002; Carter *et al*., 2013; Knights and Richards, 2003). This is particularly the case in relation to additional academic activities which involve physical mobility, such as international travel and attending research seminars. These activities are increasingly a requirement for those working in the competitive environment of modern day academia. The ability – or not – of individuals to participate in these activities can have significant implications for individuals' career progression (Lubitow and Zippel, 2014; Savigny, 2014).

2.2.2 Cultural sexism in academia

Researchers have drawn attention to what Hall and Sandler (1982, p.3) refer to as the 'chilly climate' that women may experience within higher education (see Brooks, 2001;

Joyner and Preston, 1988, Soe and Yakura, 2008). Hall and Sandler (1982, p.3) argue that the 'chilly climate' is constituted by the 'subtle ways in which women are treated differently – ways that communicate to women that they are not quite first-class citizens in the academic community'. Savigny (2014, p.800) highlights how women may be marginalised in practice, for example: 'the way in which childcare is positioned as a women's issue', and 'the overt sexualisation of women colleagues'. She argues that this cultural sexism acts as a barrier to women's career progression in a number of ways. Firstly, structural factors such as the holding of research events in the evenings meant that women may miss out on key networking opportunities. Secondly, women may internalise their marginalisation, and not put themselves forward for promotions or senior positions due to a lack of confidence in their abilities. This chilly climate manifests academia as an unwelcome environment for women, supporting research which has drawn attention to the historical 'other-ness' and outsider status of women in the academy (Acker, 1980; Anderson and Williams, 2001; Morley, 2009; Puwar, 2004; Reay, 2000; White, 2013). de Welde and Laursen (2011, p.571) use the term 'glass obstacle course' to describe the kinds of overt and covert discrimination that women are subject to within the academy – because barriers are 'often implicit and unanticipated: they are unseen, yet unbreachable'. They argue that there are 'unequal gendered processes' within academia, observed in their study of women doctoral students in STEMM fields in the US (*ibid,* p.571). This sense of being both historically other and subsequently othered in the contemporary academy through different forms of discrimination can lead to women feeling that they are 'bodies out of place' (Puwar, 2004, p.68).

Cultural sexism describes both the cultural norms and the organisational structures of academic institutions, and Savigny (2014, p.795) argues that it poses a 'significant, invisible, normalising barrier to women's progression within the academy'. Yet, as well as dwelling in less visible processes, cultural sexism also manifests itself in more overt forms. In the mid-1990s, Bagilhole and Woodward (1995) identified the prevalence of sexual harassment in the experiences of women academics, and argued that there was significant under-reporting and underestimation of incidences of sexual harassment in UK universities. Despite the current policy context in UK higher education which promotes initiatives to address gender inequality within higher education, such as

Athena SWAN, women students and staff continue to experience sexual harassment (see Batty and Bengtsson, 2017; Brunning, 2013; Eyre, 2010; Weale and Batty, 2017). This is also the case in higher education institutions in the US and Australia (see Levin, 2017; Zhou, 2017). Sara Ahmed (2015) has described sexual harassment as part of the culture of universities, arguing that it is enabled by institutions who refuse to acknowledge sexual harassment as a part of wider gender discrimination, because of concerns about institutional reputations. The persistence of sexual harassment in higher education institutions is one of the most visible signs of cultural sexism in academia, and a significant indication of how women continue to be othered in the academy.

2.3 Gendered careers

In addition to institutions and disciplines, academic careers are similarly gendered. Bagilhole and White (2013, p.1) note that 'the careers of women academics remain a focus of gender research because women often have different career paths from male colleagues'. Despite the increase in the numbers of women academics – in 2014/5 women made up 45% of all academics in comparison to 38% in 2001/2 (Higher Education Statistics Agency, 2017) – the careers of women academics have not replicated those of men, and are less likely to conform to the traditional linear academic career path where individuals progress from doctoral study to a lectureship, senior lectureship and onwards to a professorship (see Cabrera, 2007; Ryan, 2012; White, 2013). Sellers (2007, p.207) argues that often in discussions of women's career development, discourses of deficiency are often drawn on, considering women's careers as a lesser variation of men's, 'owing to lower perceived ability or to breaks for childcare'. McCulloch (1998, p.206) problematises the fundamental notion of 'career', arguing that the word is unhelpful as it implies a linear progression and rationality. Soe and Yakura (2008, p.184) suggest that instead of considering women academics' careers in terms of linear trajectories, an alternative would be to consider them as composed of 'cultural layers' including the 'societal, occupational and organisational'. Despite these efforts to broaden the concept of career, Ollilainen and Solomon (2014, p.34) argue that there are still 'masculinised expectations of an academic career'.

2.3.1 The 'leaky pipeline' and higher education participation

The loss of women through increasingly senior positions within academia is often described through the metaphor of the 'leaky pipeline' (Barinaga, 1993). Fewer women academics hold senior and leadership positions within higher education institutions than men; just 23% of all professors in UK higher education institutions are women (Equality Challenge Unit, 2016). Within this gender division, there are also further inequalities; just 2% of all professors in the UK are women from black and minority ethnic (BME) backgrounds (Equality Challenge Unit, 2016). Morley (2013, p.3) has drawn attention to the multiple implications of this, highlighting 'the business case – skills and talent wastage – and also [the] social justice case – exclusionary structures, processes and practices'. Though the 'leaky pipeline' may be a 'convenient visual metaphor' (Hatchell and Aveling, 2008, p.3) to describe the lack of women in senior academic roles, researchers have argued that it is problematic in that it poses the problem as individual rather than structural, implying a deficit view of individuals rather than illuminating the structural barriers which cause women to leave academia (see Allen and Castleman, 2001; Soe and Yakura, 2008). Hatchell and Aveling (2008, p.3) note that the metaphor of the 'leaky pipeline' reinforces the idea of an academic career as linear and straightforward, reflecting traditionally masculine academic career trajectories which do not accommodate the 'more complex life-patterns of females' (see also Cabrera, 2007; McCulloch, 1998; Ryan, 2012; White, 2013).

Despite the wealth of evidence of gender inequality in academia, due to increases in the number of women participating in higher education and recent figures showing that women on average achieved better degrees than men (Bekhradnia, 2009), there is an argument that universities are becoming 'feminized' (*The Economist*, 2015; Ratcliffe, 2013). Leathwood and Read (2009, p.10) highlight that this 'feminization thesis' is linked to the change in the proportion of women entering the academy, and that ‘feminine’ values, concerns and practices are seen to…change cultural values towards a greater emphasis on co-operation, care, negotiation', and this is perceived as a 'dumbing down' (*ibid*, p.18) of higher education. Morley (2011, p.224) refers to these concerns as a 'moral panic'. The perceived problem of the relative under-achievement of men in comparison with men students is reflected in an observation made in the

Department for Innovation, Universities and Skills report on gender and higher education participation:

> The rise in participation of women over the past few decades has been phenomenal and is, without a doubt, one of the great success stories of Higher Education in England. However, this rise in female participation has made the performance of males look relatively dismal. (Broecke and Hamad, 2008, p.29)

Indeed, it was only in 1992 that an equal number of women and men were recruited onto undergraduate degree courses (Archer *et al*., 2005). Leathwood and Read (2009, p.48) observe that 'for eight centuries, men totally dominated higher education in the UK; for just one decade, women have constituted a slightly higher proportion of the graduate population. This, in itself, puts the feminization thesis into context'. Understanding the context of women's increased participation in higher education generates insight into why the lack of women in senior positions remains a subject of much concern (see Grove, 2017; Rice, 2012).

2.3.2 Gendered disciplines

The lack of women in senior academic roles is not uniform across academic disciplines. Carvalho and Machado (2010, p.33) highlight that disciplines are also gendered, arguing that 'segregation within universities is both vertical and horizontal'. Birch (2011, pp.17-20) notes that the 'leaking pipeline…differs between disciplines', and argues that tendencies to critique the lack of women in senior roles often 'obscures gendered segregation and variations in different areas and discipline areas within universities'. Dever *et al*. (2006, p.13) note the implications of gendered disciplines for individuals' careers: 'many female academics [are] concentrated in areas which attract lower levels of external funding'. In an era of increased competition for research funding within UK higher education, this can have significant personal consequences (see Jump, 2015). This gendering of disciplines begins early on – despite the fact that there are more women in undergraduate education than men[2], fewer women than men study STEMM subjects (Equality Challenge Unit, 2016). The lack of women working within these traditionally male-dominated disciplines, and the experiences of

[2] In 2014/5, women students constituted 56% of full time undergraduate students (Equality Challenge Unit, 2016)

women in these subjects, has been well documented (Blickenstaff, 2005; Kulis, Sicotte and Collins, 2002; Jones, 2005; Smith, 2011; de Welde and Laursen, 2011). Though efforts have been made by recent governments to address this under-representation of women and increase the labour market within scientific and technological industries (Glover and Fielding, 1999; Greenfield, Peters, Lane, Rees and Gill, 2002), Smith (2011, p.993) notes that 'gendered patterns of participation persist'.

Hearn (2001) observes that 'each discipline has a different history, traditions, and social organisation' (cited in Birch, 2011, p.19). These histories and traditions are gendered; in his categorisation of academic disciplines, Biglan (1973) divided subjects into natural sciences which were ‘hard’, with arts and humanities and social sciences being ‘soft’. The ‘harder’ disciplines (such as technology, engineering and maths) with their scientific connotations have been traditionally dominated by men, with women clustered in the ‘softer’ disciplines of arts and humanities and social sciences (Fletcher, Boden, Kent and Tinson, 2007; Knights and Richards, 2003). Yet Delamont (2006, p.187) notes how women have actively resisted the gendering of disciplinary knowledge, observing how the feminist movement of the 1970s mounted 'major intellectual challenges to the nature of academic disciplines' as well as forging new disciplines such as women's studies. Becher and Trowler (2001, p.55), argue in their seminal work *Academic Tribes and Territories,* that disciplines 'are not culturally neutral: areas of study are widely held to embody beliefs about masculinity and femininity'. They contend that academic disciplines produce 'disciplinary stereotypes' which pose barriers to women working in traditionally male-dominated disciplines (*ibid*, p.55). Despite the introduction of gender equality policy initiatives such as Athena SWAN (ECU, 2015), the gender stereotyping at the heart of academic disciplines continues to reinforce the idea of women academics as 'other' (Acker, 1980). This has implications for women academics, who must work to fit into male-dominated environments by displaying stereotypical feminine behaviours, in order to appear unthreatening; what Tierney and Bensimon (1996, p.85) have referred to as ‘smile work’.

2.3.3 Gendered roles

The kinds of work done within academia are also gendered, with women being more likely to work in teaching roles in comparison to men who are more likely to work in research roles (see Becher and Trowler, 2001; Cotterill *et al*., 2007; Dever and Morrison, 2009). Brabazon (2014, p.51) argues that teaching and administrative duties form the 'institutional housework' of academia. White (2013, p.118) argues that this gendered division of labour is 'established during PhD candidature' and becomes 'a constant narrative throughout the careers of women academics'. Researchers have observed the gendered expectations of women academics in teaching roles compared to men, and noted the emotional labour (Hochschild, 1983) involved in providing pastoral care to students (see Eveline and Booth, 2004; Gill and Donoghue, 2015; Henkel, 2000; Parsons and Priola, 2013; Reay, 2004). Letherby and Shiels (2001, p.129) observe that 'care is expected…from women in a way that it is not from men'. This expectation of women academics to provide nurturing, emotional support to students has been termed 'mom work' (Tierney and Bensimon, 1996, p.87). Research has also found that women academics are often given heavier teaching loads than men (Acker and Feuerverger, 1996; Becher and Trowler, 2001; Deem, 1998; Parsons and Priola, 2013). As Cotterill *et al*. (2007, p.6) note, teaching and research are not regarded as equally valuable activities within the academy: 'teaching and learning and research are gendered activities with higher status accorded to those who engage in research'. Birch (2011, p.21) notes the negative implications of gendered academic roles for individuals' career progression: 'promotion is often based on research performance, including publications and gaining external funding, rather than teaching and administration'.

Many researchers have suggested that academia is a kind of 'game', with covert rules (Clegg, 2012; Hancock, 2014; Lucas, 2006; The Res-Sisters, 2016). Bagilhole and White (2013, p.189) observe that one of the challenges for women academics is 'to understand the 'game' of academia…even if they are not interested in playing it'. Thwaites and Pressland (2016, p.4) argue that playing the academic 'game' requires individuals to engage in constant efforts to fulfil multiple criteria: 'staff face increasing pressures to meet student expectations whilst continuing to produce world-class, ground-breaking research, which they disseminate to niche and lay audiences in the

name of public engagement'. Yet, with men dominating higher-status research roles within the academy, women academics are disadvantaged in playing what Lucas (2006) refers to as the research game within academia. Further, for those working on casual contracts – who are more likely to be women (Gill and Donoghue, 2015) – their ability to play the game is compromised by concerns over job security. Standing (2014, p.963) defines the 'precariat' as a group of people who are employed in unstable, precarious conditions – which Thwaites and Pressland (2016, p.2) argue increasingly applies to academics – and particularly early career academics, who compete with peers and more experienced academics for increasingly casual and short-term contracts.

Playing 'the game' of academia in an era of increasing casualisation of academic labour means embodying Williams' (2001) concept of the ideal worker; a good neoliberal subject who is able to devote themselves singularly to their work, geographically mobile, and able to withstand sustained periods of precariousness. Yet, as the Res-Sisters (2016, p.267), a feminist collective of academics, question: 'who is this ideal academic? Who can – and indeed wants to – play this game?'. Some answers to these questions may be found in research which has studied gender and experiences of doctoral study. Women are more likely than men to undertake a PhD later in life than men (Bagilhole and White, 2013), less likely than men to be encouraged to engage in activities relevant to building academic careers (Dever *et al*., 2008), and less likely to be introduced to useful networks during their doctorate (Asmar, 1999; Giles, Ski and Vrdoljak, 2009). Thus, men have a significant advantage in playing the 'game' of academia in gaining their qualifications earlier, receiving support for career development and participating in academic networks during their doctorate.

2.3.4 Competing roles

The experiences of women in the academy have been significantly influenced by the expectations on women to fulfil particular social roles outside of their work. Demos *et al*. (2014, p.134) argue that 'gender inequality in the academy is closely tied to the gendered nature of work and family'. Morley (2013, p.122) observes the gendered expectations on women to fulfil caring roles in the family and wider community, arguing that there is a 'moral imperative' on women to care for children and elderly

relatives. Sandra Acker (1980) argues that families as well as universities can be considered 'greedy institutions'. Morley (2013, p.122) extends this argument, observing that women academics are ‘caught between’ these two greedy institutions of the university and the extended family. More recently, Ward and Wolf-Wendel (2016, p.12) have described women academics as ‘in a bind that stands at the intersection of ideal worker norms that assume a complete focus on work, and intensive mothering norms that assume total dedication to family’. Clearly, little has changed in recent decades.

Gatta and Roos (2004) suggest that 'work and family integration has been and continues to be a major (if not the major) obstacle women face in academia' (cited in Demos *et al*., 2014, p.134). This is borne out by research which notes that women academics are less likely than their male equivalents to marry and have children, and more likely to delay having children until later life (Mason and Goulden, 2004; Wolfinger, Mason and Goulden, 2008). Acker and Armenti (2004) found evidence of considerable strategising by women academics, who tried to plan the birth of their children around the academic year. Further, research has highlighted that many women academics try to conceal their caring responsibilities by deliberately not mentioning family commitments at work (Drago, Colbeck, Stauffer, Burkum, Fazioli, Lazzaro and Habasevich, 2006; Schlehofer, 2012; Solomon, 2011). Demos *et al*. (2014, p.134) argue that ‘underlying these patterns is an entrenched set of cultural beliefs that define the 'ideal worker' as one unencumbered with children or family responsibilities’. Indeed, (Lynch, 2010, p.63) argues that ‘to be a successful academic is to be unencumbered by caring’. The need for women to engage in these strategies draws attention to what Joan Acker (2006, p.443) has named the ‘inequality regimes’ in academia: ‘the inter-related practices, processes, action and meanings that result in and maintain class, gender and race inequalities’. As Runte and Mills (2004, p.240) observe, it is women who invariably ‘navigate between parental and employee roles, it is therefore women who pay the “toll” for crossing the boundary between work and family’ (cited in Morley, 2013, p.122).

2.3.5 Imposter 'syndrome'

Not only do the academic careers of women appear structurally different to those of men, but their career experiences also differ. One issue which affects the career experiences of women in academia more than men is imposter 'syndrome', or 'imposterism'. This phenomenon was first identified by psychologists (Clance and Imes, 1978), in a study of high achieving women staff and students at a university in the USA. They noted that 'despite outstanding academic and professional accomplishments, women who experience the imposter phenomenon persist in believing that they are really not bright and have fooled anyone who thinks otherwise' (Clance and Imes, 1978, p.1). Within the context of academic careers, Breeze (2018, p.194, emphasis in original) defines imposterism as:

> The suspicion that signifiers of professional success (which…might include promotion, publication, prizes, award of a permanent contract, award of *any* contract, grant funding, student evaluations, prizes, the 'expert status' of editorial positions, leadership responsibilities) have somehow been awarded *by mistake* or achieved through a *convincing performance*, a kind of deception.

The imposter phenomenon, with its feelings of fraudulence and fear of being 'found out' has been observed more often, and with greater intensity, in women than men (Clance, 1985; Collet and Avelis, 2013; Sakulku and Alexander, 2011). Though discussion of this phenomenon has expanded beyond academia since Clance and Imes' (1978) original study, notably in relation to women in the world of business (see Sandberg, 2013), it is interesting to note that the first empirical study to identify this sense of 'imposterism' amongst women was conducted in the higher education sector.

The concept of imposter 'syndrome' is often referred to within academic communities as being commonplace, with articles featuring individuals' experiences regularly appearing on websites such as the Times Higher Education (see Barcan, 2014; McMillan, 2016). Imposter syndrome is often considered to be felt more often by those new to academia, such as doctoral students and early career researchers; and discussions of how to combat these feelings of inadequacy and fraudulence often take place on blogs, at conferences, as well as on websites aimed at supporting doctoral

students, such as the Thesis Whisperer (see Thompson, 2016). Yet Breeze (2018) argues that referring to these feelings as symptomatic of a particular 'syndrome' is unhelpful, in that it pathologises and individualises a set of feelings which are simply a product of the demands of the neoliberal academy. She argues that re-thinking imposterism as a public feeling rather than a personal issue removes the onus of individuals being somehow at fault for their feelings of personal inadequacy (*ibid*, 2018).

Though imposter 'syndrome' may be a commonly understood phenomenon within academia, especially among early career academics, Breeze (2018) argues that feelings of fraudulence are felt differently by academics at different career stages, on varying contracts and across subject areas, and that for academics from under-represented and marginalised groups such as those from the BME community, these feelings of fraudulence may be heightened. Coate, Kandiko-Howson, and de St Croix's (2015) study of women academics' career strategies supports these claims. They found that the sense of being an 'imposter' was compounded for women academics from working-class, lower-income and black and minority ethnic backgrounds. Breeze (2018) argues that imposter syndrome individualises fears which are grounded in feelings of 'other-ness' produced by an academy which has systematically 'othered' individuals along lines of class, gender, race, and disability, making academics who are not able-bodied white men feel 'other' (Puwar, 2004). Imposterism can therefore be viewed as a product of historic discrimination, but which within discourses of individualism and resilience promoted within the neoliberal academy, is felt as a personal failing, which can have a significant impact on individuals' career experiences.

2.4 Gendered Doctorates

I have argued that academic careers are inherently gendered, but doctorates themselves are also shaped by gender. Despite the increase in women participating in higher education over recent years, women are still under-represented amongst doctoral students. In the latest research conducted by the Equality Challenge Unit (2016), women students were in the majority across all levels of study apart from the

doctorate[3]. In addition, women are under-represented within doctoral students studying in traditionally male-dominated STEMM disciplines (see Equality Challenge Unit, 2016). When women do undertake doctoral study, it is common for them to commence their degree later in life than men (Bagilhole and White, 2013). Further, Leonard (2001) observes that men are almost twice as likely as women to study a doctorate directly after they first graduate, a pattern reflected across Europe. Thus the educational trajectories of women are different from those of men, and do not follow 'the historical (male) higher education linear model that starts with early undergraduate experience, followed by a smooth upward progression through the ranks' (Cotterill *et al*., 2007, p.3).

2.4.1 Traditional conceptions of doctoral students

A number of assumptions about the purpose of doctoral study persist, which in turn are based on a particular conception of who doctoral students are. McCulloch and Stokes (2008) draw attention to the male stereotype of the traditional PhD student: 'he (and it is implicitly a 'he') is a young, full-time, funded student who is geographically mobile, without dependants, studying in a metropolitan area and intending to pursue a career as a full-time researcher or academic' (cited in Pearson, Cumming, Evans, Macauley and Ryland, 2011, p.528). This stereotype of a doctoral student as career-focused, young, and free from caring responsibilities, echoes the 'ideal academic' that Lynch (2010, p.58) describes, based on the concept of the ideal worker (Williams, 2001). Thus, the stereotype of doctoral students as young, male, free from responsibilities, and motivated by an academic career persists, and informs conceptions about who an ideal academic might be (Lynch, 2010). Indeed, Pearson *et al*. (2011) argue that though outdated, the stereotype which McCulloch and Stokes (2008) outline has permeated into the higher education sector's collective consciousness and thus 'underpins contemporary British public policy' (Pearson *et al.*, 2011, p.528).

Though not all doctoral students undertake a PhD in order to pursue an academic career, the PhD is traditionally viewed as the starting point for an academic career

[3] According to the Equality Challenge Unit's most recent statistics, 47.4% of UK doctoral students were women.

(Park, 2005). It has been referred to as 'the key status passage through which young academics gain entry to the academy' (Delamont, Atkinson and Parry, 2000, p.2), and a qualification that works as an 'academic passport' (Noble, 1994). A significant number of doctoral students aspire to academic careers; in their most recent national Postgraduate Research Experience Survey, the Higher Education Academy (2015) reported that two thirds of respondents envisaged a career in academia after finishing their PhD.

For those who aspire to academic careers, there is fierce competition between PhD students for academic jobs (Royal Society, 2010) with statistics highlighting that few doctoral students who aspire to an academic career will be successful (Vitae, 2012). The competitive environment of contemporary academia increasingly pressures PhD students to acquire additional skills and experience, such as experience of publishing work, in order to have the best chance of obtaining an academic position afterwards (see Matthiesen and Binder, 2009). Parry (2007, p.6) argues that the period of doctoral research is when PhD candidates learn the 'rules of the game', and Carter *et al.* (2013, p.342) argue that studying for a doctorate is affected by 'a candidate's ability to…step into an authority symbolically and historically gendered masculine'. These arguments draw attention to the structural inequalities implicit within academia, which require an understanding of rules which are not always clear. The game of academia can be seen as inherently gendered. Further, not only academia, but the process of building towards an academic career during the doctorate, can be viewed as a game.

2.4.2 Gaining access and enculturation

This game-like process of negotiating entry into academia involves socialisation; a process which has also been referred to as ‘enculturation’ (Delamont *et al.*, 2000; Kamimura, 2006; Parry, 2007). Lee (2008, p.267) defines enculturation as ‘where the student is encouraged to become a member of the disciplinary community’. Further, Carter *et al.* (2013, p.340) suggest that engaging in doctoral study involves ‘negotiating entry to a culture; acceptance there entails identity shifts'. Yet as Parry (2007) observes, undertaking a doctorate can be viewed as a game with both written and unwritten rules. I argue that ‘negotiating entry’ into the academy has two facets – on one hand the process of enculturation, and on the other the academic opportunity

structures open to doctoral students. It is the first of these – the process of enculturation – which I turn to now.

There is evidence to suggest that the process of enculturation into academia during the doctorate is not always straightforward for women doctoral students. There is limited research on the lived experiences of women doctoral students (see Brown and Watson, 2010; Carter *et al.*, 2013 for exceptions), but studies have highlighted that women students have less positive experiences of doctoral study than men (Dever *et al*., 2008; Lee and Williams, 1999; Nerad and Cerny, 1999; de Welde and Laursen, 2011; White, 2004). Borrowing from Becher and Trowler, Carter *et al.* (2013, p.340) argue that doing a PhD necessitates successful enculturation into a particular environment: 'the doctorate involves…acceptance into the 'academic tribe' of one's discipline. The first step is to recognise the cultural conventions'. Yet for women, who historically are 'outsiders' in the academy (White, 2013), aligning with these cultural conventions and being accepted into an environment which is historically masculine – thus successfully being 'encultured' – is not straightforward. Literature discussed in section 2.2 has shown how academic cultures are not always amenable to women, with the existence of what has been termed a 'chilly climate' for women (Hall and Sandler, 1982; Soe and Yakura, 2008), and the persistence of gender based discrimination and harassment (Ahmed, 2015; Savigny, 2014).

Pragmatically, negotiating entry into the academy is also more difficult for women doctoral students than their male counterparts because of the structures of academic careers. As I have argued, women are less likely to fit the ideal worker model of a traditional academic who can fully dedicate themselves to academic labour. Women doctoral students are more likely to have multiple responsibilities than their male counterparts (Brown and Watson, 2010; Carter *et al*., 2013; de Welde and Laursen, 2011), and thus are less likely to be able to demonstrate the 'constant mobility' that White (2013, p.181) argues is necessary to pursue academic jobs in the contemporary academy. Further, researchers have found that the experience of doctoral study can discourage women from pursuing a career in academia (Birch, 2011; Hatchell and Aveling, 2008; Royal Society of Chemistry, 2008). Guest *et al.* (2013) found that women doctoral students perceived conflict between family life and a career in academia, with

those who were not already parents questioning whether it was possible to balance the two, and others deciding not to have children at all. Thus, I contend that within the game of negotiating entry into the academy, women are at a disadvantage not only due to cultural barriers, but also because of the structural barriers that are implicit within academic careers.

2.4.3 Caring Responsibilities

Women are more likely than men to study for a doctorate later in life (Bagilhole and White 2013), and research has found that one of main issues that shapes women's experiences of doctoral study is their external caring responsibilities (Brown and Watson, 2010; Leonard, 2001). Hill and McGregor (1998) argue that 'the lives of women postgraduates are more likely to be more complex, and include responsibilities and demands on their time that are not shared by their male colleagues' (cited in Brown and Watson, 2010, p.387). Churchill and Sanders (2007, p.131) observe that caring responsibilities often require women students to engage in 'significant compromise…as their studies are often affected by circumstances outside their control'. They argue that these commitments result in 'women facing different challenges to men in doctoral studies' and that this has 'implications for how the game is played' (*ibid*, p.131).

In their study of the experiences of women doctoral students in the UK, Brown and Watson (2010) identified role conflict as a significant factor which shaped individuals' experiences. They observed that participants felt torn between their role as a student and other roles as wives, mothers and carers, and that they often experienced guilt for not being able to dedicate more time to each of these roles. For participants, the doctoral journey was not only influenced by this role conflict, but was 'characterised by juggling the demands placed on them both at home and by the need to further their studies' (*ibid*, p.395). Similarly, in a US study of doctoral students which aimed to identify factors supporting student success, Byers *et al*. (2015, p.286) noted the 'strong sense of remorse and guilt' that participants felt about the 'sacrifices that they had to make in order to succeed within their doctoral programs'. They highlighted that the women students in their study held multiple roles, and the demands of these additional roles as caretakers and spouses caused identity fragmentation, meaning

that participants had to compartmentalise aspects of their lives in order to be successful in their studies.

Like women academics, women doctoral students with caring responsibilities face barriers to participating in academic life due to the conflict between their multiple roles. Attending conferences and meeting other academics is an important part of research, yet the timing of these events combined with the need to often stay away from home often poses challenges for students with caring responsibilities. Brown and Watson (2010, p.398) note that in their study, 'almost all of the women cited familial constraints as barriers to their participation' in these kinds of events. Not being able to attend conferences and relevant networking opportunities can lead to feelings of isolation and marginalisation (Leonard, 2001; Thanacoody *et al*., 2006). These expectations of geographical mobility are 'highly gendered because women with family responsibilities do not have the same opportunities to be mobile' (Bagilhole and White, 2013, p.180). Leonard (2001) observes the implications of this for institutional research cultures, which she argues will continue to be dominated by male interests if women are less able to participate in key academic activities such as conferences. Clearly, there are also negative implications for individual womens' careers, as attendance at conferences and networking with other academics is a significant factor in facilitating academic career development (Bagilhole and White, 2013; Dever *et al*., 2008).

2.4.4 Gendered experiences

Women's experiences of the doctorate are fundamentally different to those of their male peers (Brown and Watson, 2010). Studies have identified that women students are subjected to gender-based discrimination including sexual harassment (Eyre, 2010) as well as being more likely to encounter mental health issues (Levecque, Anseel, De Beuckelaerd, van der Heyden and Gisle, 2017), and struggle with imposter 'syndrome' during their studies than their male counterparts (Collet and Avelis, 2013).

Some studies have highlighted the prevalence of mental health issues amongst doctoral students (see Hyun, Quinn, Madon and Lustig, 2007; Levecque *et al.*, 2017), and media attention is increasingly being drawn to what has been referred to as the 'culture of acceptance' (Shaw and Ward, 2014) of mental health issues in academia

(see Bothwell, 2017; Else, 2014; Percy, 2014). Yet as Wisker and Robinson (2017) argue, mental health amongst doctoral students is under-researched; despite the common understanding of the PhD as a highly stressful and pressured period, there is little empirical work on the psychological implications of undertaking doctoral study. One of the only studies of this nature was conducted recently in Belgium; comparing their sample of over 3000 doctoral students with other groups such as other students within higher education, Levecque *et al*. (2017, p.874) found that 'in terms of mental health problems, PhD students were consistently more affected'. They observed that over half of respondents had experienced at least two symptoms of poor mental health, indicating psychological distress. A third of respondents had experienced as many as four separate symptoms, indicating 'the risk of having or developing a common psychiatric disorder (especially depression)' (Levecque *et al*., 2017, p.873). Further, their findings indicated that women doctoral students were both more likely to experience mental health issues than their male peers, and these mental health difficulties were likely to be of a more severe nature.

Imposter 'syndrome', as discussed in section 2.3.5 in relation to academics, has also been found to affect women doctoral students. Research has found that particularly marginalised groups of women such as those from BME backgrounds, first generation students and women in the early stages of their careers feel a sense of being fraudulent more intensely than others. For example, in a study in the USA, Peteet *et al.* (2015) found that students from African-American backgrounds were more likely than their white peers to experience these feelings. Imposter 'syndrome' has the potential to affect women's career trajectories if these fraudulent feelings are experienced early on. In their study of over 400 PhD students in the US, Collet and Avelis (2013) found that feelings of fraudulence, or imposterism, negatively impacted the career trajectories of early career researchers. The findings of their study – which used both survey and interview data – highlighted that women tended to alter their aspirations after graduation; what Collet and Avelis (2013, p.1) refer to as 'downshifting'. A large part of women graduates' decisions to 'downshift' from tenure track programmes to either non-tenure track teaching positions or non-academic careers was due to feelings of fraudulence. Though some men who participated in this study also engaged

in similar behaviours due to feelings of imposterism, women were far more likely to modify their aspirations in this way.

A further gendered aspect of the doctorate is the possibility of experiencing gender-based discrimination. As with women academics, women students continue to be subjected to sexist attitudes and comments, but also to sexual harassment. Recent reports in the media have drawn attention to the systemic nature of sexual harassment within UK universities (see Batty and Bengtsson, 2017; Weale and Batty, 2017). Yet this is not a new phenomenon. Lee's (1998) study of cross-gender supervisory relationships illuminated the sexual harassment that PhD students were subjected to by supervisors. Studies have found that women may be discouraged from pursuing academic careers after their experiences of gender discrimination during their doctorate. In their study of women doctoral students in working in STEM fields in the US, de Welde and Laursen (2011, p.571) highlighted how students faced sexism and sexual harassment, particularly in male-dominated disciplines where the 'old boy's club' culture prevailed, and women had not reached a critical mass. They found that 'such norms could contribute to women's sense of not belonging and perhaps choosing to leave a STEM field' (de Welde and Laursen, 2011, p.583). Further, in a study in Australia, Hatchell and Aveling (2008, p.2) observed how being subjected to overt gender discrimination and harassment during their PhD led to 'gendered disappearing acts' by women students, who left academic science after their doctorate because of these experiences. Leonard (2001, p.221) contends that sexual harassment can have a range of implications for women, arguing that at worst, it ‘serves either to drive us out of the organisation’, and at least, to ‘stress our lack of fit’, thus impacting on womens’ ability to belong within academia.

2.4.5 Post-PhD Trajectories

Research in Australia illuminates the gendered nature of doctoral study, and the implications of this for women's career development. Birch (2011, p.20) argues that 'from the outset of academic careers, starting at PhD level, women have a different career experience'. White (2004) observes that women are far less likely to publish during their doctorates than their male peers, which has significant implications for individuals in the context of Research Excellence Framework, as well as for securing

their first academic post. Further, a longitudinal study examining gender differences in post-PhD employment in Australian universities found that:

> Female graduates reported significantly less encouragement than males in those areas relevant to building academic careers: to publish their own work; to prepare funding proposals; to give conference papers; and to develop professional relationships. In general, assistance in gaining employment was significantly more likely to be available to male rather than female PhD candidates. (Dever *et al*., 2008, p.26).

This echoes the findings of Asmar (1999) and Giles *et al*. (2009), and is a pattern which is replicated throughout later career stages. The Equality Challenge Unit's recent (2016) survey of academics working in STEMM subjects found significant gender gaps in training relating to grant applications skills and financial management, skills necessary for obtaining more senior positions. Women reported barriers such as having unsupportive line managers, and being unable to attend training opportunities due to clashes with caring responsibilities.

The different nature of women's experiences of doctoral study in comparison with men's translates into different career trajectories. The Royal Society of Chemistry (2008) found that at the beginning of their PhD, 72% of women and 61% of men wanted to pursue careers as researchers either in industry or academia. By their third year, just 12% of women still wanted to work as researchers in academia, compared with 21% of men. It is worth noting that both men and women were significantly less likely to want an academic career at the end of their PhD than they were at the beginning. Similarly, the Wellcome Trust (2013) conducted a qualitative study with men and women who studied science PhDs. It found that 'most of the women…who left academia did so straight after their PhD; suggesting that their experience during the PhD, and/or their perception of what post-doctoral academic work might be like, influenced their decision' (*ibid,* p.6). Guest *et al.* (2013, p.6) observe in their report, *Gender and Career Progression in Theology and Religious Studies:*

> For many women, the process of doing an MA or PhD will often determine whether they pursue a career in academia or not. It is on the basis of this experience that they begin to see the rewards and costs of being an academic.

The doctorate can therefore be viewed as a key formative experience for women, who use their cumulative experiences and knowledge gained during the doctorate to decide whether or not they want to pursue academic careers afterwards. These empirical studies, whilst providing insight into how doctoral study shapes individuals' career aspirations, and identifying links between women's experiences of the doctorate and leaving academia, however are limited to particular academic subjects. Thus, there is a clear need for further research which explores how women's aspirations are shaped by their perceptions of a future in academia, and to do so across disciplines.

Research has illuminated that the ways in which doctoral students perceive the lives of academics impacts on their career aspirations. In his research with students in the US who left their doctorates before completing, Golde (2005) found that a significant factor which influenced them to leave their degree was the perception that being an academic was incompatible with a well-rounded life. He observes that: 'one reason doctoral students and postdoctoral fellows choose not to pursue faculty careers is because they learn that faculty life is characterised by enormous amounts of work and little balance between work and family' (*ibid*, p.689). Further, a study conducted by Mason *et al*. (2009) based on a survey of 8000 male and female doctoral students in California found that doctoral students' aspirations shifted during their degree. Academic posts in research-intensive institutions were perceived particularly negatively; more than 10 per cent of doctoral students at these institutions changed their career aspirations away from posts in such universities in favour of roles in either teaching-intensive universities, business or government, because research-intensive universities were not perceived as family-friendly. The authors also noted the reluctance of students to replicate the career experiences of their supervisors, which contributed to this shift in their aspirations: 'many respondents said that they did not want lifestyles like those of their advisers…women doctoral students in particular seem

not to see enough role models of women faculty who successfully combine work and family' (*ibid*, p.3).

2.4.6 The PhD as a 'high risk' activity for women

Undertaking a doctorate has been referred to as a 'high risk activity' (Delamont *et al*., 2000) in that it requires the dedication of a significant amount of time and effort for an outcome which is not guaranteed (Brailsford, 2010; Golde, 2005; Lovitts, 2001; Wellcome Trust, 2013). In media articles, blogs and guidance literature aimed at doctoral students, the PhD is described through a variety of metaphors; as a 'journey', a 'game', a 'rollercoaster'. None of these metaphors have particularly positive connotations. In his study of doctoral students' motivations, Brailsford (2010, p.24) observed that participants had significant concerns about their ability to complete the PhD, and felt they had taken a risk in doing a doctorate. Thus, there is an expectation that doctoral study will be challenging; not just academically, but also emotionally. Delamont *et al*. (2000, p.32) observe that even for individuals who completed their doctorate a number of years ago, the memories of their PhD can still be painful: 'the vast majority of academics bear the scars of their postgraduate research'. The language used to describe doctoral study in guidance literature and blogs aimed at new and current doctoral students is overwhelmingly negative, positioning doctoral study as an ordeal which should be endured rather than enjoyed. There is often a focus on addressing the isolation that students are likely to feel, with chapters addressing the difficulties of managing supervisors, coping with stress, staying sane, and dealing with discrimination. The overall implication is that though there may be future rewards, doctoral study is something that must be negotiated carefully, in order to 'survive' (see Karp, 2009; Leonard, 2001; Matthiesen and Binder, 2009; Phillips and Pugh, 2015; Rugg and Petre, 2010; von Weitershausen, 2014).

Literature suggests that women's experiences of doctoral study are different to those of men, and that the PhD can pose particular challenges for women (Brown and Watson 2010; Carter *et al*., 2013). This is due to the issues I have discussed in this chapter: the relative 'outsider' status of women still within the academy (Reay, 2000; White, 2013), the persistent stereotype of doctoral students as young, male and 'care-free' (Lynch, 2010), the 'chilly climate' of academic cultures for women (Hall and

Sandler, 1982; Soe and Yakura, 2008), the lack of career-related support for women students (Dever *et al*., 2008), and the persistence of sexism, gender-based discrimination and harassment (Ahmed, 2015; Savigny, 2014). Further, challenges such as imposter 'syndrome' and mental health issues have been observed to be felt more often and more acutely by women students (Collet and Avelis, 2013; Levecque *et al.* 2017). These gendered experiences have implications for individual careers and shape post-PhD career trajectories – women are more likely to leave academia after their PhD than men, despite having similar academic aspirations at the start (Guest *et al*., 2013; Mason *et al.*, 2009; Royal Society of Chemistry, 2008; Wellcome Trust, 2013).

These gendered issues are experienced by individuals against the backdrop of a neoliberal academy which poses these challenges as individual failings rather than structural problems. The rise of individualism within the academy means that instead of critiquing the model of the 'ideal worker' (Williams, 2001), individuals instead internalise their own failure, meaning that individuals feels that they are simply not 'resilient' enough (Gill and Donoghue, 2015). Considering these multiple issues facing women doctoral students, I therefore contend that doctoral study may be 'riskier' for women than for men. Further, it is likely to pose more challenges for some groups of women. It is important to acknowledge the impact of intersecting inequalities on individuals. Crenshaw (1989) argues that using an intersectional framework draws attention to the different types of discrimination that individuals may experience as a result of their ethnicity, gender, social class or age. In the context of doctoral study, women students of colour, from working-class backgrounds, and who began their studies later in life, are more likely to feel they are outsiders within the academy than young, white, middle-class women (Leonard, 2001).

2.5 Conclusion

In this chapter, I have summarised literature from a range of sources, including policy documents, media articles and blogs, and as well as traditional academic studies, in order to provide a context for my research on the career aspirations of women doctoral students. I have outlined how women continue to be positioned as outsiders within the academy, and how their career experiences are different to those of men. I have argued that women studying for their doctorate face gender discrimination, and

that their post-PhD career trajectories are influenced by experiences of doctoral study, during which time they have formed largely negative views of what becoming an academic involves. Based on this evidence, I contend that the act of undertaking a doctorate is 'riskier' for women than it is for men. I will return to this argument later when I discuss my data. I also draw on the literature discussed here in chapters 4-7 where I discuss the gendered nature of my participants' experiences, and how their experiences of doctoral study have shaped, and continue to shape, their career aspirations.

This review has also indicated the lack of empirical research on the aspirations of women doctoral students over time. Existing studies are limited in their claims because they cannot generate a longitudinal view into how aspirations change over time. This is not unusual: as Alaszewski (2006, p.113) observes, 'most social science methodologies access information at one point in time'. Yet, the point in the doctoral journey at which studies are carried out is of significance. Researchers have observed how doctoral study often produces a shift in individual identities (Baker and Lattuca, 2010; Grover, 2007). It is therefore to be expected that these identity shifts would subsequently alter individual career aspirations. Of the studies discussed in this chapter, data collection was mostly carried out on a single occasion, representing a single point within the doctoral journey. However, one of the strengths of my study is that participants were interviewed multiple times, and their day-to-day experiences of academia were captured through research diaries. This research design has enabled me to generate insights into change over time, and offers a valuable and novel contribution to the field. In the next chapter, I outline the research design and discuss my methodological approach.

Chapter 3

Methodology

3.1 Introduction

This chapter reflects on how the research was undertaken. I describe my methodological approach, discussing the feminist principles underpinning this narrative study. I outline the theoretical framework used, the research design, research questions, recruitment processes, methods of data collection and the approach taken to data analysis, and give an example of how I used the 'restorying' (Clandinin and Connelly, 2000) process to produce narrative accounts of participants' experiences. I conclude with a discussion of the ethical issues which I have navigated in this research.

3.2 Feminist Research

As outlined in Chapter 1, I have always been motivated by doing research which illuminates women's experiences. My approach to this study is underpinned by a commitment to doing feminist research. Acknowledging the multiplicity of definitions, approaches and understandings which this can imply, in this chapter I will outline my interpretation and use of feminist research principles. Hesse-Biber (2012, p.17) argues that despite the wide range of feminist approaches to research, 'it is possible to discern some common principles of feminist research praxis'. She claims that studies which seek social change and transformation are indicative of feminist research. Moreover, Letherby (2003, p.5) contends that ‘feminist research practice can be distinguished by…the location of the researcher within the research'. Bhavnani (1993) also highlights the importance of feminist researchers being aware of power relations and issues of difference between the researcher and those who participate in the research. These three principles are constitutive of my approach to feminist research, as I now discuss.

3.2.1 Social change

This study aims to influence change both in institutions and in the experiences of women students by drawing attention to the issues affecting women's experiences of the doctorate and factors which affect their career aspirations. Ramazanoglu and Holland (2002, p.16) describe feminist research as 'politically *for* women'. Although women are not conceptualised as a homogenous group, and acknowledging the relative privilege of the women in this study, this research does have a political aim; to 'produce knowledge that will make a difference to women's lives' (Letherby, 2003, p.4). By participating in this research participants have had the opportunity to critically reflect on their experiences, and consider the impact of gender on their doctoral journey and career aspirations. As Leavy (2011, p.20) observes, 'the experience of sharing one's experiences, thoughts and feelings can be affirming for the participant'. Moreover, Chase (1996) argues that participating in narrative research can be empowering, claiming that through the researcher's focus on the cultural processes embedded in personal narratives, the broader context of individual experiences is revealed to participants. This may mean that participants develop a deeper understanding of the phenomenon; in this case the gendered nature of doctoral experiences, and post-PhD careers. Further, I hope that the findings of this study will improve the experiences of future doctoral students. I aim to generate new understandings of the experiences of women doctoral students by undertaking this research; something which is likely to benefit future students if institutions are receptive to the findings. Participants may appreciate being able to participate in a study which contributes to these improvements.

3.2.2 Location of the researcher

Feminist researchers have argued that there can be no 'distanced observer' in the research process; refuting the idea of researcher objectivity, Haraway (1991, p.189) argued that the 'view of infinite vision is an illusion, a godtrick'. There can be no view from nowhere (Nagel, 1986) and all knowledge is 'grounded in the "point of view" of those producing it' (Stanley, 1997, p.204). Other feminist researchers (see Behar, 1996; Oakley, 1981) have challenged the traditional hierarchy in research relationships where researchers exert influence over participants. Thus, the explicit locating of the

researcher within feminist research counters the traditional conceptions of the researcher as an objective, detached observer within the positivist paradigm. Reflexivity has been used by researchers – and particularly by feminist researchers – as a tool to disclose their own values and consider their impact on the research. There have been arguments for 'strongly reflexive' accounts of the researcher's place within the research that they conduct (see Olesen, 2000). Brooks and Hesse-Biber (2007, p.15) note that reflexivity 'requires the researcher to be…critically reflective about the different ways her positionality can serve as both a hindrance and a resource toward achieving knowledge'. Stanley and Wise (1993) make a powerful case for using a reflexive approach:

> Because the basis of all research is a relationship, this necessarily involves the presence of the researcher *as a person*. Personhood cannot be left behind, cannot be left out of the research process. And so we insist that it must be capitalised upon, it must be made full use of (*ibid*, p.161)

Responding to Stanley and Wise's call, I have taken a reflexive approach to this research, acknowledging the influence that my position as the researcher has on the data. In doing so, I try to fulfil Etherington's (2004, p.32) description of reflexive feminist research, which 'encourages us to display in our writing the full interaction between ourselves and our participants so that our work can be understood, not only in terms of *what* we have discovered, but *how* we have discovered it'. In approaching this research reflexively, I have ensured that within the analysis I am explicit about my interpretive stance. For example, in Chapter 4 when I discuss participants' letters to their future selves, I dedicate sections of the analysis to outlining my particular reading of the letters, acknowledging that other readers may have different interpretations. Further, I have engaged in reflexive research practices, such as sharing my letter to my future self with participants before asking them to write their own. Using a reflexive approach allows me to foreground my own values and reflect on the impact of this on the research, but also improves the transparency of the research process. It has been argued that by including the researcher's voice within the research, a more detailed and honest account of the research is produced (Cotterill and Letherby, 1993). However, I have kept coming back to Finlay's (2002, p.212) warning that researchers

may lose themselves in the ‘infinite regress’ of self-analysis, rather than focusing on participants' experiences, which has helped me to keep my participants' stories – rather than my own – at the centre of this thesis.

3.2.3 Power and Issues of Difference

As a feminist researcher, it is important that I reflect on the nature of the relationship between myself as the researcher and the participants in this study. Doucet and Mauthner (2006, p.39) discuss the ‘inevitability of power differentials’ within the research process, and thus I am ‘mindful of hierarchies of power and authority in the research process’ (Hesse-Biber, 2012, p.4). Though Oakley (1981) has argued that when the researcher and participant share the gender identity of woman, this subverts the traditional power dynamic which favours the researcher, and produces equality, Stacey (1988, p.25) warns that feminists can suffer a ‘delusion of alliance’ if they assume common interests in woman-to-woman research’.

Other feminist researchers have drawn attention to issues of difference between women, arguing that women are far from a homogenous group and that their experiences are shaped by factors such as social class, sexuality and ethnicity (Bhavnani, 1993; Code, 1995). It is therefore important not to assume knowledge purely based on gender. As Riessman (1987) notes, gender is not enough to produce shared understandings. I respond to Riessman's observation by taking various actions. For example, within my interviews with participants, I made efforts not to make 'assumptions of similarity' (Dwyer and Buckle, 2009, p.58) and acknowledge the uniqueness of individuals' experiences. I also make clear within the data analysis my position as a privileged, able-bodied, middle-class white woman researcher; thus the position from which I am speaking and claiming knowledge (Jackson, 1998).

My position in this research could be described as that of an 'insider-researcher' (Dwyer and Buckle, 2009). Participants and I are all women doctoral students and we may have some experiences in common. Further, as the group of participants are not particularly diverse in relation to ethnicity, disability or sexual orientation, in some ways we share many of the same privileges. However, I cannot presume to fully understand their experiences; my position as a woman does not allow 'a

straightforward route to knowing' (Doucet and Mauthner, 2006, p.40). My status as a white, middle-class heterosexual woman prevents me from knowing what it is like not to be white, middle-class and heterosexual. Further, though participants in this study are doctoral students and therefore relatively privileged, there are significant differences in our experiences of the PhD, particularly for those who are international students, those who have children, and those who have come to doctoral study after having long careers. The concept of 'insider' research has been contested, with feminist researchers arguing that it is overly simplistic (see Acker, 2000; Hill Collins, 1986). Dwyer and Buckle (2009, p.54) argue that instead of claiming 'insider status', researchers should take up a position that occupies 'the space between'. It is this position which I take up within this research, using a reflexive approach to make clear where my own views and experiences have shaped and informed the research process, and highlight where I have been involved in co-constructing the stories that I discuss in this thesis, but ensuring that participants' stories are the focus of this research. The complexity of continually negotiating this position in 'the space between' (*ibid*, p.54) calls to mind Weston's (1996, p.275) claim: 'a single body cannot bridge that mythical divide between insider and outsider, researcher and researched. I am neither, in any simple way, and yet I am both'.

3.3 Ontology and Epistemology

The political nature of knowledge production has been discussed by feminist researchers such as Bhavnani (1993, p.96), who refers to knowledge production as 'a set of social, political, economic, and ideological processes'. Feminist researchers have characterised historical conceptions of knowledge as masculine, and removed from the experiences and understandings of women (Belenky, 1986; Daly, 1978). A range of feminist epistemologies developed from these critiques, based on the idea that there are women's ways of knowing (Harding, 1995). Significantly, Haraway (1988) argues that all knowledge is partial and socially located; different communities have varying experiences and understandings which lead to the production of situated knowledges. The position I take in this research is based on Stanley and Wise's (1993, p.193) 'ontologically based theory of feminist…knowledge'. My stance echoes Stanley and Wise (1993), who argue for:

> A feminist epistemology rooted…in the acknowledgment that all social knowledge is generated as a part and a product of human social experience…there is nothing separate from social life and experience, nor which exists outside it…being or ontology is the seat of experience and thus of theory and knowledge. (*ibid*, p.192)

My constructionist epistemological stance draws heavily on the work of Stanley and Wise in their seminal work *Breaking Out* (1993). It treats 'knowledge' as situated, indexical' and holds that there are 'competing knowledges' (*ibid*, p.8). This epistemic position holds that there is no singular 'truth' which can be elicited. In the context of an interview, this posits all data as co-constructed accounts of reality, which are interpreted by the researcher. My constructionist epistemology is reflected in the way I discuss the interviews that I conducted with participants. Within the analysis I refer to them as 'our' interviews, deliberately using this linguistic device to both highlight my position within the research and reinforce my interpretive stance. Stanley and Wise (1993, p.6, emphasis in original) argue that 'the researcher is an active presence, an agent…she constructs what is actually a viewpoint, a point of view that is both a *construction* or version and is consequently and necessarily *partial* in its understandings'. This constructionist position is situated within a narrative inquiry framework. This framework stems from the idea that 'people by nature lead storied lives and tell stories of those lives' and researchers 'write narratives of experience' (Connelly and Clandinin, 1990, p.29) which illuminate wider meanings of individual stories. Rather than treating participants' narratives of experience as truths, I consider them to be subjective versions of participants' realities, constructed by participants in their diaries and letters, and re-constructed by me in the writing up of their accounts. This approach is explored in detail in the next section of this chapter.

3.4 Narrative Inquiry

Narrative has been referred to as 'an epistemology, 'or a "way of knowing"' (Goodall, 2008, p.13). Indeed, storytelling is an 'everyday practice' (Riessman, 2008, p.7). It has been argued that individuals construct their identities through narrating their stories and that selves can therefore be seen as narratively configured (Polkinghorne, 1988). However, narrative inquiry is a large and multidisciplinary field within which there are

a variety of approaches; Chase (2005, p.651) calls it a 'field in the making'. Narrative inquiry has a strong historical link with feminist research. Methods such as oral history were used as an 'emancipatory tool' to facilitate the telling of women's stories (Chamberlayne *et al*., 2000, p.2). Feminist researchers place value on women's lived experiences, and treat women's personal narratives as 'essential primary documents for feminist research' (Personal Narratives Group, 1989, cited in Chase, 2005, p.654). This study was undertaken according to feminist research principles, but without using an explicitly feminist methodology, as I felt that a narrative inquiry framework was more fitting given the longitudinal design. Narrative has been argued to be one of the primary modes through which humans interpret and understand their experiences (Bruner, 1986). This is the view I have taken in my approach to this research, viewing the stories that participants tell about their experiences of doctoral study to be crucial in addressing how their career aspirations change over time, and observing that 'restorying' (Clandinin and Connelly, 2000) their narratives within this thesis enables me to convey a particular understanding of their experiences.

The approach I have taken to narrative inquiry is informed by my constructionist epistemology. This holds that the stories individuals tell represent a *version* of reality which is co-constructed in the interview situation. My epistemological position involves the belief that multiple and layered realities exist, and that participants' accounts are one of the many possible versions that might have been told. Each of these is no less real or true than another; my understandings and written interpretations of these experiences form a further construction of reality, and readers of this account may again construct their own interpretations from mine (Coulter and Smith, 2009; Iser, 1978). Stories are viewed as narrative constructions of reality, which are shaped by the time, place, situation and audience. My influence as the researcher in this process is significant, and narratives are viewed as co-constructions. Andrews *et al*. (2013, p.110) argue that 'a narrative researcher does not collect narratives, but instead jointly participates in their construction and creation'. Locating myself within this process is important, as it speaks back to the feminist research principles which have informed this study. These principles make it necessary for the researcher to be transparent about their position within the research, and how they have influenced the research process (Brooks and Hesse-Biber, 2007).

A focus on narrative emphasises individual agency, and this study conceptualises participants as narrators of their own lives (Chase, 2005), but whose stories are shaped by the cultural and societal contexts in which they are lived and told. The focus on individual agency in storytelling enables a view of identity as narratively constructed. McRae (1994, p.215) refers to telling one's story as 'a means of becoming', but Bruner (1987, p.694, emphasis in original) goes further, arguing that the 'culturally shaped…processes that guide the self-telling of life narratives achieve the power to structure perceptual experience…we *become* the autobiographical narratives by which we 'tell about' our lives'. In this way, narrative inquiry can be seen as empowering, as it allows individuals the opportunity to be agentic in describing their experiences, and also in constructing their own identities. This is another potential benefit of participation for the participants in my study.

3.5 Theoretical Framework

In this section I outline the theoretical concepts used to frame this study. Together, they enable me to consider how participants construct their aspirations, and highlight the factors shaping these aspirations. The sociological concept of horizons for action (Hodkinson and Sparkes, 1997) is used to explicate the structural constraints within which participants construct career aspirations. Possible selves theory (Markus and Nurius, 1986) is used to gain insight into the ways in which participants envisaged their futures. These concepts are utilised within a narrative inquiry framework, understanding narrative as a key way in which individuals make sense of their past, present and future experiences (Goodall, 2008; Riessman, 2012). Each theoretical concept is used in a new way in this study. Possible selves theory has not been used in research on women doctoral students before. Further, this study undertakes a novel application of the concept of horizons for action, using it in relation to career aspirations, rather than career decisions. In this section, I outline how this theoretical approach produces a view of individual aspirations as produced through the interaction of personal circumstances with structural constraints.

3.5.1 Use of theory

As Mouzelis (1995) observes, social scientists use theory in two ways; firstly as a set of statements about the social world which can be either proved or disproved, and

secondly, as 'a set of tools that…prepare the ground for the construction of substantive theory' (*ibid*, 1995, p.1). My use of theory accords with the second of Mouzelis' definitions, utilising theoretical concepts as 'a set of thinking tools' (Bourdieu, in Wacquant, 1989, p.50). This follows Wodak's (2001, p.64) argument that rather than turning to grand theory, researchers need to ask 'what conceptual tools are relevant for this or that problem and for this or that context?'. This approach to theory is appropriate within narrative inquiry; Clandinin and Connelly (2000) note that 'formalists begin inquiry in theory, whereas narrative inquirers tend to begin with experience as lived and told in stories' (*ibid*, p.128).

My use of horizons for action and possible selves theory is grounded in sociological ideas of structure and agency. As Mills (1959, p.3) states, 'neither the life of an individual nor the history of a society can be understood without understanding both'. Further, those working within narrative inquiry emphasise individual agency, viewing participants as narrators of their own lives (Chase, 2005). Yet it is important to attend to the wider social structures which influence the ability of participants to be agentic, and thus shape their stories. I use the sociological concept of horizons for action and the psychological theory of possible selves together, to produce a view of participants as both socially situated and agentic. Within my analysis, I pay attention to how participants' personal circumstances are shaped by larger social structures, such as gender and social class, and how these structures shape what they consider to be possible. However, I also focus on how participants demonstrate agency in imagining various possible futures, and engaging in activities which will enable them to realise these futures. Using insights from sociological concepts alongside psychological theory constitutes a theoretical contribution to knowledge.

I have encountered some difficulties in combining horizons for action and possible selves theory within a narrative inquiry framework. Achieving the correct balance between attending to the structural constraints within which participants' stories are told, and the stories themselves, has been challenging. I was keen to avoid presenting participants either as completely free agents, or as subjects unable to exert agency from their positions within wider social structures. This struggle echoes Walby (1996, p.2) who observes the dilemma within feminist theory in relation to structure and

agency: 'if women are seen as having agency then they must be seen as choosing their oppression, and if they do not choose it, as in structural accounts, then they are merely passive victims'. Despite this tension, I feel that using horizons for action and possible selves frames participants' stories as 'enabled and constrained by a range of social resources and circumstances' (Chase, 2005, p.657), but also as accounts of agentic and autonomous individuals.

3.5.2 Horizons for action

The concept of horizons for action derives from Hodkinson and Sparkes' (1997) theory of careership, which frames career decision-making in a way which combines 'social and cultural factors with 'personal' choices'' (*ibid*, p.32). Horizons for action describe what individuals understand to be possible for them to achieve in the future. Whilst acknowledging that 'individuals can and do make differing choices' (Hodkinson, Hodkinson and Sparkes, 1996, p.155), the concept of horizons for action refutes the notion that individuals are able to make completely free choices, and argues that decisions about the future are 'always bounded' (Hodkinson, 2008, p.13). Thus, Bowman *et al*. (2004, p.13) argue that individuals' career decisions should be 'understood as enabled and constrained by horizons for action'. In this study, rather than focusing on individuals' career decisions, I use horizons for action as a tool to draw attention to the parameters within which participants construct career aspirations, arguing that aspirations as well as decisions are shaped by structural factors (see Oyserman *et al.*, 2002).

The concept of horizons for action is particularly pertinent in considering how individuals construct career aspirations, framing individuals as agentic but within particular constraints. Horizons for action are 'determined by external job or educational opportunities, in interaction with personal perceptions of what [is] possible, desirable or appropriate' (Hodkinson *et al*., 1996, p.123). Yet, what is perceived to be desirable or appropriate will vary; Hodkinson (2008) notes that social class, gender and ethnicity are key in shaping how young people consider various careers. Horizons for action are also informed by individuals' personal situations; thus horizons for action can and do change over time (McAlpine, Amundsen and Turner, 2014). Knowledge and awareness of career opportunities inform individuals' horizons

for action; McAlpine, Amundsen and Jazvac-Martek's (2010) study of academic identities highlighted that early career researchers' horizons for action altered over time due to individuals becoming disillusioned with academia. Therefore using horizons for action in relation to participants' career aspirations is useful, as it generates understanding of how different stages of the doctorate shape what participants envisage as 'possible, desirable or appropriate' (Hodkinson *et al*., 1996, p.123) for the future.

3.5.3 Possible selves theory

Possible selves theory was developed by psychologists Markus and Nurius (1986). Possible selves are 'specific representations of one's self in future states' (Markus and Ruvolo, 1989, p.212), and 'represent not only what one aspires to, but also what an individual fears' (Knox, 2006, p.61). Markus and Nurius (1986, p.954) argue that 'an individual's repertoire of possible selves can be viewed as the cognitive manifestation of enduring goals, aspirations, motives, fears, and threats', and thus individuals' aspirations provide the basis for positive possible selves that individuals wish to embody (Oyserman and Fryberg, 2006). Hortmanshof and Zimitat (2003) observe that individuals may have possible selves relating to any aspect of life, for example to their health, lifestyle or career. In this study, I focus on the career-possible selves that participants construct, but also attend to personal possible selves in order to examine the interplay between individuals' career aspirations and personal lives. Possible selves theory is a useful theoretical tool for understanding how participants think about the future, as it enables insight into their hoped-for, expected and feared selves (Markus and Nurius, 1986), and understands individuals' imagined futures as multiple and varied.

Possible selves are specific to individuals, but are also socially constructed (Oyserman and Fryberg, 2006). Like horizons for action, this theory recognises that selves are differentially constrained and enabled by social structures (Clegg, 2017). In a higher education context, this entails attending not only to wider social structures such as gender and class, but the structures of the academic environment, and academic careers. Educational relationships form the context for the potential construction of academic possible selves (Leondari, 2007; Rossiter, 2004), and thus examining

relationships with academics, peers and supervisors is important in considering how individuals construct, develop and elaborate their possible selves. Using possible selves theory in the context of doctoral education makes a valuable contribution to possible selves literature, as this has not been undertaken before. This theory is used as a tool to highlight the plurality of futures imagined by women doctoral students, enabling an exploration of their aspirations, but also their expectations and their fears for the future.

Neither possible selves theory nor the concept of horizons for action alone allows a view of women doctoral students which accounts for both individual agency, and the influence of the structures within which they study. Horizons for action, whilst explicating the structural constraints within which individuals make career decisions, is limited in its ability to generate insight into the individuals' hopes and fears for the future. Possible selves theory enables insight into how the various futures that individuals construct, focusing on individuals' agency in constructing these aspirations. Yet, it places the onus for what is perceived to be possible almost exclusively on the individual. Markus and Ruvolo (1989, p.213) assert that 'individuals can construct all types of possible selves; they are limited only by their imagination'. However, as Stevenson and Clegg (2011, p.233) suggest, possible selves are shaped by gender, race and class, and can 'only include those selves that it is possible to perceive'. I argue that participants' possible selves and aspirations are constructed within particular constraints. Thus, there is a clear need to combine this psychological theory with sociological insights gained through the theoretical lens of horizons for action.

3.6 Research Design

The research design stems from my constructionist onto-epistemological stance, using multiple qualitative methods to build a longitudinal dataset which lends itself to narrative inquiry. This approach, discussed in detail below, allows the construction of multi-faceted narrative accounts of participants' experiences over time, enabling insight into their everyday experiences, reflections on a particular period of time, and their conceptions of the past and future. This research is conducted with only women participants, in response to literature which highlights the different academic career trajectories of women in comparison to men (see Bagilhole and White, 2013). 13

participants were recruited for this study, all of whom were full-time, first year doctoral students at the beginning of this study.

A review of existing research informed the longitudinal design of this research. As I indicated earlier, most empirical studies about doctoral students' aspirations (e.g. Brailsford, 2010) are conducted at a single point in the PhD experience, meaning that aspirations cannot be explored over time. Yet the point in the doctoral journey at which studies are carried out is of significance. Anderson and Williams (2001, p.4) observe that 'we all retrospectively make sense of our changing identities. Past experiences are revisited and reinterpreted from a particular 'now' position'. Grover (2007) observes how doctoral students navigate the various stages of the PhD in different ways; it is reasonable therefore to infer that their aspirations will also change over this period, and will be influenced by their experiences during the doctorate. The longitudinal design of this study therefore makes a valuable contribution to knowledge in this field.

McAlpine, Amundsen and Turner (2014) draw attention to the lack of qualitative longitudinal research in the area of doctoral students' career trajectories. This research is therefore timely, using interviews alongside other qualitative methods to explore how participants conceive of their futures, and whether or not they aspire to an academic career. There have been a range of studies which highlight that women's experiences of doctoral study affect their career aspirations (Birch, 2011; Hatchell and Aveling, 2008; McAlpine, Amundsen and Turner, 2013). A longitudinal design therefore provides the best framework to explore how participants' career aspirations shifted during the doctorate.

A combination of qualitative methods was used, as they allowed different elements of participants' experiences to be captured, from the everyday, to reflections on a particular period of time, to conceptions of the future. These methods are discussed in more detail below. The main method of data collection is the semi-structured interview, which is used on two separate occasions during the study. This was the most appropriate method because it 'attempts to understand themes of the lived everyday world from subjects' own perspectives' (Kvale, 2008, p.27).

3.6.1 Interviews

This study uses interviews within a longitudinal framework. Participants were interviewed twice, once in the first year of their studies and again in their second year. Interview questions derived from my overall research questions. Some questions, such as what kept participants motivated, remained the same from one interview to the next, whereas others were linked to the particular stage they were at in their studies. Interview questions also reflected key incidents which participants had shared in their research diaries and previous interviews. This allowed insight into changes in participants' aspirations over time. Semi-structured interviews were chosen, as they allowed specific lines of inquiry to be pursued but also enabled different follow-up questions to be asked. Interviews were face-to-face, and in locations which were convenient for participants, usually in their department. Interviews ranged between 50 minutes and 2 hours and were recorded, with participants' consent, using a digital voice recorder. Occasionally, our conversations continued after the recorder had been turned off, but I made notes of what they had said and with participants' consent, these have been included in my analysis.

Interviews in this study are conceived of as 'form[s] of discourse' (Mishler, 1991, p.vii) with participants' responses viewed as ‘narrative accounts, or stories’ (*ibid*, p 67). Kvale (1996, p.55) describes the interview as 'a key site for eliciting narratives'. Holstein and Gubrium (1997, p.123) argue that the interviewer should 'activate narrative production' in order to elicit these narratives. Interview questions were thus framed in ways which encouraged narrative responses. For example, in the first interviews with participants I asked them to tell me how they came to be doing a doctorate. My constructionist epistemological position views interviews as relational spaces (Tietel, 2000) where the researcher and the narrator co-construct interviews. As a feminist researcher, when participants asked me questions about my own experiences, I felt I should share my experiences with them. As Oakley (1981, p.263) argues: ‘interviewing is best achieved when the interviewer is prepared to invest his or her own personal identity in the relationship’. Therefore interview data is viewed as a product of this interaction between myself and each participant.

3.6.2 Research diaries

Research diaries were also used to collect data. These allowed participants' everyday experiences to be documented, and therefore capture data which 'might not be forthcoming in face-to-face interviews or other data collection encounters' (Hammersley and Atkinson, 1995, p.164). During initial meetings with participants who had volunteered to take part in my research, I outlined basic requirements of diary-keeping, and suggested that useful things to record would be events, situations or moments which were significant for them. These could be personal, directly related to their studies, or both. Due to the volume of data collected during the research process, research diaries are drawn on less than interviews in the analysis. They are used to elicit key instances where participants' aspirations shifted, and where these changes did not come through in interview data – for example in relation to Freija's changing personal priorities (see Chapter 7, page 210).

3.6.3 Letters to future selves

In addition to research diaries, letters to 'future selves' were also used. Participants were asked to write letters to their future self in order to gain insight into how they imagined their futures. I gave limited guidance (see Appendix 1), simply requesting that they include details of their hopes for the future and any challenges that they foresaw. Participants were encouraged to personalise their letter and focus on whatever they felt was most important. As such the letters are of varying levels of length and detail. Letters were written in early 2014, a few months after participants had begun their studies and after ethical approval for the research had been received (see Appendix 2). I shared with participants the letter that I had written, acknowledging that they may not have done this kind of writing before. The inclusion of my own letter, and the act of sharing it with participants, is an example of my reflexive approach to this research. Participants reacted positively to the invitation to write the letter to their future self, and appreciated the opportunity to write something that they could keep for posterity.

Letters to future selves have become popularised as a tool for motivation and self-reflection in society in recent years. It is now possible to purchase a pre-formatted pack of letters from a popular retail website on which individuals can write letters such

as a ‘pep talk for future me’ (Amazon, 2014). The popularity of writing such letters has grown, with celebrities such as Kim Kardashian (Glamour, 2015) and James Corden (Corden, 2015) recording video versions of letters to their future selves. Letters to future selves have also been used by teachers in classrooms as tools for getting pupils to envisage their futures (see Samuelson, 2014). Yet, as a qualitative method in social research they have been little used. Only in Psychology have they been used as research tools to gain insight into how individuals imagine their future, usually with adolescents or young adults (see van Gelder *et al.*, 2013). This method is particularly pertinent in the study of individual career aspirations, as it allows me to capture their imagined futures, and their reflections on their doctoral experiences. It is also an innovative methodological contribution to knowledge, as this method has not previously been used in education research, though it has significant value in studies of career development and educational trajectories.

The benefits of using this method are significant. It was a useful first exercise for participants to complete before the interviews, as it enabled them to start considering their aspirations. Letters captured participants’ initial feelings about doctoral study, as well as their hopes and concerns for the future, both in the short-term whilst they completed the PhD, and in the longer term once they had finished. Letters to future selves are highly personal documents, documenting participants' fears, hopes and dreams for the future from the vantage point of a particular moment in time, making them an invaluable methodological tool in social research.

The chosen data collection methods – interviews, diary entries and letters – constitute a rounded, reflexive set of data which allow me to construct a narrative of the journeys of each participant. This research design is fitting because the focus of this study is the change over time of participants' career aspirations. These methods allow an exploration of how participants imagine their futures, whether or not they aspire to an academic career, and how these conceptions change over the course of their doctorate. These trajectories can be traced in a narrative way, drawing together data gathered from these various methods.

3.7 Recruitment and selection

Participants were all full-time, first year doctoral students at the beginning of this study. Only full-time doctoral students were recruited, as the experiences of part-time doctoral students are very different (Deem and Brehony, 2010; Vigurs, 2016). Moreover, it was necessary that participants' studies reflected my own timescales in order to enable the timely completion of my own PhD. Participants were recruited across subject areas from two institutions within one Northern city in the UK. These institutions have different academic specialisms, and different sized postgraduate communities. There were 13 participants in total, six of whom studied at Redbrick University, a research-intensive institution with a large number of doctoral students, and seven from Modern University, a teaching-focused institution with a smaller population of doctoral students. Participants were recruited via Graduate Schools and academic departments. Institutions were selected because they were in a convenient geographical location and allowed comparisons to be drawn between institution types.

Limitations to this study are the lack of diversity of participants, particularly in regards to ethnicity and age. Much of the literature refers to women being more likely to undertake doctoral study later in life than men and after having a family (Brown and Watson, 2010). I hoped to include participants who had children and were older; yet only one participant, Jessie, is a parent. There is an over-representation of younger students, almost half of whom began doctoral study straight after their undergraduate or taught postgraduate degree. There is also a notable lack of diversity in terms of the ethnicity of participants; all participants apart from one are white. Yet there is little ethnic diversity among doctoral students nationally; in 2016 just 16.8% of doctoral students in the UK were from BME backgrounds (Equality Challenge Unit, 2016). Due to the self-selecting sample of my study, this diversity was not achieved. However, the range of participants recruited does enable a useful comparison of experiences across disciplines and two institution types.

After obtaining ethical approval for this study, I met with those who expressed interest in participating. Meetings took place at their institution and at their convenience. These meetings gave me the chance to explain the study and gave individuals the opportunity to find out more about the study without having to commit to it. After original expressions of interest, some decided not to take part because they felt they

did not have the time to contribute. Interestingly, these were older women who had young families.

3.8 Data management

Ritchie *et al*. (2007) note the importance of effective data management in social research, particularly within projects with large amounts of qualitative data. They argue that researchers should take steps to familiarise themselves with data and ensure that it is organised, sorted and labelled in order to make them 'easier to access and interpret' (Ritchie *et al*., 2007, p.297). I have responded to these suggestions, taking particular steps to ensure the effective management of the large amounts of data generated within this study.

3.8.1 Data storage

I created a data management plan outlining what kind of data would be produced, and how it would be documented and stored. The data largely consisted of interview transcripts. These transcripts were saved without reference to participants' real names; pseudonyms were used instead. Data was stored according to the University's data management policy. I ensured that all research data was stored securely on the University's networked storage system, and rather than storing data on my laptop it was largely kept on an external hard-drive, with the exception of research diaries. Research diaries were shared securely with participants through Google Documents, allowing them ease of access to make entries. This also made the collection of a large volume of data easier for me as the researcher, as the diaries were kept over a three year period.

3.8.2 Transcription

A large amount of interview data was collected, meaning that I faced issues around transcription. Two interviews were conducted with each participant. Time pressure was a significant influence on my decision about transcription. For the first set of interviews in March-April 2015, I transcribed half of the interviews, but due to time constraints chose to pay a professional to transcribe the remainder. On advice from my supervisors, for the subsequent round of interviews in November 2015-January 2016, I used this contact to transcribe all the interviews. Using a professional contact

to transcribe interviews has implications, both on a practical basis as highlighted above, but also in relation to principles of feminist research. As Millen (1997, p.2.4) observes, 'an agenda which intends to be 'for women' cannot uncritically be founded on the exploitation of the low-status and poorly paid skills of female typists, transcribers and data analysts…women cannot justify oppressing women to benefit other women'. I was acutely aware of the problems which Millen outlines. However, I was also highly aware of time and resource constraints, being in a precarious position as a doctoral student on limited funding. In an ideal scenario I would have transcribed all the interviews myself, but in practice this would have made the timely completion of this thesis impossible.

There are many ways to undertake transcription, but it is important to note that transcription is an 'interpretive practice' (Riessman, 1993, p.13). Partial transcription of recorded interviews may save time, but as this study is a narrative inquiry I felt that it was important to fully transcribe the interviews so as not to miss out any potentially significant details of participants' stories. Mishler (1986, p.49) observes that ‘there is no universal form of transcription that is adequate for all research questions and settings' and argues that 'the mode of transcription adopted should reflect and be sensitive to…the specific aims of the study’. However, as De Vault (1990, p.108) notes, 'no transcription technique preserves all the details of respondents' speech'. I developed my own style of notation which included meaningful pauses and some non-verbal utterances but not to the level of detail of transcriptions done for linguistic analysis. I revised the transcriptions completed by the external contact in order that they all used the same notation style.

3.9 Analysis

Analysis of data has been ongoing since the first data were collected. The analytical process began informally, as I made interpretive comments on interview transcripts, before moving to data immersion. Beginning analysis relatively early in the research process allowed me to develop a thorough knowledge of my data. Indeed, Coffey and Atkinson (1996, p.10) argue that analysis should be a 'pervasive activity throughout the life of a research project'. The research process has been referred to as 'messy' (Bechhofer, 1974, p.74). This is something which I encountered in my own analysis; I

often felt that I was 'drowning in data' (Coffey and Atkinson, 1996, p.1). However, despite the messiness of the process, eventually I was able to start identifying 'signals emerging from the noise' (Patton, 2014, p.522) through filtering my data through the lens of my research questions. In this section I outline the analytical process, including a discussion of the restorying approach.

3.9.1 Narrative Analysis

There are a range of approaches to undertaking narrative analysis, and it has been referred to as a 'family of methods' (Riessman, 2008, p.11). Polkinghorne (1995, p.12) made a distinction between approaches to narrative inquiry: 'analysis of narratives…studies whose data consist of narratives or stories…analysis produces paradigmatic typologies or categories' and 'narrative analysis…studies whose data consist of actions, events and happenings…analysis produces stories'. My approach does not fit neatly into either of Polkinghorne's categories. In this study, the data is conceived of as narrative, but analysis does not aim to create paradigmatic typologies. Rather, it aims to produce narrative accounts of lived experiences, and elicit common themes from across individual stories. Though the interview data in this study are viewed as distinct individual narratives (Mishler, 1991), participants' research diaries were used alongside them to construct longitudinal narratives of participants' experiences of the doctorate. Letters to future selves were analysed slightly differently, as this method generated data which related with what participants imagined, rather than their lived experiences. Therefore my analysis of these letters (see Chapter 4) does not use the restorying approach, but rather uses possible selves theory in a narrative framework, which elicits the future-oriented stories that participants imagined to be possible.

Using narrative to explicate the experiences of women doctoral students and their career aspirations is useful as it allows for a detailed exploration of individual lives. It maintains the sense of the individual throughout the analytical process, but also enables comparisons between individual experiences. As Mauthner and Doucet (1998, p.138) note, in a traditional thematic approach to analysing qualitative data, individuals' transcripts are fragmented and thus 'the discrete, separate and different individuals are gradually lost'. An approach which maintained the coherence of

participants' stories seemed appropriate within a feminist research project, which places value on the unique lived experiences of women. Utilising the concept of restorying allowed me to maintain the individuality of participants' experiences, but also enabled me to identify commonalities of experience from across individuals' stories in Chapters 4-7. As Ollerenshaw and Cresswell (2002, p.332) observe, within the restorying approach 'researchers narrate the story and often identify themes or categories that emerge…thus, the qualitative data analysis may be both descriptions of the story and themes that emerge from it'. Space constraints prevent me from incorporating each restoried account into this thesis, but as Ollerenshaw and Cresswell (2002) highlight, the restorying approach enables common elements from participants' stories to be elicited, and thus this is the form that my analysis takes in Chapters 5-7. In Chapter 8 (see 8.2) I summarise these common elements of participants' stories.

3.9.2 Restorying

The first stage of data analysis in this study utilised Connelly and Clandinin's (2000) 'restorying' approach to create individual narrative accounts of participants' doctoral experiences (see Appendix 3 for example). This step was taken for two reasons; firstly to generate a narrative understanding of individuals' doctoral experiences, and secondly to preserve the integrity of each participant's story, as the data chapters (4-7) take a thematic, rather than an individual, approach. Restorying views participants' data as individual stories which can be re-told in a variety of ways. We are all engaged in living and subsequently telling others about our lives, but narrative researchers are engaged in this to a further degree; we restory others' lives in the research process, writing 'narratives of experience' (Connelly and Clandinin, 1990, p.2). The restorying approach is grounded in an interpretive, constructionist epistemology which holds that the researcher has a vital role in constructing the account which is presented at the end of the research process. Indeed, Connelly and Clandinin (1990, p.5) argue that the researcher's story is necessarily implicated in the restorying approach: 'the two narratives of participant and researcher become, in part, a shared narrative construction and reconstruction through the inquiry'.

Clandinin and Connelly (2000) describe restorying as a 'collaborative process that occurs between the researcher and the participants' (cited in Ollerenshaw and

Cresswell, 2002, p.342). In this study, there has been a collaborative element to the process of restorying; participants were given the opportunity to comment on their restoried accounts. The comments that I received were minimal, with two participants simply indicating that they found the accounts interesting to read. However, I have not collaborated with participants throughout the restorying process, partly due to the logistical constraints of conducting data analysis for a doctorate within the short timeframe of three years. Another factor in this decision not to embark on a fully collaborative project was my need to claim interpretive authority (Chase, 2000) for the interpretations I have made as the researcher in this study. I felt that it was important to acknowledge what Krieger (1991, p.53) refers to as the 'basic recognition that a study, or story, was the work of its author', and though 'it might include aspects of the lives of other people…the person most responsible for putting those aspects together would be held accountable for the work in the end' (Krieger, 1991, p.53). As a feminist researcher, I acknowledge the power implicit in my position as researcher within the research process, and the responsibility which follows from interpreting and representing participants' experiences.

In the restorying process, and the restoried accounts of participants' experiences (see example in Appendix 3), attention is paid to aspects of the data involving interaction, continuity, and situation, which are the principles supporting Clandinin and Connelly's (2000) three-dimensional space approach to narrative analysis. This approach holds that in order to understand people, it is necessary to examine their personal experiences and interactions with others. It also acknowledges the continuous aspect of experience; the principle that 'experiences grow out of other experiences and lead to new experiences' (Ollerenshaw and Cresswell, 2002, p.339). Furthermore, these interactions and experiences always occur in a particular place or situation (Clandinin and Connelly, 2000). Thus, in restorying participants' stories, it is necessary to do so in a way which reflects their interactions with others, acknowledges how early experiences of the doctorate shape their present feelings about their studies, and situates their stories in a particular context which reflects their personal situation.

3.9.3 Benefits of restorying approach

The restorying approach to narrative analysis was appropriate in this study because of its focus on temporality and the chronological ordering of experiences. Restorying involves the researcher 'rewriting the story to place it within a chronological sequence…the researcher provides a causal link among ideas' (Ollerenshaw and Cresswell, 2002, p.332). The researcher constructs an account of individual's experiences which attempts to highlight how one set of experiences has led to another. In a longitudinal study which aims to identify how individuals' experiences during the PhD influence their aspirations, and illuminate how these aspirations change over time, the restorying approach to narrative analysis is particularly useful. Using restorying as a way of analysing data may also allow participants a deeper understanding of their doctoral experiences. As Ollerenshaw and Cresswell (2002, p.332) note 'often when individuals tell their stories, they do not present them in a chronological sequence'. By creating a causal link between ideas through restorying, the researcher constructs an account which may illuminate for participants other aspects of their experience. In this case this would mean that participants may gain a deeper understanding of the gendered nature of their doctoral experiences, and post-PhD careers. Therefore a restorying approach to narrative analysis may also benefit the individual women participating in this research; one of the aims of this study.

3.9.4 Stages of analysis

I engaged in restorying by reading over all the data collected, analysing it to understand participants' lived experiences through the lens of my research questions, before re-constructing particular narratives. Thus, the process was guided by my research questions, and informed by relevant literature relating to the experiences of women, and doctoral students, in higher education. Restorying was also significantly influenced by my own subjectivities, developed through my experiences of studying for a doctorate. My analysis of participants' experiences thus reflects the aspects of their experiences which resonated most with my own. In restorying individuals, the focus was on bringing to the fore the stories that women had told me about their doctoral experiences, and drawing out the experiences which they deemed to be most significant. The criteria I used to determine significance were where participants used

emotional language or tone of voice, or when they spent a substantial amount of time discussing a particular event or situation.

The process of restorying consisted of multiple readings of the data. These different readings are considered as three particular lenses through which the data was interpreted. The first reading looked for aspects of participants' experiences which pertained to my research questions and resonated with relevant literature. Within this, I was interested in drawing attention to the factors that shaped women's career aspirations, the influences that academic, peer and personal environments had on participants' career aspirations, and the barriers that participants perceived to pursuing an academic career. The second reading looked to identify the stories that participants shared which seemed particularly significant to their experiences of doctoral study. The final reading was based on my own subjectivites; I read the interviews looking to highlight aspects of participants' experiences which resonated with my own experiences of doctoral study.

After these multiple readings, in which three lenses were used to examine the data, there were several stages of analysis. Initial analysis involved data immersion; after reading interview transcripts I wrote short overviews of each participant's journey towards the doctorate, and summarised their motivations for doctoral study and initial aspirations on starting their degree. The second stage was to engage with the interview data in chronological order. This involved listening to interview audio whilst reading transcripts, and making notes of which aspects of participants' experiences pertained most to my research questions. The third stage was to analyse the significant stories which participants told about their experiences of doctoral study. The notes from the second and third stages of analysis were drawn together, and a broader narrative account of individuals' doctoral experience was constructed in a fourth stage of analysis. This created an account based on the aspects of participants' experiences which related to my research questions and the significant stories they had told. The final stage of analysis involved eliciting common elements of participants' experiences from these restoried accounts, identifying similarities and differences between participants' experiences of the doctorate, and their individual career aspirations. This final stage of analysis is reflected throughout the write-up of my data in Chapters 4-7.

Individuals' restoried accounts were framed according to the principles of Clandinin and Connelly's (2000) three dimensional approach to narrative analysis; interaction, continuity, situation. Thus, each participant's account is grounded in their interactions with others. The restoried accounts also depict the continuous aspect of participants' experiences, linking past experiences to the present. Each account also situates participants in their particular context, so that readers have a sense of each individual's background and personal circumstances, and an insight into their academic environment. These accounts also map changes in participants' aspirations over time and the stories they told about their experiences of doctoral study. In this study, I have presented one interpretation of participants' stories which portrays a particular account of their experiences, and draws connections between their experiences of the doctorate and career aspirations which other researchers, and the participants themselves, may not have made. Clearly, there are many possible interpretations of participants' stories and many possible re-tellings of these stories by researchers. In restorying participants' narratives in this study, I am claiming interpretive authority (Chase, 2000), presenting one account which focuses on the aspects of participants' stories which relate most to my research questions. This restorying therefore has a particular purpose; to tell participants' stories in a way which illuminates factors which affect their career aspirations.

3.9.5 Exemplar of restorying

Below is an excerpt from the restoried account of Martina's experiences of her doctorate, included to exemplify the process I have described above. It is preceded by a short biographical note about Martina. Each participants' data was restoried using the same process which has been outlined above. Martina's restoried account can be found in full in Appendix 3.

Martina

Martina was 26 when she started her doctorate in Politics at Redbrick University. Prior to the PhD, she worked as an administrative assistant for a European NGO, having completed her Master's degree before this. She is an international student from Europe and is in a relationship, with no caring responsibilities. She applied for a PhD

because she was interested in her particular topic and was considering pursuing a career in academia.

Excerpt from restoried account

Martina applied to do a PhD because she had a passion for learning, and had intended on doing further study after her undergraduate degree. The PhD was something she "always wanted to do", but she felt that after her Master's "it would be good to take a break…and get some professional experience". After working in an administrative role for an NGO for a couple of years, and developing her ideas for future research, she "started to get a sense of the topic that I wanted to write on" and "decided that I wanted to progress to the PhD". Her decision to do the PhD was timed around her personal life: "I really thought that the PhD was the thing to do, now, before I… sort of turned 30 and then have children". However, she only managed to secure part funding from the university, and had to get financial backing from her parents in order to move to the UK and start her doctorate. Her parents were "encouraging" of her doing the PhD, as was her partner, who moved to the UK with her. Due to these changes, her lifestyle has altered dramatically and she feels that "my life now is my PhD" and that it is her main priority: "I live around my PhD commitment".

Her choice to return to studying without full funding was "not an easy decision". The financial implications of this and the contrast between her old professional lifestyle and that of a PhD student made her occasionally question her decision. Though her parents were "very supportive", she found relying on her parents and losing her financial independence difficult. During her PhD she became increasingly frustrated that she would have to wait "years" before being "able to start going back to the job market again". This frustration was "always in the back of my mind…it makes me even wonder if I did the right thing in choosing to study again". However, she tried to take a positive view of it as an "investment…in my education". Considering her choice in the long-term helped her "let go of that nagging feeling that you should already be financially independent and you're not".

Martina had some awareness of what she would need to do to pursue the career options which she considered. In relation to working as a policy-maker, Martina

considered which institutions she would like to work for in the future, and ensured that she kept up to date with the activities of these organisations. In terms of an academic career, she signed up for weekly notifications of relevant job advertisements and assessed whether her experience and skills meet their requirements, so that she knew "what is expected". She was also aware that teaching experience was "important to have" for someone pursuing an academic career, and wanted to get some teaching experience in her final year to "to leave the academic career door open". She was also encouraged by her supervisor to present and publish her work, which is "more pertinent" if she were to pursue an academic career, and he encouraged her "to have all my doors open". Her uncertainty about the future was a "big worry" because she did not know when she would be financially independent again, and was aware that she may have to take a lower paid and more junior position after the PhD, in order to "work my way up a career ladder". Martina's career plans also depended on her personal life. She lived with her partner and would make her career decisions around what would work best for their relationship: "I don't look at what I'll be doing after my PhD as a standalone thing I also have to think about what he is doing right now…where he's based and how then it would work…our sort of lives together".

3.10 Ethics

My approach to research ethics was informed by Sheffield Hallam University's guidelines. I was keen to ensure that I attended to ethical issues throughout the research process, rather than considering my ethical responsibilities to have been dealt with simply during recruitment and data collection. For example, in relation to Jane's experiences of sexual harassment (see Chapter 6, p.164), I ensured that she was happy for me to write about this within the thesis, as she had initially said that she wanted it to be kept confidential. In what follows, I discuss issues that arose such as the impact of participation on individuals as well as issues of informed consent, confidentiality and anonymity.

3.10.1 Representation

Issues of representation have been considered throughout, with particular reflection on my interpretive authority (Chase, 1996) as researcher and the implications of this for a feminist research project. The initial move by early feminist researchers to 'find

and express women's voices' (Olesen, 2005, p.252) has been critiqued by those who debated the possibilities of being able to 'give voice' to others (see, for example Lather, 2001). Feminists expressed concern about representations of women's voices in written research accounts (see Fine, 1992) and struggled with the challenge of 'how to make women's voices heard without exploiting or distorting those voices' (Mascia-Lees *et al.*, 1989, p.30, cited in Olesen 2000). I have critically reflected on these issues throughout the research, particularly in considering how to represent the participants and their stories within this thesis.

Issues of representation are significant in a feminist research project which uses a narrative methodology. Chase (1996, p.45) highlights that narrative research 'demands that we pay special attention to participants' vulnerability and analysts' interpretive authority'. Analysing women's stories and representing their experiences carries a 'heavy ethical burden' (Sikes, 2010, p.11) and has implications relating to issues of knowledge and power. Smythe and Murray (2000, p.326) note that:

> Participants enjoy a certain epistemic privilege by virtue of the fact that the story is about their own experience…Researchers, on the other hand, have theoretical knowledge and access to literature that can frame the participant's experience within a much larger context.

Chase (1996) argues that narrative researchers must use this knowledge and claim their interpretive authority in the research. She states that participants who tell their stories have different interests than the researcher; participants want to share their experiences whereas researchers want to interpret these stories within a wider cultural context. I have therefore claimed my interpretive authority in an effort to be more transparent and honest about the research process.

The problem of representation is grounded in the reality of the research process. Whatever strategies are employed by the researcher to negate power relations, for example sharing drafts of the research with participants, the final written representations of data are always constructed by the researcher, not the participant. I have found it challenging to express the subtleties of participants' experiences, draw

meaning from their stories and represent them in a way which is interesting, meaningful and respectful. There is no easy resolution to these issues. However, I have taken comfort from Josselson (1996, p.70) who observes that 'I would worry most if I ever stopped worrying, stopped suffering for the disjunction that occurs when we try to tell an Other's story...it is with our anxiety, dread, guilt and shame that we honour our participants'.

3.10.2 Impact of participation

The benefits of participation in this study for individuals have been discussed earlier in this chapter (see Section 3.2.1). Yet it is important to also consider the potential negative impacts of participation. Doctoral study is demanding, and in discussing participants' work this sometimes led to emotive responses. I allowed participants time to discuss their concerns but did not enter into detailed discussions of specific issues, and ensured that I had details of services which I could refer them to for help (e.g. counselling services). Participants also revealed examples of negative practices in their department or institution, and I raised particular concerns regarding these practices with my supervisors.

3.10.3 Informed consent

The principle of informed consent is 'widely acknowledged to be at the core of ethical treatment of participants' (Smythe and Murray, 2000, p.313). Thus, information sheets and consent forms were used to facilitate informed consent. Both were submitted to the research ethics committee at Sheffield Hallam University, and ethical approval for the research was given (see Appendix 2). Information sheets and consent forms were discussed with participants at preliminary meetings before individuals had agreed to participate, in order to check understanding. However, there are limits to informed consent; participants cannot know exactly what they are consenting to when they have not yet participated (Josselson, 1996). This therefore supports the notion of consent as an ongoing negotiation; something I integrated into this research. Before each interview, as they were conducted some months apart, participants completed a consent form to confirm they consented to continue participating in this study.

3.10.4 Confidentiality and anonymity

Principles of confidentiality and anonymity — 'the means by which researchers protect their participants' rights to privacy' (Smythe and Murray, 2000, p.313) — were prioritised in this study. In our discussions before participants committed to participating, I assured them that their data would be treated confidentially and would be anonymised before publication. As part of informed consent, I made them aware that their data would be used in my thesis and future publications. In order to confirm that data handled by the external transcriber was kept confidential, I ensured that we had a signed confidentiality agreement.

One strategy for ensuring confidentiality was protected was through anonymising participants. Participants' institutions and names were replaced with pseudonyms, and individuals were offered the option to choose their own pseudonym, which most individuals did. I felt that this was empowering for participants, particularly in relation to international students, as it enabled them to choose culturally appropriate names, rather than imposing names upon them. Other identifying information, such as participants' ages, disciplines and institutions were also considered in order to maintain confidentiality. In discussing participants' ages, I have given a general indication rather than exact numbers.

Moreover, I have given a general description of their subject, rather than giving the specific discipline in which they study. Institutions are also not identified by name, and are given pseudonyms which still provide context of the institutions. The two institutions at which participants study are known as either Modern University or Redbrick University, and Elite University is used to describe another institution where some participants previously studied. It was also important to ensure that individuals such as supervisors, friends, colleagues and partners who participants discussed were not able to be identified within this research. As such, those individuals who participants mentioned by name were also given pseudonyms. I created a coding book for each participant in order to manage this process of anonymisation.

Despite the strategies discussed above, there are limits to the anonymity that has been able to be provided. Participants at the same institution have met each other in their university community, and discovered that they are participating in the same study.

Some participants work in the same shared office, and thus had the same realisation. This means that they would be likely to recognise each other in the write up, which has implications for anonymity. I have tried to address this by stressing to participants the importance of keeping confidential the identities of other participants. However, I accept that this has been an unavoidable consequence of the self-selecting recruitment strategy used.

In this chapter, I have provided a reflexive account of the research process, giving a transparent account of my methodological approach, and the research design. I have outlined the ontological and epistemological beliefs that informed the research, and discussed the feminist research principles underpinning this study. I have also considered the ethical issues encountered during the research. In the next four chapters, I discuss my interpretations of my data, beginning by exploring the ways in which participants envisaged the future in their letters to their future selves (Chapter 4), followed by a consideration of how participants' career aspirations shifted during the doctorate (Chapter 5). I then discuss how participants negotiated feelings of belonging to their academic communities in Chapter 6, and finally analyse how participants considered the possibility of taking on an academic identity in Chapter 7. However, before this, I disclose my own letter to my future self in order to illuminate how I envisaged the future from an early stage in my PhD.

Letter to my post-doctoral self

February 2015

As I write that title, I realise that in calling it so, I am assuming that I'll have successfully completed my PhD when I come back to reflect on this letter. That's a big assumption.

Yesterday was the first day I thought to myself, I'm not sure if I can actually do this. That seems a bit arrogant, I suppose, considering this for the first time in four months. We- my supervisors and I- were just discussing RF2 and the presentation I'll have to give in order to upgrade to PhD this summer. The ease with which my supervisors suggested that I open up the presentation to anyone who was interested enough to come along filled me with dread, I wondered why on earth I ever thought I was capable of doing that, standing up in front of all those people.

I digress. This is a letter to the imagined, future, Doctor Handforth- how strange it is to write that down, to see it in all its glorious potential. Rachel, if you've really done this, I know how much this means to you. It's the best thing you've ever done, and you know it. It means so much because before this you couldn't seem to find your place in the world, and whatever happens next I think you've found it, now.

I can't imagine the challenges you've had to face over the last three (please say it's just three, otherwise I'm really going to have to start saving soon) years, and how hard it has been. Your past self is naïve and full of hope, confident in her ability to produce interesting and worthwhile articles, collect data with skill and ease, whilst also maintaining a social life and a relationship.

I hope you're as proud of yourself as Mum and Dad are of you. I can only imagine their faces, Mum saying how clever her daughters are and how we've outdone both of them academically! But how could we not, when we had all the opportunities and privileges that they worked so hard for us to have?

I wonder what you'll do next. Maybe you'll have fallen out of love with academia. Maybe you'll be running for the hills and away from its demands of productivity, its intimidating teaching and its short-term contracts. I like to think that in studying the nature of academia over the last few months, I've come to appreciate some of the challenges that may lie ahead.

I hope you haven't run away, though. Somehow I feel as if academia is where I belong- that seeking out new ideas and knowledge is what I'm best suited to. But perhaps, like Jonathan who's in his final (and fourth) year of his PhD, you're now tired and jaded and disillusioned and just need to do something else, anything else.

Whatever you decide to do, I hope you're happy. I hope you appreciate the way that this has changed your life, the huge achievement that this is. I hope you're not too absorbed in the academic bubble, that you still have a life and are fortunate enough to still have good friends and a loving partner.

Good luck for whatever comes next, Rachel. I have a feeling you're going to need it.

Chapter 4

Imagined Futures: Letters to our future selves

Wherever one positions oneself in that continuum — the imagined now, some imagined past, or some imagined future — each point has a past experiential base and leads to an experiential future. (Clandinin and Connelly, 2000, p.2)

4.1 Introduction

This chapter examines how the women doctoral students in this study imagined various possible futures at the beginning of their doctoral studies, in order to contrast these fantasy futures with participants' actual experiences of the doctorate, which I discuss in Chapters 5-7. Shortly after starting their PhD, participants were asked to write letters to their future self who had finished the PhD. This gave them free rein to fantasise about future possibilities. In their letters, participants formed a range of imagined possible selves, representing various futures which related to both their careers and personal lives. As well as depicting future-oriented fantasies, the letters also give some insights into their actual lived experiences, as they were written in the first few months of their studies. Using Clandinin and Connelly's (2000) reflection above I focus on Freija, Harriet and Pepper's letters, as they offer a range of perspectives on the imagined doctoral experience. Freija's letter focuses on her desire to travel and how this shapes her career aspirations; Harriet's letter emphasises her reluctance to follow the trajectory she feels is expected of her as a scientist; and Pepper's letter depicts the mental health difficulties she imagines experiencing during the PhD. I analyse how participants' letters drew on multiple fantasy possible selves, and I explore the salience of these possible selves – how easily they were brought to mind – as well as the extent to which they were detailed, or elaborated.

I begin the chapter by giving a brief overview of all participants' letters, indicating the possible selves identified in each letter (see Table 3). The letters were analysed according to three concepts from possible selves literature: desired and fantasy selves;

ought selves, and feared and nightmare selves (Bybee and Wells, 2002). These concepts also provide the structure for the analysis of Freija, Harriet and Pepper's letters. I draw links between these letters, particularly in relation to the career-possible selves which they imagined, allowing me to address research question one, which explores the factors shaping participants' aspirations. Their letters were therefore read through a number of theoretical lenses derived from possible selves theory. In addition, prior to this chapter, I introduced my own letter to my future self in order to contextualise the following analysis, which illuminates aspects of participants' letters which resonated with my own experiences and imaginings. My position as a woman doctoral student, and having written my own letter to my future self, mean that these subjectivities have influenced my analysis.

4.2 Identifying possible selves

In Table 3 below I outline my findings from a thematic analysis of participants' letters, undertaken using three concepts from possible selves literature to frame the analysis. Though Bybee and Wells (2002) conflate some categories of possible selves, equating desired and fantasy selves, and feared with nightmare selves, I have made some distinctions between these selves in my analysis. Firstly, I distinguish between the desired self, or the 'self one would like to become' (Clegg and Stevenson, 2010, p.9) and the fantasy self – 'the self as one would like to be if anything were possible' (Bybee and Wells, 2002, p.257), arguing that desired selves may have a strong basis in reality, whereas fantasy selves do not. Occasionally individuals' possible selves may be simultaneously desired and fantasy, for example in the case of Freija and Harriet's traveller possible self. They imagine these selves as if anything were possible, but in elaborating these selves they also develop specific goals which they consider to be achievable, such as Freija's plan to become a visiting scholar in Canada. I also make a distinction between feared and nightmare selves, as I feel that some of the possible selves outlined particularly in Pepper's letter, reflect concerns which go beyond usual feared selves, and thus constitute nightmare selves. Table 3 shows the range of possible selves which participants imagined within these categories, allowing me to elicit commonalities and differences from across participants' possible selves. I undertake a detailed analysis of three letters in the subsequent sections of the chapter.

Table 3 Overview of participants' possible selves based on letters to future selves

Participant	Possible selves		
	Desired/Fantasy[4]	**Ought**	**Feared/Nightmare** [5]
Freija	- Traveller self* - Married self - Pet owner self - Academic self, specifically post-doc - Cared-for, happy self - Self who is living on a croft in Scotland*		- Self who has struggled to complete the PhD - Self who may have had a breakdown - Self who will prioritise career over travelling
Harriet	- Traveller self* - Self whose decision to do a PhD has proved positive and has enjoyed it - Self who has not been influenced by others	- Doctoral student self - Academic scientist self, specifically post-doc - Self who is grateful for the support of friends and family	- Intellectually fatigued self - Self who has struggled to complete the PhD - Self who has failed to travel
Pepper	- Self who has managed to overcome her anxiety - Self who has grown in confidence as a result of completing the PhD	- Self who should be able to cope with the demands of the PhD	- Self who has failed to complete the PhD* - Self who continues to experience anxiety*
Antonia	- Self who is well - Self who will help other international students - Academic self, specifically research	- Self who is grateful to her colleagues for their help	
Emily	- Self who has made it as a successful athlete* - Self whose PhD is now a distant memory	- Self who has learned a lot and developed as a person	- Self who has failed to be a successful athlete
Sally	- Self who has been able to make a positive impact through the PhD - Self who has developed future plans		- Exhausted self who is sick of the PhD

[4] The distinction between desired and fantasy selves is fully explained in section 4.2. For the purposes of this table, fantasy selves are made distinct by the use of a *
[5] The distinction between feared and nightmarey selves is fully explained in section 4.2. Nightmare selves are made distinct by the use of a *

Jessie	- Self who is well - Self who is still keeping up her hobbies - Self who is able to make an impact in her field through her research	- Self who has built up a good network during the PhD to facilitate future career options	- Self who has struggled with the PhD
Liz	- Self who is well - Self who has managed to cope with supervision sessions		- Self who may not have been able to complete the PhD* - Self whose marriage may not have survived her doing the PhD*
Bella	- Self who has enjoyed the PhD - Self who has grown in confidence - Academic self, specifically a lecturer or post-doc		- Self who has struggled with anxiety during PhD
Chloe	- Self who is well - Academic self, specifically post-doc - Pet owner self	- Self who has been privileged to do a PhD and should enjoy it - Self who has developed future plans	- Self who has experienced stress during the PhD - Self who has broken up with her partner
Martina	- Self who is more confident - Self who has developed career plans - Academic self - Self who works for a feminist NGO	- Self who contributes to feminist activism	- Self who is intellectually and emotionally fatigued
Eleanor	- Academic self - Self who is positive about the future		- Self who is sick of the PhD
Jane	- Self whose decision to do a PhD has proved positive - Academic self, specifically post-doc - Happy and fulfilled self	- Self who is unable to give up the PhD - Successful academic self who has overcome challenges - Self who has kept in touch with friends and family	- Self who is intellectually fatigued - Self whose relationship has suffered because of the PhD

Though this table gives a useful indication of the types of possible selves which participants imagined in considering their futures, it does not illuminate how far these selves were salient, or elaborated, and therefore does not provide an insight into how motivating these possible selves were for individuals. I address the salience and elaboration of Freija, Harriet and Pepper's possible selves in the subsequent sections.

4.3 Freija's letter

In this section I draw on Freija's letter, as it best exemplifies how participants elaborated desired selves, which reflect the selves 'that we would very much like to become' (Markus and Nurius, 1986, p.954).

Figure 1- Freija's letter to her future self- March 2015

All being well, you should be finishing your thesis and preparing to submit. If you've got that far, then WELL DONE! This means that you figured out what you wanted to do, and how to do it (and where to do it)… and you did it! That's a pretty huge deal considering how confused you still where whilst writing this in February 2015. You still didn't have a clue back then and you were waiting for your supervisors to get back to you about your first confirmation review draft. Let's hope you got past that hurdle – for all we know they might not have let you through to second year. I really hope that's not the case! If you did make it through, I hope you've had fun and haven't had some kind of breakdown in the middle. How are you doing? Everything okay?

I wonder where you decided to carry out your fieldwork. I hope you didn't just stay in Sheffield. Not that there's anything wrong with Sheffield, but you had bigger plans! Did you manage to pull off a comparative study in Germany? Maybe even somewhere else in Europe or further afield?

Did you get married during your PhD? I know the plan was 2020 (still a good few years away!), but maybe you decided to have a cheap and cheerful wedding on the beach in Scotland to make filling in Visa forms for Canada easier ;)

Figure 1- Freija's letter to her future self- March 2015 (continued)

Talking of Canada, I really hope you made it to Vancouver as a visiting scholar during your second or third year! I'll be so disappointed if you didn't because you really wanted to go (unless you went somewhere else? That's the only excuse I'll accept). Maybe you're still there right now? That would be cool.

I'm about 99% sure that you'll have a dog by now. You've been going on about it for long enough. A canine PhD pal is definitely a good idea. If you still don't have one, then go get one now. Yes, right now! You'll need a constant supply of cuddles whilst writing up and preparing for your viva.

So, what's next? I guess the logical next step is to start the hunt for post-doc positions. Is it as difficult to find a job as everyone said back in 2014 when you started? It's probably even harder now. I hope you don't just take the first job you're offered. Go where you want to go. New Zealand or Australia or Italy! Please don't end up somewhere rubbish.

Maybe you won't jump straight into a post-doc. I'll be amazed if you've saved up enough money to take a year out and go traveling (well done if you did!). Maybe you'll head into something totally different – photography or freelance research?

Whatever you do once all of this is over, make sure it's something that makes you happy. Good luck with the final bit of the PhD – you're so close!

Freija

P.S. If you're living in a croft by a loch in the Highlands with goats and ponies and chickens then you've totally made it – nice one!

4.3.1 Desired and fantasy selves

In this section I draw on the concepts of both desired and fantasy selves to gain insight into how Freija envisages the future. I argue that in some cases, these selves may be distinct. For example, Freija imagines a desired self who has "had fun" during her studies. However, other possible selves may be determined to be both desired and fantasy. Freija envisages a traveller possible self who has undertaken fieldwork abroad, which she would like to become: "did you manage to pull off a comparative study in Germany? Maybe even somewhere else in Europe or further afield?". Yet she also fantasises about this traveller self, considering anything to be possible, including living in a number of different countries: "Go where you want to go. New Zealand or Australia or Italy!". Freija elaborates this traveller self, who has been able to go to Canada during her PhD to study as a visiting scholar. The term elaborate is used in possible selves literature to describe how individuals narrate a future in a way which involves them planning towards this future (see Oyserman, Bybee, Terry and Hart-Johnson, 2004; Plimmer and Schmidt, 2007), and therefore I have used this term to highlight where participants' possible selves are imagined in a way which involves detailed planning. This can be observed within Freija's letter, when she considers that she might have stayed in the country where she intends to study as a visiting scholar: "Maybe you're still there right now? That would be cool". This fantasy self is easily imagined, and detailed. Since salient possible selves motivate individuals to undertake particular actions which will enable them to achieve this self (Strauss *et al*., 2012), the ease with which Freija describes this traveller fantasy self suggests that this imagined future may motivate her behaviour.

Individuals may have fantasy possible selves relating to any aspect of life, for example to their health, lifestyle or career (Hortmanshof and Zimitat, 2003). Yet these are not necessarily distinct, and particularly for Freija, her career-possible or future work selves (Strauss *et al.*, 2012) are connected to more personal ambitions, and she considers many different options to be possible for her to achieve both during and after the PhD. For example, she constructs an imagined future where she has chosen not to "jump straight" into a post-doc. She elaborates this fantasy possible self, who has not taken "the first job you're offered" but rather has followed her desire to travel: "go where you want to go. New Zealand or Australia or Italy!". This level of elaboration

suggests that this traveller fantasy self is actually a desired self and thus could be highly motivating (Chalk, Meara, Day and Davis, 2005; Stevenson and Clegg, 2011).

The fantasy self may be constituted of 'playful daydreams' or 'idealistic, grandiose strivings' (Bybee and Wells, 2002, p.261). An example of playfulness is present in how Freija describes another fantasy self, that of a pet owner: "A canine PhD pal is definitely a good idea. If you still don't have one, then go get one now. Yes, right now! You'll need a constant supply of cuddles whilst writing up and preparing for your viva". Further, the additional career-possible selves that she briefly refers to in her letter can also be viewed as 'playful daydreams' (*ibid*, p.261); Freija envisages alternative futures where instead of pursuing an academic career she has done "something totally different" like a career in "photography or freelance research". Though these possible selves appear less salient and elaborated than her post-doc self, it is clear that Freija is able to imagine herself in other careers. In contrast to these fantasy selves which reflect daydreams, Freija's traveller possible self instead represents an 'idealistic, grandiose striving' (*ibid*, p.261). She continues to elaborate this possible self throughout her letter, fantasising that she has "saved up enough money to take a year out and go travelling (well done if you did!)". This fantasy is posed as a possibility — perhaps not a likely one — but writing this letter allows Freija to imagine various possible futures, where financial constraints may not limit her options.

Attending to Freija's fantasy possible selves illuminates how her personal life influences her academic ambitions. In her letter, she considers that she may decide to get married sooner than she originally planned, perhaps during the PhD rather than afterwards. Again, this potential decision is linked to her desire to live abroad: "Maybe you decided to have a cheap and cheerful wedding on the beach in Scotland to make filling in Visa forms for Canada easier". Thus, though Freija's possible selves are intertwined, many of them relate more to her personal life than to specific career aspirations. For example, she describes a particular fantasy self which can be viewed as her 'ideal self-image' (Bybee and Wells, 2002, p.257), writing that "if you're living in a croft by a loch in the Highlands with goats and ponies and chickens then you've totally made it".

Analysing Freija's letter has produced findings which counter the traditional view of doctoral students, outlined in Chapters 1 and 2, which positions students as academic apprentices (see Park, 2005). This view of PhD students simply as career-driven (see Ali and Graham, 2000; Raddon and Sung, 2009; Wellington, 2013) can mean that the doctorate is perceived as purely a career-motivated exercise; for example, in their guide for PhD students Matthiesen and Binder (2009, p.83) describe the doctorate as 'preparing you for a career in your chosen profession'. Yet Freija does not easily fit this position. Whilst she does construct career-possible selves, these are not the focus of her letter. Though she mentions wanting to get a post-doctoral job, her priority is not becoming an academic, but working somewhere which means she can travel. Further, though she has academic aspirations, examining another of her desired possible selves, a content self, reveals how she prioritises personal happiness above any specific career goal: "whatever you do once all of this is over, make sure it's something that makes you happy". Drawing attention to the importance of the personal in Freija's letter challenges the ways in which institutional and governmental policies conceptualise PhD students as purely career-motivated.

4.3.2 Tensions between fantasy and feared selves

Despite Freija's generally optimistic view of the future, it is possible to identify feared or undesired selves (Bybee and Wells, 2002, p.257), which conflict with her more positive fantasy selves. Moments of doubt and fearfulness about the future are present throughout, and trouble some of the fantasy selves which she imagines. Concerns about particular aspects of doctoral study seep through the enthusiastic, hopeful narrative that Freija constructs in her letter, and as well as considering the positive possibilities that lie ahead, she also considers the worst possible outcomes. Attending to individuals' feared or undesired selves provides 'insight into individuals' behaviours and thought processes' (Bybee and Wells, 2002, p.266). In her letter it is possible to identify tensions between Freija's imagined positive possible self of a successful PhD student who has "figured out what you wanted to do, and how to do it", and her feared possible self who has struggled to, or even been unable to, complete the PhD. This feared self is more elaborated than its more positive counterpart. Freija describes her concerns about various stages of the PhD process, perceiving the upcoming confirmation review at the end of her first year as a "hurdle" which she is

afraid she may not be able to overcome: "they might not have let you through to second year".

Freija expresses doubts about her ability to successfully complete both her confirmation – a key milestone which all students must successfully overcome early on in their studies in order to progress with their doctoral research – and the submission of her thesis. This feared self is salient and elaborated: the first two lines of her letter illuminate the presence of her doubts even at an early stage of her studies. In relation to submitting her thesis, she questions "if you've got that far", and wonders "if you did make it through" the confirmation review. Freija also constructs a feared self relating to the emotional impact of the PhD, considering the possibility that she might have "had some kind of breakdown in the middle". It is striking that these fears are already making themselves known, despite Freija being at such an early stage in her studies. It seems these fears of failure are linked to her concern about the impending confirmation review. As well as illuminating how early on individuals may question their ability to successfully complete the doctorate, this finding also supports the argument that different stages of the PhD pose unique challenges to students (Grover, 2007).

A further tension relates to Freija's fantasy traveller self. Alongside this possible self she also imagines a feared self of someone who has failed to fulfil this personal goal. She admits that she will be "so disappointed" if she has not been able to go to Canada to study as a visiting scholar, which she "really hope[d]" to do during her PhD. Freija elaborates this feared self, detailing a possible future where she has compromised this desire to travel in order to take up employment. This negative possible self is both salient and well elaborated; she describes how difficult it is to find a post-doctoral position in 2014, and acknowledges that "it’s probably even harder now". She is concerned that this will mean that she may take the first academic job she is offered after finishing the PhD, and therefore "end up somewhere rubbish", rather than a country where she really wants to live. These tensions illuminate how Freija sees both her best and worst case scenarios as possible for after the PhD, but also highlight how she is keen to impress her present priorities on her future self. These priorities are not strictly career-related, and are more personal. Thus the futures which Freija imagines

do not fit neatly into either categories of the career and the personal, but are bound up together.

4.4 Harriet's letter

In this section I discuss the letter written by Harriet who, like Freija, also imagines more than one possible self, but experiences significant conflict in imagining these selves, and refers to ought selves (Bybee and Wells, 2002, p.257) within her letter.

Figure 2- Harriet's letter to her future self- March 2015

Hello future me!

I hope you aren't as stressed as everyone said David was before his thesis submission, it's not worth getting fat for! If you have made it that far, past-you is very proud as you weren't even sure a PhD was the right thing to do at the time. Currently, I am still not sure if a career is a researcher is actually what I want or if I am doing a PhD because it seems like the next natural step. I feel like I have conformed to all of the traditional educational steps so far, but I really hope that you feel like a PhD is something you wanted to do because you enjoyed it and it was worth all of the hard times and stress that I'm sure there is to come.

I don't know what career decisions you may have made by then as I have no clue about the future now, but I expect that you haven't been pushed in to anything and will be doing something interesting whatever it may be! Don't forget about how much you wanted to take some time off from work to travel the world. I reckon you haven't done any real planning but have booked a flight somewhere and will see what happens.

I hope you are still as interested in finding the answer to biological questions as I am now, and you haven't lost your spirit and inquisitiveness! I'm sure you feel lucky to have got this far and were able to get another degree out of doing something you love!

Figure 2- Harriet's letter to her future self- March 2015 (continued)

I don't know what career decisions you may have made by then as I have no clue about the future now, but I expect that you haven't been pushed in to anything and will be doing something interesting whatever it may be! Don't forget about how much you wanted to take some time off from work to travel the world. I reckon you haven't done any real planning but have booked a flight somewhere and will see what happens. I don't know how hard it is to take time out and then come back in at a post-doc level, but I hope any difficulties that are likely to come out of a year out will not put you off doing it. You haven't had a break from education since you started school and you need it! I know you will hugely regret not travelling while you are young as you will probably want to have a family one day which will make it even more difficult. JUST DO IT!!! SEE THE WORLD! Once you have a PhD you have it for life!

I also hope your personal life is okay, and you still keep in contact with your undergrad and post-grad friends. Try not to let any partner you may have influence your decision to travel or go straight into a job, it's not worth giving up an experience you always thought you'd have for someone else.

Still, keep an open mind about what options you have and have faith in funding bodies and fellowships that someone will fund you if you want to keep doing research. Things are getting better for returners so you will be fine!

Make sure you thank your family and friends for being so supportive, even though you probably feel quite isolated at the moment, you didn't do this by yourself. I'm sure everyone in the lab will want to help so make sure you ask them if you need anything!

Keep having fun!

Harriet

4.4.1 Ought selves

Ought selves refer to those selves which individuals feel a duty or obligation to embody (Plimmer and Schmidt, 2007). They are shaped by social influences, reflecting what others believe individuals should become (Markus and Nurius, 1986). These social influences may stem from the expectations of individuals' close friends, family or colleagues, or from wider societal norms. I use the concept of 'ought' selves (Bybee and Wells, 2002) to gain insight into Harriet's struggle with what she feels is expected of her and her personal desires for the future.

Ought selves represent 'the self one should be and contains elements of conscience, role demands and duties to others' (Bybee and Wells, 2002, p.260). Harriet positions her present doctoral self as an ought self, critiquing her motivations to undertake a doctorate: "I feel like I have conformed to all of the traditional educational steps so far". In doing so, she indicates that she has responded to the expectations of others in embodying this ought self (Bybee and Wells, 2002), and questions the desirability of fully achieving this possible self: "I am still not sure if a career is a researcher is actually what I want or if I am doing a PhD because it seems like the next natural step". Doctoral study has traditionally been viewed as the start of an academic career (Park, 2005), and it is worth noting that in deciding to do a PhD, Harriet feels she has already chosen a particular path. Harriet's ought doctoral self is limited in its salience; though she can easily bring it to mind, this self is not clearly defined. Further, she is conflicted about her perceptions of this ought self. Harriet acknowledges that she was not "sure the PhD was the right thing to do", but later in her letter reflects that: "I really hope that you feel like a PhD is something you wanted to do because you enjoyed it". Thus it is possible to identify how Harriet's ought doctoral self is shaped by her own conscience as well as by social expectations (Bybee and Wells, 2002).

4.4.2 Conflict between ought and fantasy selves

There is considerable tension between Harriet's ought career-possible self and her fantasy traveller self. The main ought self which can be identified in her letter relates to her post-PhD career decisions. Harriet imagines an ought self of a post-doctoral researcher, though this is not very clearly elaborated or salient, suggesting that this self is unlikely to be motivating (Plimmer and Schmidt, 2007; Strauss *et al*., 2012).

Ought selves 'concern others' expectations (real or imagined) of who we ought to be' (Plimmer and Schmidt, 2007, p.102). Despite her uncertainty about the future, Harriet is keen to ensure that she will resist others' expectations of her in relation to her career: "I expect that you haven't been pushed in to anything". By asserting this, Harriet positions her future self as strong and resolute, able to withstand pressure from others. Though it is largely implicit within her letter, in later interviews it becomes clear that Harriet is responding to the pressure she feels from her senior colleagues to apply for post-doctoral positions after finishing the PhD. Thus Harriet's hope that she has not been "pushed into anything" is manifested as a refutation of this ought self. It is striking that just a few months into her doctorate, she anticipates that others will have particular expectations of her in relation to her future career, and that it is likely that people will try and "push" her to choose a certain option. However, Harriet does not reject the ought self of a post-doctoral researcher altogether, later considering the possibility that she would return to science and pursue at the "post-doc level" after taking "some time off work to travel the world".

This traveller self represents Harriet's desired and fantasy self. Desired selves can function as 'incentives for future behaviour' (Markus and Nurius, 1986, p.955). In her letter, Harriet appeals to her future self to prioritise travelling rather than continuing with a career in academic science: "you haven't had a break from education since you started school and you need it!". Harriet elaborates this desired self, imagining this desired self having undertaken particular actions: "I reckon you haven't done any real planning but have booked a flight somewhere". This desired self becomes fantasy in the way in which she envisages this possible self with no limitations, using highly emotive, exclamatory language and capital letters which stress the personal significance of this fantasy self: "JUST DO IT!!! SEE THE WORLD!". This salient and elaborated traveller possible self motivates her to resist her ought self who would pursue a job straight after the PhD. Yet there is clearly significant tension between Harriet's ought self of a post-doctoral researcher and her fantasy traveller self. Disparity between individuals' ought and fantasy possible selves has been linked to poor wellbeing and anxiety disorders (Bybee and Wells, 2002). The disparity between her fantasy and ought selves leads Harriet to imagine a feared self, who will compromise her desire to travel in favour of embodying her scientist career-possible

self, in response to the challenges of obtaining a post-doctoral position after a career break: "I don't know how hard it is to take time out and then come back in at post-doc level, but I hope any difficulties that are likely to come out of a year out will not put you off doing it".

This tension between her possible selves leads Harriet to engage in persuasion within her letter, in order to ensure that she will achieve her fantasy possible self and avoid embodying her ought post-doctoral self. She does so through reassurance, aiming to strengthen her resolve by asserting a positive view of long-term career possibilities: "keep an open mind about what options you have…have faith…that someone will fund you if you want to keep doing research". Harriet elaborates a positive future, indicating that she feels that having the doctorate will generate career options: "Once you have a PhD you have it for life!". She is almost relentlessly positive in considering the future career prospects in her discipline: "things are getting better for returners so you will be fine!". Further, Harriet tries to convince her future self to prioritise her fantasy of travelling by maintaining that after the PhD is the best time to do so: "I know you will hugely regret not travelling while you are young as you will probably want to have a family one day which will make it even more difficult". It is significant that Harriet already imagines that her possibilities for travelling in the future will be limited as she is likely to have children. Her considerations of family circumstances in making future plans are gendered; she assumes that having a family will prevent her from achieving her other goals. Women are, indeed, more likely than men to consider family within their career plans (see Mason *et al*., 2009; Wellcome Trust, 2013), and in imagining the future are more likely to prioritise domestic life over career goals (Brown and Diekman, 2010).

4.5 Pepper's letter

Figure 3- Pepper's letter to her future self- March 2015

I think it'll be pretty funny looking back at this document, having finally gone through the PhD and obtained the qualification, when you consider how horribly afraid you always felt that you weren't doing enough or that you'd never get here.

Figure 3- Pepper's letter to her future self- March 2015

Even as I write this, I honestly wonder if I'll ever reach a point where I feel comfortable in what I'm doing – or that I even know what I'm doing, or at the least feel like I know what I'm doing. And I wonder if I will see the day where that qualification is mine, that all this research and eventual testing will have paid off.

Right now, I'm mostly terrified that I won't find anything new and that this excursion is pointless. I wonder if I made a mistake picking this course in life over industry, I'm paranoid that the people around me think I'm stupid (particularly the ones who I work for, even when I can see the patience and understanding in Mark especially about how difficult this is), the idea that I won't come up with anything good or above standard makes me lose sleep. Which all sounds pretty dramatic when you read it, go strong independent female who did a bloody MEng undergraduate and should be more than fine right now! That was sarcasm, by the way.

Above all the anxiety and the issues it causes though, I know you are always confident. I know often anxiety overrides so much and can be so crippling that you don't want to get out of bed, that more often than not you choose to live in a world that exists between headphones - a limitless place with all sorts of possibilities – and I wonder now as I have done for years if that world will still be the comfort and inspiration it is to you at 25/26 that it has been since childhood. I hope you can read this and say that finally the confidence you know you have has taken its rightful place and you lead your live with it at the forefront of your mind. You know you're strong, a good and decent person, intelligent and more than capable; I hope that finishing this PhD has cemented those and that finally you can step forward into life knowing it every day, with anxiety taking a backseat hundreds of rows back.

When the day comes that you finish this research, and you look both at this and the diary which has been kept, I know that every frustration, every panic attack and tear and sleepless night, will have absolutely been worth it.

4.5.1 Feared and nightmare selves

Though possible selves may represent 'the ideal selves that we would very much like to become', they can also portray 'the selves we are afraid of becoming' (Markus and Nurius, 1986, p.954). Thus in this section I draw on the concepts of feared selves, which represent 'the self as one does not want to be' (Bybee and Wells, 2002, p.257), as well as 'nightmare' selves, which I argue are distinct from feared selves in their depth of emotive elaboration, and which go beyond individuals' usual fears. I discuss these selves primarily in relation to Pepper's letter, who out of all thirteen participants elaborates the most nightmare selves. Other participants including Freija and Harriet, imagined feared selves, but I argue that Pepper's feared selves constitute 'nightmare selves' (*ibid,* p.257) in that they are considerably more salient and elaborated.

Nightmare possible selves 'may arouse considerable anxiety, stress, and dread, resulting in poor mental health' (Bybee and Wells, 2002, p.266). A number of nightmare selves can be elicited from Pepper's letter. These selves are influenced by her struggles with her mental health, particularly in relation to anxiety. Literature highlights the prevalence of mental health issues amongst doctoral students: 'in terms of mental health problems, PhD students [are] consistently more affected… than the highly educated general population, highly educated employees and higher education students' (Levecque *et al*., 2017, p.874). Pepper's experience reflects these findings; her fears are the focus of her letter, and she does not imagine a future beyond the end of the doctorate. She does not construct any career-possible selves in her letter, and is unable to do so because of her struggles with anxiety, and difficult experience of the doctorate thus far. The end of the doctorate is as far in the future as she can envisage, and this possible self of a successful PhD student is implied rather than salient. She imagines having "gone through the PhD and obtained the qualification" but in the next sentence, questions "if I will see the day where that qualification is mine". The nightmare selves that Pepper elaborates are complex, and relate to a number of fears, including the fear of failing to successfully complete the doctorate, as well concerns about her mental wellbeing. I explore these nightmare selves in detail in the following sections, and draw on examples from Harriet and Freija's letters in order to provide points of comparison, showing how their related selves are feared rather than constituting nightmare selves.

4.5.2 Fear of failure to complete the doctorate

The nightmare self 'may serve as a repository for unwanted social identities' (Bybee and Wells, 2002, p.266). This is reflected in Pepper's letter; she admits to herself that she is "horribly afraid" that she will not be capable of successfully completing the PhD. This possible self is salient, and elaborated. One of the key requirements of doctoral research is an original contribution to knowledge (Park, 2005; Wellington, 2013), but Pepper describes being "terrified that I won't find anything new and that this excursion is pointless". Like Pepper, in her letter Harriet also questions her decision to do a doctorate, but she does also construct a positive possible self in relation to this decision, considering that the PhD may prove to be a good choice. Pepper does not develop a similar positive possible self. Instead, Pepper elaborates this nightmare self further, acknowledging that her fear that she will not be able to "come up with anything good or above standard" keeps her awake at night. Pepper's construction of this self, in the context of her existing struggles with anxiety, echoes research which has drawn attention to the impact of poor mental wellbeing on individual's abilities to complete the doctorate (Hyun *et al*., 2007).

Despite not facing the same difficulties as Pepper with their mental health, it is significant that Harriet and Freija express similar concerns, also imagining feared possible selves who have failed to complete the PhD. Though they also imagine a more positive and successful doctoral self who has succeeded, this feared possible self is salient in both of their letters. For example, for Harriet, the possibility that she has not been able to make it to the point of submitting her thesis is almost the first thing she writes in her letter: "if you have made it that far, past-you will be very proud". Further, doctoral students can experience intellectual fatigue particularly towards the end of the PhD (Phillips and Pugh, 2015), and Harriet is concerned that even if she is able to complete the doctorate, the process will diminish her enjoyment of her subject: "I hope you are still as interested in finding the answer to biological questions as I am now, and you haven't lost your spirit and inquisitiveness!". The feared, intellectually fatigued future self which Harriet alludes to indicates the passion she has for her subject, and her emotional investment in the PhD that she has embarked upon.

4.5.3 Fears about future wellbeing

Examining participants' letters, written just a few months into studying for their PhD, reveals that they imagine that doctoral study will have a negative impact on their physical and mental wellbeing. This is particularly significant in the context of recent efforts by the higher education sector to address doctoral students' wellbeing (see Havergal, 2017), and research which indicates that wellbeing amongst women doctoral students is lower than their male counterparts (Hargreaves *et al*., 2017). Participants' anticipation of emotional upheaval and distress during the PhD manifested itself largely in embodied symptoms such as sleeplessness, physical exhaustion and pain. These manifestations of feared possible selves can be found in all three letters, but are most striking within Pepper's letter.

Doctoral practices are 'often conceived as disembodied' (Hopwood and Paulson, 2012, p.670). Yet participants' feared possible selves become embodied through a process of imagination and inscription within their letters. For example, Pepper's letter illustrates that doctoral study is anything but disembodied; her anxiety "can be so crippling that you don't want to get out of bed". Studies have highlighted the high levels of mental health issues amongst doctoral students (see Hyun *et al*., 2007; Levecque *et al*., 2017). As discussed previously, Pepper focuses more on her present experiences than the future, and writes largely in the present tense. She tries to reassure herself by writing from a place of future confidence, referencing an implied positive possible self of a successful doctoral student: "when the day comes that you finish this research, and you look both at this and the diary which has been kept, I know that every frustration, every panic attack and tear and sleepless night, will have absolutely been worth it". The emotive language she uses draws attention to the significant emotional investment that Pepper has made in this qualification, and the nature of the struggles that she has faced in the early stages of the PhD. Pepper expects the PhD to contribute to her anxiety, supporting the view of doctoral study as something which must be 'survived' (see Karp, 2009; Leonard, 2001; von Weitershausen, 2014). Her letter illuminates the ways in which the doctorate can be seen as a highly emotive and embodied experience, countering the view of the doctoral experience as a purely intellectual endeavour.

Though Pepper's letter is more overtly focused on embodied symptoms of emotional distress, these negative bodily experiences are also evident in both Freija and Harriet's letters, though to a lesser degree. For example, Freija anticipates that she may have "some kind of breakdown" during her PhD, and describes expecting to "need a constant supply of cuddles". Further, Harriet expects to become "stressed" when submitting, and has concerns about her future physical wellbeing: "it's not worth getting fat for!". Thus, the imagination of a feared possible self who has experienced emotional upheaval during the PhD which has led to unwanted physical and emotional changes was common across a significant number of participants. These findings support the argument that 'studying for and living through a doctorate is an inescapably bodily experience' (Hopwood and Paulson, 2012, p.667).

Some of the possible selves that participants imagined in their letters were highly personal, and embodied. This echoes feminist research which argues that bodies are at the centre of lived experience, and that we make sense of the world around us as 'embodied subjects' (Grosz, 1994, p.90). Further, researchers have pointed to the existence of gendered, raced and able-bodied assumptions around the doctoral experience (McCulloch and Stokes, 2008) and argued that discussions of doctoral study 'implicitly assume a certain kind of (white, male) body' (Hopwood and Paulson, 2012, p.670). Drawing on the work of feminist researchers who have highlighted the entrenched masculinity of higher education institutions (Acker 1980; Bagilhole, 2007; Bagilhole and White 2013; Cotterill *et al*., 2007), it is possible to suggest that Pepper's physical symptoms of anxiety position her as 'other' within the academy, which assumes able-bodied, white masculinity as the norm.

4.5.4 Feared selves as embodied and inscribed

Just as some possible selves were embodied, some were also inscribed. Participants' possible selves are instantiated in physical documents – their letters to their future selves – which individuals often imagined themselves using in the future as a tool for reflection. The agentic qualities of these future selves were acknowledged by all three participants, who all referred to their future selves re-reading their letter, and having a particular emotional reaction to it. For example, Pepper anticipates that the letter she is writing will be proof to her future self of the changes she has undergone during the

doctorate. She visualises herself being able to read over her letter when she has successfully completed the doctorate, in order to understand the change that she has experienced as a result of doing the PhD. She expects the doctorate to be transformative, constructing a possible self in her letter who feels validated as a result of successfully completing the doctorate: "I think it'll be pretty funny looking back at this document, having finally gone through the PhD and obtained the qualification, when you consider how horribly afraid you always felt that you weren't doing enough or that you'd never get here".

The way in which participants constructed agentic possible selves who reflected on the past through re-reading their letters, is worthy of further analysis. I have already argued that participants' possible selves are embodied, but here I extend this argument. Qualitative researchers have argued that the interview can be a therapeutic encounter (Birch and Miller, 2000; Dickson-Swift, James, Kippen and Liamputtong, 2007). Similarly, I argue that the act of writing these letters is therapeutic for participants, evidenced by the ways in which they describe using them as future reflective tools. Understanding letters to future selves as therapeutic documents allows a unique insight into how participants view the doctorate, as they position individuals' aspirations within a particular, time-specific context.

4.6 Across the letters

In this section, I draw together my analysis of the previous two sections and reflect on the analysis outlined in Table 3 in order to discuss some of the key findings from across all of the letters written by participants.

4.6.1 Differences in career-possible selves

In analysing participants' letters, it became clear that a range of factors influenced how they imagined career-possible selves. For example, as discussed in section 4.3, Freija's career-possible selves are connected to her personal goals. Though she aspires to an academic career, she stresses the importance of doing something that she will enjoy. Having had a career in higher education administration prior to starting the PhD, Freija is able to imagine other career-possible selves which might generate this fulfilment. In contrast, Harriet views her fantasy traveller possible self and her academic scientist

ought self as dichotomous, and only imagines one career-possible self. This may be because she started a doctorate straight after her first degree, and has not worked outside of academia. She therefore envisages a future which reflects her past experiences, which are limited to the sphere of higher education. As such she appears to view the PhD simply as an 'initiation rite' (Rugg and Petre, 2010, p.2) to enter academia. Thus, life stages influenced participants' imagined futures. Reflecting on Table 3 (see pp.91-92), whilst most participants who aspired to academic careers only constructed one career-possible self within their letters, Freija, Chloe and Martina constructed other career-possible selves alongside imagined academic futures. All of them had returned to study after working in a professional capacity (pp.22-23), supporting the argument that participants who study for a PhD later in life are more open to careers outside of academia, or 'alt-ac' careers (see Nowviskie, 2010) than younger participants.

In addition, there were also disciplinary differences between the selves that individuals articulated. I draw on the overview of all participants' possible selves (see Table 3) in order to further elucidate this argument. The majority – eight out of thirteen — indicated that they had academic aspirations, constructing an academic career-possible self within their letters. This observation mirrors the findings of large-scale studies such as the Higher Education Academy's (2015) report, which found that nearly two thirds of postgraduate students envisaged a career in academia after completing their PhD. However whilst research shows that doctoral students in the humanities and social sciences are more likely to want an academic career than those in STEMM subjects (Higher Education Academy, 2015; Royal Society, 2014), out of the six participants from STEMM disciplines, four — Harriet, Jane, Bella and Antonia — aspired to academic careers, imagining academic career-possible selves within their letters. This finding thus troubles the idea that STEMM PhD students often prefer to pursue careers outside of academia. However, other research has drawn attention to the gendered nature of post-PhD career choices for doctoral students in STEMM disciplines, indicating that the experience of doing a doctorate can discourage women from pursuing a career in academia (Hatchell and Aveling, 2008; Royal Society of Chemistry, 2008; Sauermann and Roach, 2012; Wellcome Trust, 2013).

4.6.2 PhD as a rite of passage

Rather than perceiving the PhD as an academic apprenticeship (Park, 2005), participants' letters indicate that for many, the PhD was instead something far less career-motivated, and far more personal. Through using the letters to future selves method, participants' hopes and fears about both the longer-term future after the PhD, but also the short-term future of their doctorate, can be understood. Though participants did construct career-possible selves, they often did not have fixed career aspirations. In considering the long-term future, most participants imagined more than one career possibility. In the previous sections of this chapter I have shown how a number of participants viewed the doctorate not as a route into a particular career, but rather as a time where they could make future plans. This was not expected to be an easy transition, however, and a number of participants made reference to the challenges they expected to encounter whilst studying for their doctorate, such as passing the confirmation review. In imagining the shorter-term future, the PhD was conceived of as an embodied experience which would bring challenges and opportunities. Many of the hopes and concerns identified in Freija, Harriet and Pepper's letters, such as the fear of not being able to complete the PhD, and the expectation that the PhD would have a negative impact on their wellbeing, were also present in letters written by other participants. Letters written by other participants also drew attention to additional issues, such as the impact of motherhood on the career-possible selves that participants were able to imagine. There was not enough room to explore issues such as this within this chapter due to space constraints, but some will be explored in later chapters.

Participants often viewed the doctorate as a rite of passage which would enable them to achieve individual goals. For some, this was an opportunity to forge career plans and develop more certainty about the future, but for others it was a key period within their lives where they hoped to build their confidence, engage in personal development, and for some, overcome mental health issues. For Pepper, rather than viewing the PhD as a career-oriented qualification (see Noble, 1994; Park, 2005, 2007), she perceives it instead as a potentially validating experience which would increase her confidence and self-esteem. Though literature has highlighted how the doctorate may be seen as some as an academic apprenticeship, or rite of passage in relation to taking

on an academic identity (see Wisker *et al.*, 2010), this was not the case for Pepper. She does not mention a career, but instead focuses on getting through her doctorate, viewing it as a pathway to becoming a more confident, secure individual, allowing her to "step forward into life". Pepper is motivated to successfully complete the PhD through constructing a possible self who has managed to overcome her anxiety and has increased in confidence as a result of doing a PhD. She imagines a successful doctoral possible self, and elaborates this self by referring to the letter she is writing; "I hope you can read this and say that finally the confidence you know you have has taken its rightful place and you lead your life with it". Though she expects that her anxiety will continue to feature in her future, Pepper hopes that it will have taken "a back seat hundreds of rows back". Thus for Pepper, the PhD is a rite of passage which she hopes will produce a self-confidence that she has not yet felt.

4.7 Conclusions

This chapter has drawn attention to the various ways in which participants imagined their futures. I have used the theoretical lens of possible selves to produce insights into participants' hopes and fears, as well as what they felt was expected of them. This analysis provides the basis for understanding how participants' fantasy, ought and nightmare selves are shaped by the experience of doctoral study, something which I explore in subsequent chapters. Significantly, I have illuminated how, just a few months into the PhD, individuals had considerable fears about the impact that the doctorate might have on their wellbeing and their personal goals for the future, as well as having doubts about their ability to successfully complete the qualification. The feared selves they elaborated in their letters suggest that far from being career-focused in their concerns for the future, their conceptions of the future were instead considerably more concentrated on their personal lives. In addition, the letters indicate that participants constructed possible selves which related to many aspects of their lives, rather than just their careers, posing a contrary view of doctoral students to the one inscribed in many institutional and governmental policies which often conceptualise PhD students as career-driven, neoliberal subjects (Raddon and Sung, 2009). This draws attention to the fact that the PhD was not simply a career-related qualification for participants, and was instead perceived as a rite of passage which

would enable individuals to gain in confidence, assert their academic abilities, and forge future goals. These findings constitute original contributions to knowledge.

Individuals' ability to construct possible selves is shaped by factors such as relationships with supervisors, experiences of career guidance, and academic cultures. I have not been able to explore these in detail in this chapter because of the limitations of the data provided in these letters, which dwell largely on participants' imagined rather than lived experiences. Thus the structural factors which shape participants' possible selves will be explored in detail in the following chapters. In Chapters 5-7 I depict how participants' narratives progressed differently to how they were initially imagined in their letters. Though Pepper imagines reading back over her letter from the vantage point of someone who has succeeded in their doctorate, this possible self never materialised; Pepper left her doctorate in November 2016. Within these next few chapters, I argue that the doctorate constitutes a site of formative experience for participants, wherein the future-oriented narratives which they imagined within their letters are reconstructed according to their ongoing experiences of doctoral study.

Chapter 5

Career Aspirations, Awareness and Development

5.1 Introduction

This chapter explores participants' academic career aspirations, their awareness of career development, and their agency in acquiring career-related skills and experience. Using possible selves theory (Markus and Nurius, 1986) and the concept of horizons for action (Hodkinson and Sparkes, 1997), it examines how participants constructed post-PhD career aspirations, the constraints within which these futures were imagined, and how aspirations shifted over time. I use Clandinin and Connelly's (2000) three-dimensional approach to analysis to understand individuals' aspirations. This approach is based on principles of interaction, continuity, and situation (Clandinin, 2006). The principle of continuity – the idea that 'experiences grow out of other experiences and lead to new experiences' (Ollerenshaw and Cresswell, 2002, p.339) – is particularly useful in understanding how participants constructed career aspirations. Individuals' aspirations are understood as being informed by past experiences; 'individually distinct past experiences influence present intentions…as well as future imagined possibilities' (McAlpine and Turner, 2012, p.536). I use the concept of identity-trajectory (McAlpine *et al*., 2010) to examine how individuals' career aspirations are shaped by experiences of doctoral study. Individuals experience the PhD differently, and my analysis – returning to Clandinin and Connelly's (2000) three-dimensional approach – focuses on how participants' interactions with others during the PhD, and their personal circumstances, influenced their aspirations. This analysis therefore addresses research question one, exploring the factors which shape participants' aspirations.

This chapter focuses on those participants who initially aspired to academic careers, recognising literature which illuminates that women students may be discouraged from pursuing academic careers by their experiences during the doctorate (see Royal Society of Chemistry, 2008; Wellcome Trust, 2012). Further, in relation to traditional conceptions of PhD students which view them as aspiring academics (see Park, 2005), I discuss how some participants fit this description at certain stages of the doctorate,

and how they shifted towards and away from this traditional conception over time. Finally, in the second half of this chapter, I explore the different levels of career awareness demonstrated by participants, and the explicit and tacit ways in which this knowledge was acquired. In doing so, I introduce the concept of 'career savvy', which I define as individuals' awareness of career development, and their subsequent agency in seeking out career development opportunities. I discuss how those who demonstrated high levels of career savvy during the PhD are better placed to successfully play the 'game' of academia (Lucas, 2006).

5.2 Career Aspirations

In this section, I discuss how participants' career aspirations shifted over the duration of the doctorate. From my analysis of the data gathered from interviews, diaries and letters to future selves, I have outlined in Table 4 an overview of participants' aspirations, derived from their comments about their future goals. These are not definitive categories; often within interviews participants would contradict themselves, discussing their ideal future as an academic, but then questioning themselves about this later on. Researchers have argued that the PhD process is 'highly personal, demanding, and often passionate' and that it involves 'biographical construction of identity and career' (Strandler, Johannson, Wisker, and Claesson, 2014, p.71). Yet this process is not necessarily linear, or transparent. Participants' aspirations were not always definitively stated, and there are clearly ambiguities within the positions that participants took up in relation to academic careers. I discuss these ambiguities in more detail within this chapter, as well as in the subsequent chapters of this thesis. Yet Table 4 remains a useful summary, which broadly maps participants' aspirations at different stages of the PhD, and indicates the shifts which took place for individuals during their doctorate.

The five participants I focus on in this chapter – Jane, Harriet, Freija, Eleanor and Chloe – are those who experienced the most dramatic shifts either towards or away from an academic career. This reflects research which has observed that women's academic aspirations fluctuate during the doctorate, and that women are less likely than men to aspire to academic careers by the end of the PhD (Guest *et al*., 2013; Royal Society of Chemistry, 2008; Wellcome Trust, 2012).

Table 4 Mapping of participants' career aspirations at different stages of the PhD

Participant	Discipline	Aspiration- Interview 1 (March '15)	Aspiration- Interview 2 (Jan '16)	Change
Antonia	Engineering	Academic job- research	Academic job- research	No
Emily	Sports Engineering	Unsure, perhaps academia or industry	Unsure, perhaps academia or industry	No
Sally	Sport Psychology	Unsure, open to options (including academia) but perhaps consultancy	Unsure, perhaps consultancy	Yes- move away from academia
Jessie	Public Health	Unsure, open to options (including academia)	Unsure, open to options but considering a post-doc	Yes- move towards academia
Liz	Human and Health Science	Unsure, possibly academic job	Unsure, possibly academic job	No
Bella	Psychology	Academic job- not specific	Academic job- not specific	No
Chloe	Social Policy	Unsure, perhaps academia or policy	Academic job- but still open to other options	Yes- move towards academia
Harriet	Biology	Academic job (post-doc) but unsure after that	Probably not academic career but considering post-doc still	Yes- less certain about academia
Freija	Geography	Academic job (but not 100% set on it)	Academic job (but expresses a number of doubts)	Yes- less certain about academia
Martina	Politics	Possibly an academic job (but would need to fit her interests) or role in a feminist NGO	Academic job (but would need to fit her interests) or role in a feminist NGO	No
Eleanor	English Language	Academic job (but not 100% set on it)	Unsure, possibly an academic job	Yes- less certain about academia
Jane	Conservation	Academic job (post-doc)	Career in policy	Yes- move away from academia
Pepper	Engineering	Work in industry	Work in industry	No

Table 4 shows that although participants' career aspirations varied, a significant number began their PhD with academic aspirations. Initially, six of the thirteen participants – Antonia, Bella, Harriet, Freija, Eleanor and Jane – aspired to be academics after they finished their PhD. Six others – Emily, Sally, Jessie, Liz, Chloe and Martina considered academia as an option, with only Pepper discounting the prospect of an academic career completely. Yet by the second year of the PhD, when the second

interviews took place, individuals' aspirations had shifted, and there was much less certainty about academia. Of the six who had stated their aspirations to become an academic after their PhD, only Antonia and Bella remained certain about this pathway, with Harriet, Freija, Eleanor and Jane becoming less certain, or even moving away from this as a future academic career. In our second interview, Harriet indicates that she and her peers have felt discouraged from pursuing a career in academic science after their experiences during the PhD; "going through this has…shown people the bad side in a way…of academia…everyone is getting a bit more stressed, so you kind of just want to get out of it". Of the six for whom academia had been an option, Emily, Liz, Sally and Martina continued to do so with no real change in their perceptions, whilst Chloe and Jessie had become more enthused about this possible career. In our second interview Chloe describes how her perceptions of future career options have changed since her first year; "I do feel like ambitious now…it's not that…I have to get a postdoc or I have to become a lecturer…but I know that's definitely what I want".

5.2.1 Academic aspirations

In this section, I focus on participants who began their doctorate with academic aspirations. Some were more intent on following this career path than others – Jane, Harriet, Freija and Eleanor were initially fairly sure about this career, whilst Chloe mentioned an academic career as just one option amongst others. Yet by the second interview, Jane, Harriet, Freija and Eleanor had become less certain, whilst Chloe had begun to consider a career in academia as a much stronger possibility. In the following section I explicate the aspirations of Jane, Harriet, Freija, Eleanor and Chloe.

Jane

In the first year of her PhD, Jane – a doctoral student studying Conservation at Redbrick University – aspires to become an academic; she acknowledges in our first interview that it is what she has "always wanted to do". She is passionate about her subject, and motivated to "make a difference" in her field. Jane hopes to apply for a post-doc after the PhD, and initially rejects the possibility of working for a conservation charity or policy-focused organisation because she perceives that they have less impact than academic work. She values her academic independence, and feels she would be "frustrated having to follow the agenda of the people I was working for".

Thus, Jane seems to fit with the traditional view of a PhD student, undertaking doctoral study to further her ambition of becoming an academic (see Park, 2005; Wellington, 2013).

The competition amongst doctoral students for early career research posts across subject areas has been widely acknowledged (see Grove, 2014a; Royal Society, 2010; Wolff, 2015), which Jane acknowledges in our first interview:

> [There is a] super low success rate for making the jump from PhD to post doc, so many people don't manage it…I'm assuming I will get *rejections*, and that's quite *hard* to make me kind of carry on, so doing that will be difficult.

Despite these concerns, Jane remains passionate about a future in academia and has "always felt like that is the way I was going to go". The concept of 'identity-trajectory' (McAlpine *et al*., 2010) is helpful in considering Jane's aspirations as it purports that 'understanding imagined futures involves understanding past intentions' (McAlpine and Turner, 2012, p.539). In Jane's case, her imagined academic future is grounded in her past experiences; throughout her education, she has felt the need to "prove" herself through academic work. Jane is aware of the competition for academic jobs, but "likes the challenge", and finds this motivating; "if somebody says I can't do something then I am like, damn you I will". This desire to prove herself through educational success stems from personal experience. Her father left her family when she was young, which she acknowledges was a formative experience; "it made me think right I'm going to, I'm going to do this and I am going to do well in life without you, just to prove how little we need you". Failing the 11 plus exam and having to go to the local "crappy comprehensive" rather than grammar school made Jane determined to succeed. She decided that she wanted to study for her undergraduate degree at one of the most elite universities in the country, and was successful in achieving this goal.

Though she initially has a strong drive to pursue an academic career, in our second interview Jane acknowledges that PhD has been a "lesson in self-discoveries". Perhaps the biggest of these is that by her second year, she is far less sure about pursuing an academic career. In both her letter to her future self and her first interview, she

mentions wanting to do a post-doc after her PhD, which would allow her to spend more time in the field. Yet by our second interview, having spent three months in a tropical climate undertaking fieldwork, Jane feels differently. She did not enjoy being in the field, and "definitely got to a point during my fieldwork where I was kind of like, this isn't really what I want to do". She found this disconcerting, as she had chosen this PhD specifically because it offered this opportunity, which fit with her long-held interests and passion for her subject:

> [It] was a massive surprise for me because all since I was a little kid you know watching David Attenborough in the jungle I was like I want to be that, I want to do that and then I was there doing it and as much as I tried to be like I'm really lucky this is a really great opportunity, stop complaining, I kind of reached a point when I was like…this is not for me.

Despite her initial, long-held aspirations, by mid-way through the PhD Jane becomes disillusioned with her ideal career – both because of her lack of enjoyment of fieldwork, but also due to the broader working conditions of academia. Even as a PhD student she experiences considerable pressure to publish from her supervisors, and perceives that the competition for post-doc positions would increase this pressure, and that she would struggle with the expectations:

> The competition's really high…if it's like high to the extent that they require *millions* of publications and stuff that I…would not be able to achieve without making myself…stressed and miserable…that would be a barrier, because if I have to be *miserable* in order to get the *papers* and I have to get the *papers* in order to get the *post-doc* then it's either be miserable and succeed or be happy and fail.

This finding supports arguments made by higher education researchers, who claim that the publish or perish culture of academia has percolated through to PhD students, who now encounter significant pressure to publish during their doctorate (Badenhorst and Xu, 2016; Matthiesen and Binder, 2009). The binary way in which Jane envisages a future where she strives for a post-doc – as meaning that she would either be

"miserable" but successful, or "happy" but have failed to achieve this role – portray Jane's lack of enthusiasm for realising this future. Jane's experiences of fieldwork, and her perceptions of a future in academia mean that by her second year she feels it is unlikely that she will pursue an academic career. She acknowledges that this makes her feel a "bit lost", given her previous certainty.

Here the concept of horizons for action is useful to gain insight into this shift in Jane's aspirations. Horizons for action are partly influenced by individuals' 'perceptions of what [is] possible, desirable or appropriate' (Hodkinson *et al*., 1996, p.123), as well as opportunities within the labour market. As McAlpine, Amundsen and Turner (2014) observe, individuals' horizons for action can and do change over time as personal situations change; by the second year of her PhD, Jane has become disenchanted with academia, and she therefore begins to consider other future possibilities. Thus Jane's horizons for action widen during the doctorate, and by the time of our second interview she considers other career options, such as working in a policy role for an NGO or government agency, or in outreach.

Harriet

Like Jane, Harriet – a Biology student at Redbrick University – also becomes disillusioned with academia. Yet having begun her PhD straight after her undergraduate degree, initially she struggles to imagine careers outside higher education, which she describes in our first interview: "it's really hard to form an opinion…you just don't know because you haven't tried anything before". This lack of experience outside academia, combined with the traditional assumption that a PhD will lead to an academic career (Park, 2005), and the perception of STEMM PhD students that pursuing careers outside academia constitutes 'opting out' or even failure (Royal Society, 2014, p.1), means that Harriet's career aspirations are initially limited to academia. Thus in her first year, her plan after the PhD is to "stick with the science, do a post-doc somewhere". As described in Chapters 1 and 2, the traditional conception of a PhD student is that they are motivated by an academic career (see Park, 2005; Wellington, 2013). Though Harriet seems to fit within this traditional view, in fact for Harriet the PhD is a litmus test which will confirm whether or not she wants a future in academic science. In our first interview, she hopes that she will have more

certainty about her career plans once she completes the doctorate: "I think by the end I'll 100% know if I want to stay in science or not. Whereas before my PhD I didn't really know, I still kind of am not really sure".

In both interviews, Harriet describes witnessing the experiences of others, such as the post-docs in her lab who are under pressure to publish work and secure funding. Even in her first year, she is aware of the pressures that they face:

> We have a post-doc in our lab who's trying to like…start up his own lab, so he's quite pressured at the same time, like, to get all that stuff out…he'll just ask you to do some random stuff that's not related, just so he can write a grant about it or whatever.

Harriet often talks in a general sense about these difficulties, as well as challenges which she views as specific to women in science. In our first interview she comments:

> I think for a woman…I think people doubt you a lot more after you've had kids, whereas I think it's the opposite for men, I think they're like, oh you're a good, you know, you're a good candidate, you've got a family, like you've got your life sorted.

Harriet's perception of gender discrimination, particularly for academics who become mothers, echoes studies which highlight the gendered barriers facing women in science (de Welde and Laursen, 2011; Rosser, 2004; Royal Society of Chemistry, 2008). Despite discussing the situation for women scientists, Harriet does not often imagine herself in these positions, often using the second or third person rather than the first person. In discussing the lack of women in research positions in science in our first interview, she describes the factors that she feels contribute to this:

> There's no way you're gonna know you're gonna be somewhere for more than two years or whatever unless you get one of these big positions, which are hard, because you have to really put in the time…I think that's what puts a lot of women off.

Thus, though she considers a post-doc after her PhD, Harriet struggles to imagine herself as an academic in the future. The concerns she expresses reflect issues highlighted in the literature on women and academic careers, such as the expectation of geographical mobility, which can be challenging for those trying to balance family commitments with an academic career (Bagilhole and White, 2013; Kinman and Jones, 2008; Rosser, 2004. Harriet acknowledges that she struggles to envisage herself working in the ways she perceives she would need to in order to succeed, as an academic, such as prioritising securing funding over scientific interest. Even in our first interview, just six months into her PhD she reflects that:

> I just don't know if I'm cut out to…be that ruthless and be, like I say, if I was deciding what to do and be like oh this is interesting, but…this is, this might make me some money or whatever, I just think, I just don't know if I have that in me to do it, like that way.

The absence of an elaborated academic career-possible self indicates that Harriet's academic aspirations are not particularly motivating. She cannot visualise a long-term future in academic science, and in our second interview Harriet questions whether she should pursue a post-doc if she is unable to visualise herself in a senior position:

> I can never see myself really doing what Jon does, so I suppose if I can't see myself at the like being a professor and having my own lab then I'm not sure if that's something that I should be doing if I don't think that's something I want to do in the end.

By her second year, due to engaging in activities such as teaching and outreach work, Harriet's horizons for action have expanded, enabling her to consider other career options outside academia. Thus, Harriet becomes aware that she has a range of options on completing the PhD; "there's so many other things that are involved with science…so many other things I could do". Yet despite this, she does not elaorate any other career-possible selves. The absence of career-possible selves in the data gathered during our interviews indicates that Harriet is not particularly career-motivated. Yet this is not the view of doctoral students often depicted in the literature,

which often positions them as career-driven (see Ali and Graham, 2000; Matthiesen and Binder, 2009; Raddon and Sung, 2009).

Freija

During her first year, Freija – a Geography student at Redbrick University – develops academic aspirations. Her identity-trajectory (McAlpine *et al*., 2010) indicates how Freija's educational background has informed her imagined academic future. After completing her Master's, she initially applied for a number of PhD studentships but was unsuccessful. In her subsequent role in higher education administration she envied the academics she worked with; in our second interview, she describes this: "I did sometimes think, oh I wish I was doing this cool stuff…I'm sat like fiddling about with a spreadsheet". Freija would "quite like" an academic job after her PhD, and constructs a post-doc possible self. In her second year, she elaborates this possible self, considering how a post-doc position could best suit her:

> Some people apply for fellowships where they can do their own work, I'm actually less keen to do that…I've really struggled to define my own research…what I would quite like to do is try and find some work on a different research project with other people.

Yet Freija is aware of the challenges she would face in trying to pursue an academic career, such as the competition for jobs. In our second interview, she admits that she is "worried about that transition at the end", having seen peers experience difficulties in finding work. Though one of her peers managed to get an academic job soon after finishing her PhD, Freija perceives that this is unusual and for most people it has "been a struggle". Research has identified a link between doctoral students' perceptions of future employment and mental wellbeing: 'findings…show how career prospects (both in and outside academia) were a determinant of mental health problems' (Levecque *et al*. (2017, p.878). Increasing competition for academic jobs may also contribute to negative perceptions of future opportunities and 'give graduating PhD students bleak career prospects' (*ibid*, p.878). These findings provide a deeper insight into the nature of the "struggle" which Freija describes her peers experiencing as they try to find work after the PhD, and have implications for Freija's own mental wellbeing, as she imagines

the future; "it seems to be such like a really cold quick transition, it's like one day you are a student, and the next you're not, you are unemployed, you have to pay council tax, you need to find a job". The financial pressures that Freija imagines in this immediate period after the PhD may also impact on her mental wellbeing (see Hargreaves *et al*., 2017).

Despite her concerns about the competition for jobs, Freija's horizons for action include an academic career. Horizons for action are constituted by 'perceptions of what might be available and what might be appropriate' (Hodkinson *et al*., 1996, p.150). Though she is aware of the competition for jobs, Freija considers that an academic career is possible for her to achieve, and that it would be right for her. Yet by her second year of the PhD, her doubts have increased, and she has become sceptical about whether academic work is able to make an impact in the "real world" – a view which is shaped by the opinions of her family and her partner's family. This supports findings identified within possible selves literature, which highlights how individuals' possible selves are shaped by their social context (see Markus, 2006; Stevenson and Clegg, 2011). Indeed, Oyserman and Fryberg (2006, p.21) argue that significant others 'play an important role in the creation and maintenance of possible selves'. Freija previously constructed a post-doc possible self, and considered an academic career as both available and appropriate. Yet when she questions her academic aspirations in her second year, it is the appropriateness of this career that she doubts, not her ability to achieve it. Thus an academic career remains within her horizons for action, but she questions the viability of her academic possible self. Thus, the negative perception that Freija's significant others have of academia seem to have influenced Freija's view that her academic possible self is less desirable.

By her second year, Freija's horizons for action have become more focused, and she can only envisage herself working as an academic if she is able to work in certain ways. In our second interview she determines not to do "academic work just for the sake of it being academic", and expresses admiration for her supervisor who she perceives as "not a traditional academic" because his focus is on "working with people and…being useful". This gives her hope that being an academic "doesn't need to be just you sat there with your computer, coming up with something clever to say". Educators can

provide a 'blueprint' of a positive possible self for their students, demonstrating that their aspirations are achievable (Rossiter, 2004, p.149). Yet Freija's concerns about academia cast her academic possible self into doubt, and whereas she previously imagined herself in a post-doc position, she now questions what she will be able to achieve in this kind of role; "if I stick in academia what am I actually going to be doing, like what am I contributing to the world, like how am I actually making anything…better?". These doubts influence her aspirations; though she does not dismiss the possibility of still pursuing an academic career, she is much less certain about how appropriate this career may be.

Eleanor

Eleanor – an English student at Redbrick University – aspires to be an academic. She began her doctorate with this aim, and thus can be seen to fit the traditional conception of a PhD student (Park, 2005; Wellington, 2013), motivated to pursue an academic career. Becoming an academic seems to appeal to Eleanor largely because of the high social value placed on this role; she feels that being an academic is a "prestigious job" and if she achieved this she "would be somehow impressive to people outside…I don't know why I have this need to be impressive". Eleanor's admission resonates with literature which argues that women within the academy 'feel a constant need to prove ourselves' (Loumansky, Goodman and Jackson, 2007, p.237). Though Eleanor is unsure why she feels this way, the concept of identity-trajectory is useful in understanding her aspirations, which are informed by social class. An individual's identity-trajectory is grounded in 'distinct experiences, relationships and intentions prior to being a doctoral student' as well as 'present shifting intentions, interactions and relationships' (McAlpine and Lucas, 2011, p.704). In our first interview, Eleanor describes herself as being from a "very working class background", and comments that the secondary school she attended was "a pretty scary, rough sort of school". In our second interview, she acknowledges that she feels the need to be successful academically in order to be a role model for others from similar backgrounds:

> I kind of feel like well you have come from that background and then you went to Elite University and you are doing a PhD and you are a woman you should do your best to be successful, to show other people you can do this.

This reflection echoes literature which draws attention to the historical dominance of men within higher education (Bagilhole, 1993; Knights and Richards, 2003; Parsons and Priola, 2013). Further, women from working class backgrounds can feel like outsiders in the academy (Gillies and Lucey, 2007; The Res-Sisters, 2016; Walsh, 2007). Examining Eleanor's academic aspirations through the concept of identity-trajectory (McAlpine *et al*., 2010) illuminates how her aspirations are shaped by her past educational experiences, which – like Jane – have been characterised by overcoming challenges. Eleanor's experiences during the PhD – in which period she acknowledges in our second interview that she has developed a “feminist awareness” – lead Eleanor to acknowledge the gendered and classed dimensions of her aspiration to be an academic role model for others: “no Etonian has ever felt that in his life”.

Yet by her second year Eleanor feels “almost compelled” to become an academic after her PhD, because she is aware of the lack of women in certain academic roles and the barriers women face to pursuing an academic career. Thus, this finding enables another layer of insight into how (self-identified) working-class women perceive a future in academia. It also supports the argument that individuals' possible selves are 'personalized, but…are also distinctly social', and that they often are constructed as 'the direct result of previous social comparisons’ (Markus and Nurius, 1986, p.954). Eleanor’s academic career-possible self is shaped by her background and past experiences, but also by her present intentions – she imagines this future for herself because she is motivated by the possibility of being a role model to other women; "I feel like somehow compelled to do my best to be absolutely extraordinary and to be like I am a successful woman, other women can be successful". Yet Eleanor's academic career-possible self, constructed in relation to overcoming challenges, poses a different and more agentic view of women students than that which is presented in other literature on gender and possible selves (see Brown and Diekman, 2010; Lips, 2000).

Despite feeling the need to be a role model for others, during the same interview, Eleanor acknowledges that she is less sure about her desire to pursue an academic career, and expresses doubts: "this is on my mind a lot…do I actually want an academic career and I'm not certain whether I actually want it or not". She has developed concerns about what an academic career will mean for her life in the future, highlighting the temporary nature of many academic contracts, the need to be geographically mobile, and her concerns about combining an academic career with having a family in the future. She also becomes aware of the realities of what it would mean to become an academic and be expected to totally dedicate herself to work: "why do you want to do this, why do you want to be an academic, when there are so many reasons not to be an academic, like the working hours and the expectations…the stress looks crippling at times". Eleanor's comments echo research which has drawn attention to the 'affective embodied experiences' of academics, which include feelings of 'exhaustion, stress, overload, insomnia, anxiety, shame, aggression, hurt, guilt' (Gill, 2009, p.229). These experiences have been referred to as the 'hidden injuries of the neoliberal university' (*ibid*, p.229). Eleanor's perceptions of the emotional cost of becoming an academic mean that she questions her original aspirations.

Thus, Eleanor's horizons for action shift during her PhD. Though she still wants to aim for an academic career, by her second year her position is much more ambivalent: "there are other things I know I would like to do and it's not the be all or end all of my life". She considers that other, non-academic roles such as a professional services role in a university or working for an organisation may be more appropriate, as they would enable her to do research, but "without having to have the whole academic extravaganza of misery attached".

Chloe

Chloe, a doctoral student in Social Policy at Modern University, started her PhD having previously returned to study for her Master's degree after a career in communications. She was initially unsure of what she wanted to do after the PhD, and despite her success in her Master's, lacked confidence in her academic abilities. This was due to her early negative experiences of higher education; Chloe left her first undergraduate degree after struggling with the course and experiencing personal difficulties, and was

told by her personal tutor that university "obviously wasn't for me". In our first interview, she acknowledges that these negative experiences "totally scarred" her, limiting what she felt she was capable of; "I never thought that this was something that I could ever do, because I had such a bad experience the first time". Applying for a PhD was not something she considered possible, before she was encouraged by one of her lecturers during her Master's. Individual's horizons for action are shaped by their position within the broader societal context, influenced by factors such as educational achievements, availability of opportunities as well as demographic factors such as gender, social class and ethnicity (Hodkinson, 2008). However, they are also shaped by the 'embodied dispositions of the person' (*ibid*, p.4). Thus, individual's horizons for action may shift when their position in this wider context changes, or when their dispositions – their personal attitudes towards future opportunities – are altered. For Chloe, her horizons for action expanded to include an academic career when she was empowered to successfully apply for a PhD.

Chloe acknowledges that during her first year of the PhD she found it hard to be particularly ambitious because of her self-doubt; "I was so obsessed with being an imposter for most of my first year, that I don't really think I was ambitious I was just trying to not be found out that I shouldn't be here". Chloe's use of the word "imposter" to describe her first year of the doctorate is interesting. As I discussed in section 2.3.5 of my literature review, research indicates that feelings of fraudulence – often referred to as imposter 'syndrome' – are a common phenomenon, with women academics from working-class backgrounds, ethnic minorities and those with disabilities often experiencing this to a greater extent (see Breeze, 2018; Coate *et al*., 2015). However, throughout the PhD Chloe's confidence grows, and she develops academic aspirations, aiming to do a post-doc after her PhD. By the second year of her PhD, becoming an academic is "definitely what I want". Thus, during her PhD Chloe shifts her aspirations towards academia, and by her second year seems to fit the traditional view of PhD students, motivated by the prospect of becoming an academic.

Yet there are particular barriers that Chloe perceives to achieving an academic career, and she considers other options. In our second interview, she describes her ideal scenario for after the PhD as working in post-doctoral research position in Europe, as

she enjoyed her experience of studying in another country during the first year of her PhD. However, Chloe feels that this is "just blue sky thinking" and a "pipe dream". Though she would ideally like "the freedom to go anywhere", she feels that having older parents would prevent her from moving too far away as she "would probably feel quite guilty to leave them". Thus, Chloe ameliorates her aspirations in response to her caring responsibilities. This finding resonates with research in Australia, which highlights that women academics are considerably more likely to have caring responsibilities for older parents than their male counterparts (Probert, 2005). Further, a report on mid-career women academics illuminates how these responsibilities shape how individuals' navigated their careers: 'for women with children and/or ill and disabled relatives, and for those who expected to have caring commitments in the future, career development was understood in this context' (Coate *et al*., 2015, p.17). Chloe considers that she would also like to work as research or teaching-focussed academic, but limits herself to doing this in the UK: “I would be very happy to get a research associate position, postdoc…any kind of, even like a university teacher position in England, or Scotland". Chloe is hopeful that a research position may come up in her department, but jokes that: "it’s going to be so embarrassing when I come to the end and I’m like oh I haven’t managed to get any job, so I’m just…a cleaner at [Modern University]".

Possible selves theory proposes that individuals’ possible selves may fall into three categories, the ‘expected, hoped-for, and feared’ (Markus and Nurius, 1986, p.966). Chloe's "crazy dream" of acquiring a post-doctoral position abroad, and her comment about becoming a cleaner in her current institution, represent her hoped for and feared career-possible selves. However, though Chloe's ideal career aspiration is to work as a post-doctoral researcher abroad, her dreams are shaped by structural factors such as caring for her parents. As such she adapts her conception of the future, constructing an expected possible self that she would still like to achieve, such as working in a research or teaching position in a university closer to home.

Having considered participants’ shifting career aspirations in this section, I now move to discuss how individuals’ differing levels of career awareness influenced how they thought about the future, and shaped their approach to career development.

5.3 Career Awareness

Much of the guidance literature aimed at doctoral students, or those considering doctoral study, outlines the need for individuals to focus on their career development during the PhD (Churchill and Sanders, 2007; Hall and Longman, 2008; Matthiesen and Binder, 2009; Phillips and Pugh, 2015; Rugg and Petre, 2010). There is fierce competition for academic jobs (Royal Society, 2010), and statistics indicate that few doctoral students who aspire to an academic career will be successful, with just 38% of graduates in 2010 working in either teaching or research in higher education (Vitae, 2013a). Thus, for those with academic aspirations, there is a considerable impetus to acquire particular skills in order to position themselves well to obtain an academic job after their PhD. Doctoral students are often advised in guidance literature (for example Phillips and Pugh, 2015), blogs on websites such as the *Thesis Whisperer* (Mewburn, 2017), and *The Guardian* (Garden, 2014), as well as by supervisors and academics, to attend conferences, network, publish work and acquire teaching experience. These activities are seen to provide doctoral students with the experiences they need to prepare for the academic career they are assumed to aspire to (see Park, 2005). Yet, the extent to which participants in this study were aware of the need to engage in any career development activities during their PhD varied considerably between individuals.

As I have outlined in section 5.1, individuals' perceptions of what was possible changed over the course of the doctorate. During their PhD, participants acquired knowledge about the career development activities they could engage in during their PhD, and the career opportunities available to them. However, the levels of career-related knowledge that participants acquired during the PhD varied, due to environmental factors such as differing levels of provision of formal careers advice between institutions, and differences in the emphasis placed on career development by supervisors. Despite the recent introduction of the Researcher Development Framework planner (Vitae, 2010) – an online toolkit to help individuals evaluate their research-related skills, introduced to support the career development of doctoral students and early career researchers – there has been varying levels of engagement from institutions and PhD supervisors (Vitae, 2013b). Participants' career awareness could be acquired through explicit means, such as universities conveying career advice

and guidance through structured sessions, or tacitly, through conversations with peers and academics as well as witnessing the experiences of others. Varying levels of career-related knowledge between participants was also the result of personal factors, such as how proactive individuals were in seeking out this knowledge. Some individuals had pre-existing knowledge of career development activities, derived from having friends or family already working in academia. Thus, some participants had access to academic career-related knowledge through their networks that others did not.

5.3.1 Initial knowledge

Freija and Chloe began the PhD with existing knowledge of academic careers due to their personal situations, and thus on starting the doctorate had a level of career awareness that other participants did not. Though Freija was not "100% fixed" on pursuing an academic career at the start of her PhD, she considered it as a strong possibility. She is aware of the challenges she would face such in pursuing this career, such as the competition for academic jobs. However, she enjoys research, and envisages herself doing a post-doc after the PhD. Freija's knowledge of the academic job market is influenced by her pre-existing knowledge of the nature of academic careers, developed through her family's connections to academia. Her father is an academic, and in our first interview she describes how he tried to dissuade her from pursuing an academic career: "to be honest from day one he's been the one telling me not to do a PhD!". He warned her about the competitive nature of academia, and advised her that it was not a straightforward career:

> Because he is an academic and has kind of got quite high up, he knows how difficult things like getting the jobs and stuff are…when he got his PhD and got his lectureship it was all…quite easy to walk into a job at a university, whereas I think he just knows now it's so different, and if you get a job it's maybe fixed term for like a year, two, it's just so difficult to walk into…a permanent lectureship, and I think it was more just him kind of worrying that I had this idea that it was all gonna be quite easy, that I'd get a PhD and get a brilliant job.

Thus from the start of her PhD Freija has been attuned to the difficulties of pursuing an academic career, and aware of the need to differentiate herself from other PhD students also seeking academic jobs. Unlike some participants, from the beginning of the doctorate she has been conscious of needing to position herself well to give herself the best chance of getting an academic job. Freija develops this career awareness during her PhD, using her initial knowledge to engage in savvy behaviours.

Like Freija, Chloe – a doctoral student in Social Policy at Modern University – had some pre-existing knowledge of academic careers. James – her partner when she started the PhD – was a successful early career academic who obtained a permanent lecturing post soon after completing his doctorate, and whose career appears to conform to 'the historical (male) higher education linear model that starts with early undergraduate experience, followed by a smooth upward progression through the ranks' (Cotterill *et al*., 2007, p.3). Though Chloe could not necessarily envisage herself pursuing an academic role after her PhD due to a lack of confidence in her abilities, on starting her PhD she had a high level of career awareness, developed through witnessing her partner's experience. In our first interview, she acknowledges that she has "more insight than others" into the process of developing an academic career because she learned from his experience of prioritising career development activities: “looking at James…he’s just made sure that he has got his book and his publications and then he is able to get an academic job because that is what seems to be important”. In our second interview, she acknowledges that this has informed her career development priorities:

> Because I lived with someone…who’d been through it all which is, you need to have this, you need to have all these different types of strands to your CV and that sort of thing…I do owe a lot to having lived with someone who went through a PhD so I learnt a lot from observing that.

Since passing her confirmation review at the start of her second year, Chloe has grown in confidence and become more career-motivated, aspiring to an academic career after her PhD. Her pre-existing knowledge about academic career development therefore helped her to develop certain priorities for the rest of her PhD. She begins to

judge some activities as more important than others for her academic career development, for example perceiving that publishing papers is “the most important thing for getting your job”, as she saw her partner use this strategy successfully.

5.3.2 Explicitly acquired knowledge

Other participants gained knowledge about academic careers, and awareness of activities which would contribute to their career development, directly from their institutions. For Harriet, her academic environment was key to informing her career awareness. Her institution holds regular events for PhD students, encouraging them to consider a range of options after the PhD, and in her first year she feels that the university makes efforts to support PhD students to prioritise their career development: "they put on so many things…speakers to come in and talk to you about academia and this sort of thing so you do, you are constantly being told to think about it really". Her use of the word "constantly" implies an institutional expectation at Redbrick University that doctoral students will be career-focused during their PhD. Yet as I discuss in section 5.3.3, not all institutions seemed to have the same approach, and participants at Modern University did not necessarily have the same experience as Harriet.

Though her institution is supportive of doctoral students engaging in career development, Harriet's ability to do so is limited by her supervisor. She struggles to find time to engage in additional career-related activities such as teaching because of the demands made of her in the lab, such as supervising Master's students. Though Harriet is encouraged by her supervisor to publish her work and present at conferences, in our second interview she describes how he is not supportive of her teaching, because it "takes a day out of your working week", and she perceives that he "looks a bit down on you" for choosing to teach. It is significant that Harriet's supervisor does not encourage her to engage in career development activities beyond presenting and publishing work; activities which directly link to a research career in academic science. This attitude reflects the argument that PhD supervisors often perceive that their role is to train apprentice researchers (see Park, 2007). However, Harriet has "really enjoyed" the teaching she has done, though she has struggled to access these opportunities, and considers lecturing as a potential career: "I want to

develop my teaching stuff because that's something I'm thinking about doing". Yet her ability to participate in teaching, which would give her valuable experience relating to an academic teaching role, is limited by her supervisor.

Harriet's experience has gendered implications. Her perception that her supervisor does not consider teaching a valuable activity reflects the gendered perception of different academic roles. Literature highlights that research and teaching are gendered activities in higher education; there is a 'long-standing gendered division of academic labour that sees women more concentrated in teaching activities while men focus more on research and publishing' (Dever and Morrison, 2009, p.50), which has a negative impact on individuals' careers, as engaging in research and publishing are key criteria for promotion (Birch, 2011).

A further example of how her institution supports Harriet to engage in career development is the opportunity to do a paid placement. As well as considering lecturing as a career, she would like to get experience of working outside academia, and wants do a placement in order to acquire this experience – but is concerned that her supervisor will not be supportive of this:

> I'll have to…try and get a placement, because I'm allowed to take a couple of months out to do that so that would be a good thing to do I don't know how Jon would feel about it but…if I get the money and if I work it out myself there is nothing he can do really, I would just have to pick a good enough, like a good time of the year I suppose probably the summer.

Harriet's ability to be agentic in engaging in career development is therefore enabled at an institutional level, but constrained by the immediate environment in which she works. This gives an insight into the different research cultures which exist across disciplines and departments; something I discuss in more detail in Chapter 6. Harriet's experiences speak back to Phillips and Pugh's (2015, p.14) observation that 'those on scientific research programmes are treated…as junior research assistants', and that supervisors exert a strong influence over their students. They warn that this relationship has the potential to become exploitative, as the supervisors' priorities will

always be producing research papers and using the results gained by PhD students in their lab work to produce these publications (*ibid,* 2015). Further, research illuminates how there is significant disparity in how doctoral students in the sciences and their supervisors prioritise students' career development, with this being of considerable importance to students and of low importance to their supervisors (Pearson, Cowan and Liston, 2009). Thus, institutional factors such as supervisors' attitudes to careers have a significant influence on the agency Harriet is able to exert in engaging in career development activities.

5.3.3 Tacitly acquired knowledge

Other participants, such as Chloe and Eleanor, developed their career awareness through witnessing the experiences of others, rather than it being facilitated by their institutions. In our second interview, Chloe acknowledges that interacting with her friends, many of whom are academics, has enabled her to acquire tacit knowledge about their strategies for success:

> Because I have got lots of friends who have already done their PhD and got jobs, I feel like I kind of *know* that when you sort of come to the end the most important thing is having some papers and some publications.

She is conscious that she is likely to have more awareness about academic careers than others because of this:

> Luckily because I *know* a lot of people through James who have gone through this process and you know I think, I guess people don't always know, oh so you do a PhD and so what do you do, become a lecturer or but I kind of know the step by step options that are available.

In our second interview, Chloe is highly critical of her institution – Modern University – as she feels it does not encourage doctoral students to engage in career development activities. Like Harriet, she has struggled to access opportunities to teach during her PhD, and it is only because she has "persevered" that she has been able to get some

teaching experience. She found this frustrating, as she is aware that teaching experience is vital for her academic career development:

> I *know* that I need that on my CV erm…so I've been trying to sort that out and complaining to various people that I've not been able to erm…I know full well that if I want to be employable I *need* to have that experience.

Chloe is critical of her institution in comparison to the other local university. There are few career-focused events for doctoral students at Modern University, and she feels there is a lack of emphasis on developing students' career-related skills. She considers that the other local institution prepares their PhD students for academic careers better than her own, and that Modern University is more focused on ensuring that students complete their doctorates rather than supporting them to be employable in the future:

> I think [Modern University] I don't know…it just feels that it's always about finishing the PhD it's not really about what you're doing next…from a few anecdotal examples of friends from up the road, at [Redbrick University], they're sort of encouraged to co-author papers with their supervisors so they get that first step on the publication ladder, which is so important, that's the most important thing for getting your job. Erm…and then also you know getting teaching experience, that seems to be just run of the mill, part and parcel of doing a PhD up the road…I was talking to someone at a department and they were saying that you know [Redbrick University] kind of pumps out PhD students that tick all the boxes, so it's easier to employ them than ones from here.

Chloe perceives that because students at Redbrick University are encouraged to participate in academic career-related activities such as teaching and publishing, they will be more likely to be successful in securing academic positions. Her own tacit knowledge about academic careers means that she is aware that having publications is "so important", and she is concerned that her peers at the other institution will be better placed on the "publication ladder" because they are encouraged to work on publications with their supervisors. Chloe considers that the different approaches of the two institutions in supporting doctoral students is likely to have implications for

her future career; she is concerned that because students at the other institution are better prepared for academic careers, they will therefore be "easier to employ". These concerns reflect literature which highlights the lack of careers education and guidance in postgraduate courses, and the disparity in funding for careers services between pre-1992 and post-1992 universities (Bowman, Colley and Hodkinson, 2004).

Like Chloe, Eleanor also develops her knowledge of academic careers and awareness of career development tacitly. In our second interview, Eleanor acknowledges that the behaviour of her peers has a significant influence on how she has since approached her own career development: “as time goes on I have become more strategic and I think it’s the kind of people who you choose to associate with”. Eleanor perceives that many of her peers have been "active in organising things", and though she was not initially aware of this, she has inferred that there is an expectation that as a PhD student she should be doing "extra things…like going to conferences, and like sitting on committees". This expectation is reflected in literature aimed at doctoral students, which largely encourages individuals to engage in additional activities such as publishing and attending conferences during their PhD (Churchill and Sanders, 2007; Phillips and Pugh, 2015; Rugg and Petre, 2010); activities which have been referred to as ‘ancillary activities’ or the ‘sidelines of a doctorate’ (Matthiesen and Binder, 2009, p.83). Yet Eleanor expresses some frustration with this expectation, later on in our second interview referring to these additional activities as “all this kind of like extra crap”.

Initially, witnessing her peers engage in these additional activities in her first year makes Eleanor feel under pressure to do the same: "I’ve not done anything like that and I just think oh maybe I should be like starting things". Her use of the non-specific term ‘things’ implies that she does not have a specific activity in mind, but simply feels that she ought to be engaging in more additional career-related activities generally. In her first year, she is aware that she needs to acquire academic career-related experience in order to further her ambitions – “I need to try and get as much experience as I can whilst I’m doing a PhD so that I could conceivably get a job or at least a post-doc afterwards” – but again, is not specific about what constitutes this experience. Eleanor is aware of the expectation that doctoral students will engage in

career-related activities during their PhD, and feels under pressure to do so, but does not quite know what these activities should be. These expectations are sometimes covert; academia has often been described as a 'game' (Clegg, 2012; Lucas, 2006; The Res-Sisters, 2016) with rules that are not transparent. The process of developing academic career-related skills can be thought of similarly. The Res-Sisters (2016, p.276) discuss the need for early career researchers to undertake all the 'career musts in academia' but also needing to engage in work to identify what those career musts are. Further, the need for PhD students to develop soft skills through engaging in additional activities has been termed 'the hidden agenda of doing a doctoral degree' (Matthiesen and Binder, 2009, p.9). Thus, I pose the process of acquiring academic career related skills and experience during the PhD as a game that some are better able to play than others, due to their ability to acquire knowledge and understanding of what is required of early career academics. This is significantly influenced by personal networks, as well as the approach taken by institutions, departments and supervisors to supporting the career development of doctoral students. I examine the different levels of career 'savvy' that participants demonstrated in the following section.

5.4 Career Savvy

In this final section of the chapter, I examine how participants utilised their career awareness to develop academic career-related skills and experience during the doctorate. I have developed the concept of 'career savvy' to describe the various ways in which participants used their career-related knowledge agentically, seeking out particular career-related opportunities during the PhD, and engaging in strategic behaviours. The concept of career savvy is derived from Parry's (2007) concept of savvy, which describes the kinds of tacit knowledge that doctoral students need to acquire to succeed in their studies. Parry (2007) identifies four kinds of savvy: grounded, social, discourse and cultural. Here, I use the concept of career savvy to describe individual's agency in utilising their career awareness to undertake career-related activities. I argue that the concept of career savvy is key to understanding how individuals negotiate their career development during the doctorate, and allows insight into how some may be better placed than others to play the game of academic career development.

Participants' different levels of career-related knowledge – as highlighted in the previous section – produced varying levels of career savvy between participants. Career savvy was demonstrated in a number of ways. Firstly, in relation to individual agency in seeking out academic career-related opportunities, secondly, in tactically making decisions to engage in some activities rather than others, and thirdly in developing adaptive strategies in response to shifts in career aspirations. These career savvy behaviours are explored in the following sections.

5.4.1 Career-related agency

Chloe demonstrates significant agency in relation to her attitude towards career development. She develops career savvy in the second year of her PhD, after becoming more career-motivated throughout the doctorate and developing academic aspirations. Though she had a high level of career awareness in her first year, developed tacitly through witnessing her partner's experiences of academia, she was not agentic in seeking out career-related opportunities. By her second year Chloe demonstrates considerable agency in engaging in academic career development activities, such as teaching, and publishing work. This agency is partly produced by pragmatic considerations. At the end of her first year of the PhD, her relationship with her partner ended. When they were together, she had not been concerned about developing a career or getting a job after her PhD as she expected to have a period after her funding ended where she could depend on being financially supported: "I had this comfort that I didn't need to strive because I was in a relationship, and that person was going to earn and I could just sort of take my time". After they broke up, Chloe became much more career-motivated, partly due to an increase in her confidence, but also due to no longer having the security of a long-term partner to depend upon: "I have to do really well because I need to get a job…I haven't got any safety net".

Since Chloe's relationship ended she has financial concerns about the future, and feels under pressure to position herself well to get a job after the PhD: "I'm trying to do all the things I need…so that I can actually get a job, cos it's so competitive". She has therefore made considerable efforts to acquire academic career-related experience during her second year of the PhD: "I've been trying to put myself forward for conferences and seminars and try and get some teaching booked in…I'm going to be

very very very *busy*, but…in a good way, and I feel like I'm doing…I'm *succeeding*". The notion of "succeeding" that Chloe uses in this context is highly gendered; research highlights that women academics often have to perform better than men in order to be successful (see Bagilhole, 1993, 2007). Further, her comments speak back to literature which poses academia as a game and argues that the game of contemporary academia requires productive, competitive subjects who conform to the neoliberal agenda (The Res-Sisters, 2016). Chloe appears to demonstrate these behaviours here; her personal circumstances have led her to become more career-motivated and driven, and she is aware of the need to position herself well in the future academic job market by undertaking academic career-related activities. Thus, Chloe has re-made herself as a high-performing neoliberal subject.

5.4.2 Tactics in the 'game'

Freija and Eleanor developed detailed career-related strategies during their PhD, and engaged in tactical behaviours in order to position themselves to best advantage within what Bourdieu (1988) would term the 'game' of academic career development. In order to further her goal of obtaining a post-doc position after the PhD, Freija demonstrates considerable career savvy, engaging in a range of career-related activities. She has a clear idea of the experience she needs to acquire to position herself well to get an academic job, and feels the need to be engaging in a range of 'ancillary activities' (Matthiesen and Binder, 2009, p.83), and she has a "check list of things that I feel I should be doing". Freija's perception that she ought to be engaging in additional activities during her PhD seems to have been developed tacitly, rather than being based on careers advice from her institution, department or supervisors; Freija acknowledges that there are career-related events held at her institution but "I haven't really attended anything like that". Therefore her pre-existing knowledge of academic careers before she began the doctorate and awareness of the competition for jobs seems to have informed this perception.

Freija undertakes a range of academic career-related activities during her doctorate. In her second year she undertakes a part-time research assistant post, with the aim of acquiring experience of research outside her doctorate:

> The project it is interesting it's in kind of my field but I think there probably was a little bit of thinking ahead there…thinking that would be good experience to have for if I do want to apply for an academic job.

Further, she is aware that academics are expected to have experience of applying for research funding, and so has been "starting to apply for little pockets of money just to get experience of that". She has successfully applied for a number of small research grants during her doctorate, which she acknowledges was:

> A little bit tactical because I know that one of the things that you have to do as an academic is apply for grants so I thought even if I start to apply for smaller things now, that might be quite beneficial.

These examples illuminate how Freija uses her career awareness to develop a strategy for acquiring academic career-related experience during her PhD, encompassing a range of activities which she is aware she would need to take part in as an academic in the future. Her acknowledgment that she has engaged in these activities in a way which is "tactical" highlights how Freija perceives academic career development as a game which needs to be played (Archer, 2008; Hancock, 2014).

Likewise, in her second year Eleanor engages in strategic behaviours in order to improve her chance of fulfilling her academic aspirations. She develops a "strategic mind set" in relation to building an academic career. She recognises the influence that her peers have had on her approach:

> The kind of group that I move in is a group of people who is very sensible that they need to get jobs…I'm aware of the kind of methods that they are using to do that and the strategies that they are using.

One of her peers who she shares an office with is very career-oriented, and Eleanor nicknames her "strategic Samantha". Samantha is judicious about the career-related activities that she gets involved in, and is tactical in developing connections with potential employers: "she won't do anything extracurricular at all unless she sees

where it fits in her CV she is really, really strategic…she has done all her teaching at…places where she is like well I need to get my foot in the door". Eleanor has learned from this career savvy approach, and by her second year has started to emulate Samantha's behaviour, making efforts to tactically consider strategies which may help her secure academic work in the future:

> I've kind of got erm…a scheme on at the moment that I want to, that I want to do…it's the kind of thing that someone just kind of said to me in passing and you know when things just stick in your head and you are like I should do that…this comes into like thinking more in the long term and you know like how…my thinking is changing this year erm…now I kind of have to start thinking about jobs.

This "scheme" to which Eleanor refers has been derived by learning from the experiences of her peers. Another friend finished her PhD two years ago in a similar field, but is still struggling to find work. Eleanor wants to avoid this, and develops a strategy to broaden her academic knowledge and diversify her skills in order to give herself more career options, considering how she can use her background as a Maths undergraduate within her field of the humanities: "that would be the kind of thing that might actually be more useful to kind of make me more employable". She feels that:

> It's important for me to keep my options open in terms of teaching and where I can teach and what I can teach…I don't want to end up like Katie…I don't want to end up in a position where I can only teach this one highly specialist thing.

Thus, the academic environment in which Eleanor studies has a significant impact on her career savvy. She moves from being surprised at the expectation that PhD students will engage in career development activities in the first year of her PhD, to demonstrating considerable career savvy in her second year, engaging in strategic behaviours to create specific post-PhD career opportunities.

5.4.3 Adaptive strategies

A further way in which some participants demonstrated being career savvy was by developing adaptive strategies when their career aspirations shifted. These strategies

included rethinking the kinds of career-related experience they wanted to acquire, and reflecting on how best to position themselves for careers outside of academia. Freija and Jane demonstrated these behaviours most overtly. For example, though Freija aspires to be an academic, in our second interview she acknowledges that she had experienced a "little phase…of being really unsure about whether that's what I want to do". During this period, she considered how she might adjust the focus of her research so that it would give her experience and knowledge that could relate to other careers. She refocused her field work to include working with young people, which she felt would assist her if she decided to go into another profession:

> I kind of thought, that might be helpful just in case I don't want to do an academic job, if I wanted to go into like community work and teaching or something…I did start to think I should maybe include stuff that would be helpful not for an academic job.

Similarly, Jane adapted her career strategy when she became disillusioned with academia. Though she had initially intended to pursue an academic career, in our second interview Jane outlined her plan to pursue a career in conservation policy which would enable her to make a positive and measurable impact in her field: "a lot of them do really cool stuff that you can actually see happening…you go out, you protect an area, you save a species, your species start to increase in population size". However she acknowledges that: "sometimes to make the biggest difference in management and policy you do need to have an academic reputation", and feels that the best way of going about this might be to acquire further academic credentials before making the transition from academia into policy:

> So I can do academia for a little while, gain some kind of reputation at least, at the very least do a post-doc and then go fully into an NGO or working for a government agency and hopefully my academic background will be sufficient for them to actually like value my opinion.

This newly formed career plan motivates Jane to adapt her approach to career development, prioritising activities which will give her experience relating to a policy

career. Therefore in her second year she takes up opportunities to engage in outreach work, and to do a placement in an organisation outside of academia: "I try and grab all of these opportunities to do other things that I think will be useful for making that transition". Thus, Jane successfully manages to build a new career development strategy after experiencing a shift in her initial career aspirations.

5.5 Conclusions

This chapter has illuminated how participants' career aspirations shifted during the doctorate. While most participants initially aspired to an academic career many became less certain about this possible future as they progressed through the doctorate. Even Eleanor, who originally had a strong conviction about a future in academia, by her second year acknowledges that she would be satisfied with an alternative career. Though aspirations shifted, with participants such as Chloe moving towards an academic career, and those such as Jane moving away from this, each participant discussed in this chapter could be said to fit within the traditional view of PhD students, which poses them as motivated by an academic career (Park, 2005), at some stage of their doctorate. However, this binary view of students as either motivated or not motivated by an academic career hides the complexities of how individuals negotiate their future career options and how their experiences during the PhD shape how they perceive a future in academia. The longitudinal approach taken in this study enables insight into these complexities, negotiations and shifts over time which would not have been available from a single interview with participants.

This chapter makes a theoretical contribution to knowledge through my origination of the concept of 'career savvy', which I developed from Parry's (2007) initial conception of the different kinds of savvy which doctoral students need to acquire to succeed. I have defined career savvy as individuals' awareness of career development, and their subsequent agency in seeking out career development opportunities. Participants' levels of career savvy were informed by their awareness and knowledge of academic careers, which was acquired both tacitly and explicitly, and in some cases gained before starting the PhD. The career savvy concept is useful in considering participants' approaches to career development as being part of the wider 'game' of gaining entry to academia. Participants who initially aspired to academic careers engaged in a range

of career savvy behaviours, including seeking out specific career-related opportunities, and through the development of alternative career-related strategies when their career aspirations shifted, adapting their behaviours to fit with their new career goal. The concept of career savvy contributes to knowledge about the career development strategies of doctoral students, as well as to literature which draws on the concept of the 'game' in relation to academic life. In the next chapter I explore how the culture of participants' academic environments – their institution, discipline and department, as well as their lab or office – shaped the post-PhD futures that participants were able to envisage.

Chapter 6

Belonging to academic communities and cultures

6.1 Introduction

In this chapter, I examine how participants developed a sense of belonging to their academic communities, and how institutional, disciplinary and departmental cultures shaped the extent to which they felt they belonged within academia more broadly. I argue that their experiences of belonging, or not belonging, within these communities influenced how able they were to develop academic aspirations and identities beyond the doctorate, as well as their wellbeing during their studies. Throughout the chapter I draw primarily on May's (2013) and Miller's (2003) work on belonging which involves feeling 'a sense of accord with the various physical and social contexts in which our lives are lived out' (Miller, 2003, p.220). I use this definition to explore how participants' interactions with physical workspaces and peers influenced feelings of belonging, using concepts of interaction, continuity and situation from Clandinin and Connelly's (2000) three-dimensional approach to narrative inquiry. In doing so, I address research question two by exploring the 'influence of participants' academic, peer and personal environments on their career aspirations' (see Chapter 3, p.24).

In the second half of this chapter I analyse how participants' sense of belonging to their academic communities was informed by institutional, disciplinary and departmental cultures, acknowledging literature which highlights the increasingly competitive and pressured environment experienced by those working in academia (Gill and Donoghue, 2015; do Mar Pereira, 2016). My analysis focuses on how participants' experiences of these cultures during the doctorate shaped their sense of belonging within academia. I situate their experiences in relation to studies which argue that the culture of academic institutions is inherently masculine (see Parsons and Priola, 2013), and that disciplinary cultures are gendered (Becher and Trowler, 2001). This analytical focus also acknowledges the ways in which academic departments produce 'fundamental cultural rules' (Gerholm, 1990, p.263) which

doctoral students must learn how to negotiate, such as etiquette for networking with colleagues. My analysis demonstrates that participants' experiences are at best, shaped by gendered expectations and discrimination, and at worst, by sexual harassment. I conclude by drawing attention to the barriers that participants encountered to developing a sense of belonging.

6.1.1 Defining belonging

Belonging is a contested term which has multiple meanings. The understanding of belonging I deploy in this chapter is based on four key concepts:

1. Affect: belonging is always experienced as a feeling, and is affective and embodied (May, 2013). Belonging ‘makes us feel good about our being and our being-in-the-world’ (Miller, 2003, p.219), and therefore affects our wellbeing.
2. Connections: belonging involves feeling connected – to a community of people, a particular tradition, or a specific locality (Miller, 2003).
3. Power: belonging involves power relations, and is contingent on the recognition of individuals by others within a particular community. This is linked to mattering, where individuals feel accepted and valued (White and Nonnamaker, 2008), and are able to act in a 'socially significant manner that is recognised by others' (May, 2013, p.142).
4. Negotiation: belonging is a process which must be continually negotiated, and thus must be re-accomplished over time (May, 2013).

For individuals to feel a sense of belonging, all of the above concepts are implicated, though not all of them are necessarily activated. When individuals are unable to develop a sense of belonging, one or more of these concepts are contested, which may lead to conflict rather than a sense of ease or accord (Miller, 2003). As May (2013, p.89) explains, one of the key indicators of belonging is when 'we can go about our everyday lives without having to pay much attention to how we do it', whereas 'disruption in our everyday environment can make us feel uprooted’. I draw on the four concepts above to explore how participants did, or did not feel a sense of belonging. I illuminate how individuals were strategic in trying to establish belonging within their academic communities, and show how belonging was experienced as fluid and contingent on individuals' experiences of different academic cultures.

6.2 Belonging to academic communities

As Vigurs (2016, p.3) observes, 'an important aspect of doctoral study is identification with an academic community'. In line with this, others illuminate the significance of academic and social integration for doctoral student retention and success (Ali and Kohun, 2007; Lovitts, 2001; Morris and Wisker, 2011; Tinto, 1993). I argue that beyond identification and integration, feeling a sense of belonging to an academic community is vital for successful individual outcomes and positive experiences of doctoral study. Feeling belonging as a doctoral student may also lead to academic identity development. Doctoral students participate in multiple communities during their studies, including the institution, discipline, and department, as well as external social networks. The interplay of these 'nested communities' (White and Nonnamaker, 2008, p.350) creates a unique academic environment within which new students need to establish themselves (Baker and Lattuca, 2010). However, the departmental community is particularly significant as it often provides students' workspaces and the physical context for developing relationships with peers and colleagues (White and Nonnamaker, 2008). My discussion of academic communities therefore recognises the multiple, nested communities within which individuals participate, but acknowledges the significance of 'departmental homes' (*ibid*, p.359). Physical workspaces and peer groups are key aspects of participants' departmental communities, and I focus on them in my subsequent analysis.

6.2.1 Physical workspaces: Affect and Connections

Participants' experiences of belonging, or not belonging, were influenced by their connections to and interactions with physical workspaces; a significant component of academic communities. My focus on physical space acknowledges that individuals' experiences always occur 'in specific places or sequences of places' (Clandinin and Connelly, 2000, p.50), and understands space as multi-dimensional, involving the perceptions of those who use it, the original purposes of a particular space, and the lived experiences of those who work within it (Lefebvre, 1991). There is a strong link between physical workspaces and belonging for doctoral students, who may feel marginalised within their academic community if they are not allocated office space (Deem and Brehoney, 2000), and may miss out on valuable social learning opportunities if they do not utilise institutional workspaces (McAlpine and Mitra, 2015).

Literature highlights that shared office spaces can facilitate 'informal contact, socialising, and ultimately belonging' (Morris and Wisker, 2011, p.45), providing the opportunity to combat the isolation which is commonplace within individuals' experiences of doctoral study (Ali and Kohun, 2006, 2007; Golde, 2005; Morris and Wisker, 2011). Thus physical workspaces can operate in multiple ways, either facilitating or precluding individuals' ability to feel a sense of belonging, or connection to their academic community (Miller, 2003). Though online platforms such as Twitter can be useful for doctoral students to combat isolation (see Vigurs, 2014, 2016), participants did not refer to using such spaces, and thus my discussion focuses on their experiences of physical rather than virtual spaces. Further, understanding belonging as an embodied feeling of ease with the people and places around us, involving social connections and the negotiation of power relations within our immediate social milieu, requires attending to participants' immediate surroundings. In what follows, I focus on the experiences of Freija, who encountered difficulties in establishing herself within her departmental community and struggled to develop a sense of belonging within her everyday workspace.

Having studied for her previous degrees at another institution, in our first interview Freija describes how she had felt "at home in my old department". Freija's comments reflect how doctoral students may become isolated, 'particularly…if students have moved location in order to study, and as a result left established social networks' (Hockey, 1994, p.180). This can be observed in Freija's experience; it took time for her to develop a sense of belonging to a new scholarly community after moving institutions. In her first year, Freija acknowledges that she initially felt detached from her department because of the lack of staff-student interaction, which is partly due to the layout of the building:

> At [old institution] there was this big…common room type thing, and it was quite normal for staff and students to have a coffee and talk…whereas when I first got here…there was a bit more of a divide, like this is the postgrad room…and then the staff were all in these offices…there's not as much interaction.

Freija's comments illuminate how the physical spaces within her department initially prevent her from developing a sense of belonging; her ability to make social connections with others and be accepted into the departmental community is compromised by the physical distinction between academic staff and doctoral students, and the lack of common space. Whereas 'shared spaces can foster an atmosphere of collegiality' (Morris and Wisker, 2011, p.69), Freija's perception of the 'divide' in her department shows how she understands the provision of separate spaces to be an intentional decision to separate individuals based on their seniority. This echoes literature which argues that 'the academy is…preoccupied with principles of hierarchy and the differential distribution of status' (Delamont *et al.*, 2000, p.5), and that institutional spaces can reinforce hierarchies between staff and research students (Morris and Wisker, 2011). Further, the opportunity for interaction with senior colleagues is important for career development; positive relationships between doctoral students and senior academics are 'crucial in making possible and determining academic career trajectories' (Almack and Churchill, 2007, p.105). The physical separation of staff and students within Freija's department therefore both compromises her ability to establish a sense of belonging as a doctoral student, but also is not conducive to interactions which may facilitate her career development, and thus her future belonging to this academic community.

A key aspect of belonging is developing meaningful connections with others within a particular community, and feeling at ease within the immediate social context (Miller, 2003). Literature highlights that the involvement of doctoral students in communities of practice (Lave and Wenger, 1991) supports learning and facilitates belonging (see Morris and Wisker, 2011; Wisker *et al.*, 2010). For Freija, making connections with her peers and staff in her department is important. Yet she missed out on early opportunities to meet peers at taught sessions for new doctoral students, and in our first interview acknowledges that she found it difficult to establish relationships with peers: "I remember just sitting at my desk and it'd got from about 9 o'clock to about 12 and I still hadn't…you know really interacted with anyone". Freija's department does not provide opportunities for doctoral students and staff to connect, which would help foster communities of practice (Lave and Wenger, 1991). She acknowledges that the division of staff and student workspaces meant that: "it was quite difficult really to

gauge…the relationships between like staff and students…it just took a while to settle into that. At first, you know I felt like quite detached". Thus, Freija did not initially feel a sense of belonging to her departmental community because she was not at ease, and could not establish meaningful social connections; something which may have a negative impact on wellbeing (Morris and Wisker, 2011). Freija's experiences contradict institutions' assumptions that doctoral students are 'experts' at being students in higher education because of their prior experiences, and therefore need 'minimal support in…finding ways to belong' (White and Nonnamaker, 2008, p.351).

Freija began to feel "more like I kind of belong" when she began teaching in her second year. This was largely due to being in a situation where she took on a significant role as part of a teaching team, enabling her to be recognised by others in her department. Through teaching, Freija is able to contribute to one of the department's core activities and take on similar responsibilities to academics (see Jazvac-Martek, 2009). Engaging in teaching also allowed her to establish the social connections which she desired: "I've got to know…different members of staff, different PhD students and also getting to know undergrads, and Master's students". This enables Freija to feel that she both belongs and matters within her departmental community, as she acknowledges in our second interview: "the whole process has just made me feel…like part of the department more than I did before".

6.2.2 Belonging to peer groups: Connections and Negotiations

Considering belonging as 'a sense of accord with the various physical and social contexts in which our lives are lived out' (Miller, 2003, p.220) requires a focus on participants' immediate social groups, and the ways in which they established relationships with their peers. Peer support can be invaluable for doctoral students, helping combat isolation (Ali and Kohun, 2006; Lovitts, 2001; Philips and Pugh, 2015). Feeling accepted and valued within their peer group was a key way in which participants developed a sense of belonging to their academic community, which can have a positive impact on wellbeing (Morris and Wisker, 2011). Ideas from three-dimensional narrative inquiry are useful here; 'people are individuals and need to be understood as such, but…are always in relation, always in a social context' (Clandinin and Connelly, 2000, p.2). It is this social context that I focus on here, and its influence

on participants' aspirations. I explore how participants made connections with their peers, examining the impact of peer support on their experience of the doctorate, and how they imagined potential careers. I focus on Liz's experiences as she repeatedly stressed the importance of her peer community.

Like Freija, Liz struggled to develop a sense of belonging to her academic community having moved institutions to study for her PhD, reflecting in our second interview that it "took her a while to settle". As discussed in Chapter 2, studying for a doctorate necessitates successful entry into the existing culture of the academic environment (Carter *et al*., 2013), which requires individuals to become integrated and socialised into their academic community through enculturation (Delamont *et al*., 2000). Thus, belonging is a 'negotiated accomplishment involving other people…it is not enough for an individual merely to feel that they belong, but this feeling must also be reciprocated by others' (May, 2013, p.84). For Liz, living at a distance from her university and being unable to regularly work alongside peers in a shared office poses a barrier to developing this feeling and being able to act in a 'socially significant manner' (May, 2013, p.142). She therefore feels "a bit like a spare part". Isolation may lead individuals to consider leaving their studies (Golde, 2005), and this feeling, combined with initial difficulties with her supervisors, meant that Liz struggled with the PhD at first. In our second interview she describes how she considered leaving: "I have looked it up and thought so what do you need to do if you are going to give up, what do you need to resign, is it a letter of resignation?". She reflects that she had initially considered the distance from her institution as a barrier to belonging:

> I've seen opportunities to become more involved, but all I've seen is problem, problem, transport problem that, you know investment of time…I've just been very problem orientated, entirely my issue nobody else's…it actually took me to go to someone and say I'd like to be involved…here is my issue is there any way I can be involved.

Creating an inclusive environment for PhD students is 'vitally important' (Deem and Brehony, 2000, p.163), and a key way of enabling belonging is by ensuring that students are given opportunities to connect with others by participating in

departmental activities (Ali and Kohun, 2006; White and Nonnamaker, 2008). Yet Liz blames herself for not feeling a sense of belonging, and does not expect her department to facilitate her involvement. The way in which Liz frames her situation as "entirely my problem" is interesting given the relationship between feelings of belonging amongst doctoral students and retention (Ali and Kohun, 2006; Lovitts, 2001). It also speaks back to the broader issue of the neoliberal university, which positions individuals as fully autonomous and self-managing subjects, responsible for their own success (Collini, 2012; Gill, 2009). From Liz's experiences, it appears that little effort is made by her institution to facilitate the belonging of doctoral students who do not live nearby.

Establishing connections with her peers enables Liz to develop a sense of belonging in her second year. She is encouraged by one of her peers to help organise a departmental student symposium, allowing her to make connections with other students and members of staff: “it’s great because…other people have to e-mail me with any topics they want to discuss…so there is lots of communication going on, perhaps [before] anyone in that room I would have no reason really to e-mail them or they me". She therefore begins to feel more at ease within her peer group: "they make me feel normal because there is nothing I’ve gone through, that one of them hasn’t". Belonging involves 'mattering, whereby students believe the community has accepted them and values their contributions’ (White and Nonnamaker, 2008, p.354), and despite the distance from her institution Liz tries to work in the shared office in her department as often as possible – "there is always someone that I can identify with which is why I do make the effort to be in". This comment illuminates the significance that peer groups have for individual doctoral students' belonging (Morris and Wisker, 2011), and draws attention to how belonging is not something which can be completely accomplished, but must be continually achieved through individual agency (May, 2013).

As well as allowing Liz to develop a sense of belonging, this episode also shapes her horizons for action, which were initially limited due to difficulties with her supervisors. In her first year she felt unable to construct an academic career-possible self: "I am not sure it is something that is for me. Not because I wouldn’t enjoy it but because it feels

like I am probably not good enough". Being involved in organising the symposium and interacting in a 'socially significant' (May, 2013, p.142) way with her peers enables Liz to view an academic career as possible; in her second year, Liz makes a key shift and begins to consider applying for an academic position in the future: "if I see a lectureship…[I'm] looking and thinking how many of these skills have I got, and how many can I acquire to give myself more options". Therefore, Liz's horizons for action widen as a result of interacting with her peers and developing a sense of belonging to her departmental community.

6.3 Belonging within academic cultures

Culture has been referred to as ‘a description of a particular way of life which expresses certain meanings and values, not only in art and learning but also in institutions and ordinary behaviour’ (Williams, 2006, p.32). Similarly, in relation to academic disciplines, cultures have been defined as 'sets of taken-for-granted values, attitudes and ways of behaving…articulated through and reinforced by recurrent practices among a group of people in a given context' (Becher and Trowler, 2001, p.23). Within universities, cultures can operate at the level of the institution, discipline and department, as well as in specific offices or workspaces. These cultures all have the ability to either foster or preclude a sense of belonging amongst doctoral students; research has found that supportive academic cultures can contribute to wellbeing and individual belonging through 'collegiality and a valuing of research students' (Morris and Wisker, 2011, p.5). For participants, their ability to feel belonging is shaped by the gendered practices of universities, disciplines and departments, which often position women as 'other' (Bagilhole and White, 2013; Morley and David, 2009). This leads to gendered experiences, which may involve abuses of privilege by those in powerful positions, such as sexual harassment.

6.3.1 Institutional cultures: Affect and Power

As well as wider academic cultures, the type of institutions in which participants studied had particular cultures which shaped their experiences, and the extent to which they felt a sense of belonging. The cultures that participants experienced were specific and contextual, emerging from their institution, discipline and department. In this section I use literature which argues that cultures are produced by the

entrenchment of particular values and ways of behaving (Becher and Trowler, 2001), to examine how Eleanor and Jane's experiences of studying at two different institutions influenced their sense of belonging.

Eleanor and Jane often drew comparisons between the cultures of Elite University, where they had studied for previous degrees, and Redbrick University, where they studied for their doctorate. They had both felt alienated by the culture of Elite University, experiencing bullying, and encountering what they felt were unhealthy working practices. On starting her doctorate, Eleanor finds Redbrick University more collegial than her previous institution, commenting in our first interview that: "it's such a breath of fresh air after [Elite University]…it's just such a really supportive environment…I feel very included in the department, and the lecturers are very…interested and inclusive…friendly and approachable". Here, Eleanor clearly expresses a sense of belonging within her institution in that she feels at ease within her immediate surroundings (Miller, 2003), largely due to the efforts of academics to be inclusive of doctoral students and recognise them as a valuable part of the academic community.

Yet despite feeling a sense of belonging during her doctorate, Eleanor's past experiences at Elite University continue to shape her expectations, and she is surprised by having positive encounters with her supervisors and other academics at Redbrick University. For example, after submitting some work to her supervisor in her first year, she acknowledges in our second interview that she was taken aback by the constructive feedback she received:

> She was able to do that without me feeling like the smallest person in the world…some of the feedback I got at [Elite University] made me feel like that and made me feel dreadful and like a useless waste of a human being.

The cumulative effects of being made to feel like this during her past degree meant that Eleanor was concerned about her confirmation review at the end of her first year – a key milestone of the PhD – because one of her examiners had previously worked at Elite University: "I know what the [Elite University] crowd is like, and they tend to be a

bit brutal". She had been expecting "a fight", and "to really like take a kicking for my work". Her words indicate the intensity of her fears around the confirmation review, as well as her perception of academia as a combative environment. It is clear from both of these experiences Eleanor did not expect to be recognised as a valuable contributor to her academic community, and instead, based on previous experiences, anticipated that she would be made to feel inferior by those in powerful positions. Understanding belonging as shaped by power relations (May, 2013), it is significant that Eleanor did not consider that her supervisor and other academics would facilitate her belonging. Her comments indicate that though students may have positive experiences and feel a sense of belonging within some institutional cultures, the impact of past experiences of marginalisation within other academic environments is significant, and has a long-term impact on individuals.

Although Eleanor found the institutional culture of Redbrick University much more inclusive than Elite University, this does not reflect Jane's experience. In our second interview, Jane describes encountering a culture of over-working which is normalised by the behaviour of those around her: "there is this expectation that you have to be insane basically…to work really stupidly and that's just apparently normal". She tries to work in a way which resists these expectations and counters what are seen as usual working practices: "it needs to be more normal to work normal hours…you know if I, if I leave at 5 o'clock I can guarantee I will be the first to leave". Yet Jane's resistance to these expectations positions her behaviour as 'other' within her academic community, and her refusal to work in a way which is "normal" for her department acts as a barrier to being recognised as a valid member of this community. Jane's comments show how she is unwilling to engage in working practices which she views as unhealthy, but simultaneously illuminate the pressure she experiences to behave in this way. Her remarks also resonate with research which illuminates the relative poor levels of wellbeing and mental health of doctoral students (see Hargreaves *et al*., 2017; Levecque *et al*., 2017). The contrast between Eleanor and Jane's experiences of Redbrick University highlight that it is not only institutional cultures which shape individuals' ability to feel a sense of belonging, but that departmental and disciplinary cultures are also highly influential.

6.3.2 Disciplinary Cultures: Affect, Connections and Power

All academic disciplines have specific histories and traditions which constitute particular norms and ways of working, forming individual cultures which students must negotiate (Delamont *et al*., 2000; Parry, 2007). In this section I use literature on disciplinary cultures (Becher and Trowler, 2001) and ideas around participation in communities of practice (Lave and Wenger, 1991) to examine how participants felt a sense of belonging beyond their institution. Here, I focus on participants' academic disciplines to explore the extent to which they felt they mattered within them, using Eleanor and Pepper as examples in order to draw upon two very different disciplines. Research indicates that there is often a 'culture of silence' (Cotterall, 2013, p.184) within academic disciplines, which can prevent doctoral students from being able to seek support when they are struggling. This phenomenon is also gendered; levels of wellbeing amongst women doctoral students have found to be lower than male students (Hargreaves *et al*., 2017). I argue that the extent to which participants were able to establish connections with others and seek support from them was a key indicator of how legitimate they felt as members of their discipline, viewing this as ‘characteristic of ways of belonging' (Lave and Wenger, 1991, p.35). I use these ideas about disciplinary cultures here to examine how these cultures shaped participants’ ability to establish a sense of belonging within academia.

Though literature presents isolation as more common amongst humanities and social sciences students, compared to those in the sciences (see Delamont *et al*., 2000), participants’ experiences did not follow the pattern expected from this literature. Eleanor, studying for a PhD in English, describes her positive social connections with her peers in our first interview: "I’ve got like a strong like peer network as well, I know that everyone else kind of feels the same way that I do", which she feels is an important part of her support network: "we’ve got a Whatsapp group and everyone just says oh who is coming into the office today…it’s just someone to have a tea break with that makes a difference". Yet for those working in the sciences, this peer support was harder to achieve. Belonging involves 'feeling at home or out of place in particular settings, situations or social positions' (May, 2013, p.93). Whilst Eleanor is able to establish supportive relationships with peers, in our first interview Pepper describes feeling unable to admit that she is struggling, as her peers seem not to be experiencing

difficulties: "it just feels like oh god everyone else seems to be doing ok, why am I finding this so hard? This shouldn't be so hard". Pepper's lack of ease within her immediate social context, and her inability to connect with her peers and be honest about her struggles with her work, means that she finds it difficult to feel a sense of belonging.

Academic disciplines are not 'culturally neutral' and reflect 'gender roles in wider society' (Becher and Trowler, 2001, p.55), meaning that disciplinary cultures may pose barriers for women trying to belong in traditionally male-dominated disciplines. Women students in these disciplines may find it more likely to find it difficult to ask for help due to feelings of inadequacy (Lazarus *et al*., 2000). Pepper's experiences illuminate how disciplinary cultures can significantly affect women's experiences, and that women working in departments without a critical mass of women are more likely to feel isolated and inadequate (Nerad and Cerny, 1999). The gendered cultures of Eleanor and Pepper's disciplines – as a woman in Engineering Pepper is in the minority, whereas within English, Eleanor has many women colleagues – produce very different experiences, with Eleanor feeling able to seek support and Pepper being unable to admit to having difficulties. Thus, disciplinary cultures may either enable or inhibit individuals' ability to feel a sense of belonging.

Pepper experiences alienation from her male-dominated discipline of Engineering at an early stage in her studies, due to gender discrimination and gendered expectations. These experiences are common amongst women who study male-dominated disciplines, with those pursuing doctoral degrees in engineering and science subjects being likely to have encountered sexism and discrimination throughout their previous studies (Lazaraus *et al*., 2000). In our first interview Pepper describes encountering sexism during her first degree: "at undergrad, there was always like…oh women in engineering, get back in the kitchen that kind of stuff", which she dealt with by succeeding academically: "the way that I've always handled it is just prove myself, just to be very good at what I'm doing…my coursework grades are always better than them". Her description of this encounter indicates how she has become accustomed to being positioned as 'other' within her discipline, and how her attempts to belong are invalidated by other members of her disciplinary community, meaning that she is

unable to feel a sense of belonging (May, 2013). Further, Pepper's experiences echo research which notes that many women students in male-dominated environments want to belong without drawing attention to themselves, but simultaneously must prove themselves (see van den Brink and Stobbe, 2009).

Pepper continues to face sexist attitudes in studying for her doctorate, finding that people are surprised when she tells them about her work because of her age and gender: "when I tell people what I'm doing…the reaction…is always like wow…oh my god, you're doing a PhD in…Engineering and you're a woman". Further, she has encountered male academics who have been highly critical of her work, and whose feedback is rarely constructive: "there are people that just sort of, some will kind of tear you down than build you up". Pepper feels that this attitude is symptomatic both of the culture of her discipline and of academia more generally: "it seems to be engineering PhD level or academia, that just seems to be the way it is". Her comments echo research which illuminates how senior academics in Engineering departments may assume women in the discipline to be less competent than men, leading to discrimination in recruitment and promotion (see Blair-Loy *et al*., 2017). The hostile environment that Pepper experiences within her discipline reflects the 'chilly climate' that researchers have observed women academics experience (Brooks, 2001; Soe and Yakura, 2008). These experiences further inhibit Pepper's ability to feel a sense of belonging; as a woman studying a doctorate within Engineering she continues to be positioned by others as 'out of place' (May, 2013, p.93). It is unsurprising, given her experiences, that Pepper's horizons for action do not include an academic career, as she acknowledges in our second interview:

> As soon as I'm done with this I'm, I'm out like, definitely…all the pressure and everything that you do…even then to like sometimes still get put down…I really don't want that. I want to be challenged but I don't want to be put down you know.

6.3.3 Departmental cultures: Power, Negotiations and Affect

All participants were more likely to make reference to 'departmental homes' (White and Nonnamaker, 2008, p.359), feeling a sense of belonging to their department

rather than their institution or discipline. Thus, communities of practice were usually experienced at the departmental rather than disciplinary level. Here, I draw on a number of participants' experiences – those of Jessie, Eleanor, Harriet and Jane – in order to show how departmental cultures operated in a number of ways to influence participants' abilities to develop a sense of belonging. The process by which individuals gradually accrue knowledge, skills and status within their communities of practice has been described as legitimate peripheral participation (Lave and Wenger, 1991), requiring newcomers 'to move toward full participation in the socio-cultural practices of a community' (*ibid,* p.29). Yet this may be challenging to achieve in practice:

> Legitimate peripherality is a complex notion, implicated in social structures involving relations of power. As a place in which one moves toward more-intensive participation, peripherality is an empowering position. As a place in which one is kept from participating more fully…it is a disempowering position. (Lave and Wenger, 1991, p.36)

Being able to feel a sense of belonging to their departmental community also meant having a 'sense of being valued, and…a clear status as a research student' (Morris and Wisker, 2011, p.4). Yet some participants did not experience this, and found the culture of their department to be exclusionary, and hierarchical. Jessie, a PhD student in Public Health at Modern University, comments in our second interview that doctoral students are not viewed as equal members of the departmental community, and are perceived as burdensome: "they're a bit annoying for the academics…they just take up a lot of their time, they don't see the value". Rather than being recognised as an important part of the academic community (May, 2013), Jessie feels that academic staff in her department are dismissive of her and her peers, contrasting her experience with her perceptions of students in another department, where: "[they] are all cast as staff members, are invited to stuff, like the Christmas parties for example…whereas the [Health department] people just don't…recognise us". In her department, staff fail to attend events such as the doctoral student symposium, yet in other departments joint events are held, and doctoral students are "part of the team". Literature highlights how 'research students often report a sense of low status as a student…which can create feelings of isolation and not belonging' (Morris and Wisker,

2011, pp.15-16), and here it appears that Jessie finds it difficult to feel a sense of belonging as she feels excluded from the wider departmental "team".

Jessie's experiences echo research which claims that the position of doctoral students within departmental communities is ambiguous (see Delamont *et al*., 2000), and there is often tension over whether 'the graduate student is, or should be, treated as an independent, autonomous member of the community, or...placed within a subordinate position' (*ibid*, p.176). Jessie's experiences can be understood through the concept of legitimate peripheral participation (Lave and Wenger, 1991). Her frustration with the behaviour of academics in her department towards doctoral students draws attention to how this attitude keeps doctoral students on the periphery, and prevents Jessie from being able to participate more fully in her departmental community, leading to a disempowering experience (Lave and Wenger, 1991), where she is prevented from feeling a sense of legitimacy, or belonging.

As well as reflecting on their status as doctoral students within their departments, participants also noted departmental gender dynamics, often understanding gendered patterns of participation through traditional assumptions about their discipline (see Becher and Trowler, 2001; Biglan, 1973). For example, Eleanor, who studies English notes the dearth of male students in her department but observes in our second interview that a significant proportion of lecturers are male: "the more you look around the more you think actually there are quite a lot of men here". She considers that this "means that the few men who are doing PhDs must be more likely to get jobs, and that’s not very fair". Eleanor's growing awareness of the gender dynamics of her department lead her to doubt her ability to continue to belong within academia after the PhD. Though Eleanor has moved from the periphery towards more intensive participation within her departmental community – a position which could be considered 'empowering' (Lave and Wenger, 1991, p.36) – she perceives that this status may not be sustainable. In expressing concerns that as a woman, she may be less likely to get an academic job in her department, Eleanor worries that she may be 'kept from participating more fully' (*ibid*, p.36), and find herself in a 'disempowering position' (*ibid*, p.36). Eleanor's concerns reflect literature on gender and post-PhD career choices, which highlights that men are more likely than women to pursue

academic careers after their doctorate (Guest *et al*., 2013; Royal Society of Chemistry, 2008; Wellcome Trust, 2013). Her concerns also indicate that though Eleanor feels a sense of belonging to her department as a doctoral student, this may need to be re-negotiated as she attempts to become an academic.

For Harriet, her experience of departmental cultures is largely filtered through the micro-environment of her lab. In our first interview she refers to the "laddy environment" she encounters there, which she describes as being "a bit uncomfortable sometimes". The male scientists engage in disruptive behaviours, which are normalised by the participation of the majority of scientists, who are men, in these actions: "they'll…be throwing stuff at each other and like flicking each other with stuff, or like…in the office they'll like show each other like ridiculous videos, and…someone will try and like benchpress someone else". Harriet's experiences indicate the presence of 'lad culture', which often manifests itself in disruptive behaviour in learning and teaching contexts (Jackson, 2013). The behaviour of her male peers constitutes 'lad culture' as cultures are formed through 'sets of taken-for-granted…ways of behaving, which are articulated through and reinforced by recurrent practices' (Becher and Trowler, 2001, p.23). Harriet acknowledges that she is "completely ignored…when the atmosphere's like that". This admission reveals the extent to which Harriet is excluded within her working environment by patterns of gendered behaviour, and highlight how she is made to feel 'out of place' rather than 'at home' (May, 2013, p.93), jeopardising her ability to feel a sense of belonging. Harriet is reluctant to speak out against this behaviour unless a female colleague intervenes first, engaging in form of self-presentation which is complex and multi-layered: "she will shout at them so it's fine (laughs) I just hide behind Margaret and be like I agree with what she's saying! (laughs)". The marginalisation of Harriet and Margaret in this situation reflects literature which highlights the outsider status of women in the academy (Morley, 2009; Puwar, 2004; Reay, 2000; White, 2013).

As I observe in Chapter 2, academic cultures can be particularly alienating for women. Sexual harassment and violence are overt examples of how women may be marginalised within academia, and be prevented from feeling a sense of belonging. It has been argued that sexual harassment constitutes part of the 'organisational culture'

of higher education institutions (Ahmed, 2015, p.1), and that gender-based harassment and discrimination is prevalent within universities (Bagilhole and Woodward, 1995; Eyre, 2000). Sexual harassment and violence is indicative of the marginalisation of women within academia (Phipps and Young, 2013), and thus is connected to feelings of not belonging. Jane acknowledges in our second interview that she was the victim of sexual harassment whilst on a fieldwork trip abroad with a male lecturer, an experience exacerbated by being the only woman doctoral student within the group. Jane was responsible for looking after women undergraduates as there were no women members of staff on the trip, and she "ended up being the kind of…mother hen". When the same lecturer began also sexually harassing undergraduate students, she felt "a lot of responsibility" and defended them, putting herself in a vulnerable position: "he said something else to her, I think he called her sexy or something and I was just like…no, you can't say that. It was horrible".

Considering belonging as an affective experience which 'makes us feel good about our being and our being-in-the-world' (Miller, 2003, p.219), and which involves the individual negotiating power relations and being accepted by others as belonging to a particular community, experiencing sexual harassment negatively affects Jane's ability to develop this feeling. She acknowledges that she felt marginalised by this experience: "I felt…a lot of embarrassment…and just shock really". This encounter makes her feel 'out of place' rather than 'at home' (May, 2013, p.93); on returning to her institution and seeing the perpetrator in her department, Jane feels "incredibly awkward, and also very guilty I haven't said anything yet". Feeling belonging requires individuals to feel a sense of mattering, where they believe they are accepted and valued within their community (White and Nonnamaker, 2008). Yet, being objectified by a male member of staff inhibits Jane's ability to feel that she is accepted or valued within her academic community, indicated by her feelings of awkwardness and embarrassment.

In her account, Jane also expresses significant concerns for the welfare of the undergraduate students who also were subjected to sexual harassment, who she feels are in an "awful position" as they will continue to encounter this lecturer in their studies. She feels that she has a responsibility to report him, but perceives that her position as a PhD student makes this difficult:

> This is why I was a bit concerned there being no female staff member…she would have been in a better position to do something about that, whereas me being a PhD student, like, I don't know what to do about it really, I mean, I don't know who to go to, she at least could have spoken to him directly or spoken to his senior.

Jane's experiences draw attention to the 'structurally powerful position' that male academics have over students, which make the power dynamics of reporting sexual harassment difficult for victims (Lee, 1998, p.308). Further, there seems little incentive to report incidents when high profile cases of sexual abuse and violence – for example at the University of Sussex (see Turner, 2017) – indicate that institutions may prioritise their reputations over the safety and wellbeing of victims (Ahmed, 2015). An investigation by the *Guardian* resulted in over 100 cases of women reporting sexual harassment and violence from university staff (Weale and Bannock, 2016). Though there has been some recognition of the issue, a recent report by Universities UK[6] (2016) was criticised for its lack of focus on sexual harassment perpetrated by staff against students (Weale and Batty, 2016). Addressing sexual harassment as part of the organisational culture of universities (Ahmed, 2015; Eyre, 2000) is crucial if higher education institutions are to challenge perpetrators and adequately support victims.

6.4 Barriers to Belonging

During their studies participants encountered numerous barriers to becoming successfully encultured (Delamont *et al*., 2000) into their academic communities. These barriers related to aspects of their relationships with supervisors, particularly the conflict between participants' and supervisors' conceptions of the role of doctoral students, as well as supervisors' gendered expectations. Feeling a sense of belonging is important for doctoral students in sustaining motivation, as well as contributing to retention and success (Carter *et al*., 2013; Delamont *et al*., 2000; Leonard and Becker, 2009; Vigurs, 2016). Yet this requires the successful negotiation of community power dynamics, and acceptance by its members (May, 2013). Participants' feelings of belonging changed over time as they interacted with peers and supervisors, and observed the behaviour of others in their academic communities. Feelings of belonging

[6] The representative organisation for UK higher education institutions

are therefore fluid and must be constantly negotiated: 'our sense of belonging changes over time, not only because the surrounding world changes but also in response to changes in our self…belonging is not something we accomplish once and for all…belonging is something we have to keep achieving' (May, 2013, p.90).

6.4.1 Supervisory relationships: Power, Affect and Negotiations

The individual power dynamics of participants' supervisory relationships significantly affected their feelings of belonging during the doctorate. In this section, I draw on the accounts of Jane, Liz and Pepper, as these participants encountered the most difficulties with issues of power within their supervisory relationships. Researchers have discussed the power imbalance implicit within student-supervisor relationships (Bartlett and Mercer, 2010; Hemer, 2012; Manathunga, 2007). This imbalance often manifested itself in individuals feeling unable to admit to experiencing difficulties. Jane finds it difficult to be honest with her supervisors about struggling with her workload, and in our first interview describes feeling like “an incompetent child” around them because of their seniority. This admission can be interpreted as her struggles to legitimately participate (Lave and Wenger, 1991) and feel 'at home' (May, 2013, p.93) within her academic community.

Jane's experience illuminates the tensions within supervisory relationships, and the question of ‘whether doctoral students are…junior members of the profession or subordinate novices’ (Delamont *et al.*, 2000, p.176). In our second interview, Jane expresses the concern that not meeting her supervisor’s expectations could have negative implications for her career: “if you don’t work as they want you to work, maybe they’ll give you a rubbish reference…and who is going to stand up for you?”. Though Jane does not elaborate this to the extent where she imagines a feared possible self, she clearly has significant concerns about a future where she lacks the support of her supervisors. Jane's experiences indicate how supervisors act as gatekeepers, either facilitating or preventing doctoral students’ belonging to their academic community both during their studies as well as afterwards (Lee, 2008). Further, her fears about her future career illuminate the key role of supervisors in facilitating post-PhD career opportunities (see Denicolo and Becker, 2008; Wisker, 2007).

For some participants, the lack of ownership they felt they had over their research prevented them from feeling a sense of belonging to their academic community. Liz struggled to adjust to her supervisors' style of supervision, which is very different to her previous experiences at another institution, and less collaborative than she had anticipated. She feels unable to assert herself due to an incident in her first supervision, where she was told that her initial work was not good enough: "his words were we have a certain level expected of [a] PhD and this isn't it". This was unexpected, and "really scary". From this point onwards, supervisions became a struggle for Liz:

> I don't sit there crying or anything, inside I am, but I kind of I feel like I have got no teeth in there…friends have said to me you need to take charge…set an agenda, and you need to you know take charge of it, here is what I want to discuss…I have tried doing that but then what happens is…I feel like I haven't got a voice.

The language Liz uses to describe how she feels in her supervisory meetings is emotionally charged, and inscribed with power relations. The phrases which she uses indicate the disempowerment that Liz feels; she has "got no teeth" and needs to "take charge". The relationship between students and supervisors is 'saturated with emotion' (Lucey and Rogers, 2007, p.23), and these emotions are 'an inevitable and necessary part of supervision' (Strandler *et al*., 2014, p.78). Yet, 'discussions of student-supervisor relationships are often premised on the assumption that…dimensions of power can be known about [and] talked about' (Lucey and Rogers, 2007, p.19). Extending this argument, I contend that there is often an assumption within guidance literature for doctoral students that all are able to fulfil the agentic, assertive model of a doctoral student who can 'manage' their supervisors. Further, research indicates that new students are often not aware of what to expect from doctoral study, particularly in relation to supervisory relationships (see Grevholm, Persson and Wall, 2005; Wisker, 2012). Only those who feel they are legitimately participating as members of their academic community (Lave and Wenger, 1991) are able to overcome the inherent power imbalance within their supervisory relationships, and assert themselves in this way. For Liz, whose confidence in her abilities is undermined at an early stage, it is difficult for her to engage in these assertive behaviours. Supervision represents the

most significant hurdle to her being able to successfully complete the PhD, and in our first interview she measures the time she has left in the number of remaining supervisions:

> Counting the number of supervision sessions I have got to tolerate, I have had 5 supervisions now and in the three years I am going to have 36 so that is another 31, can I put myself through this another 31 times, I don't really think I want to.

Liz's comments are significant, pointing to the way in which she views her capacity to "tolerate" supervisions as a considerable barrier to her progression. They are something which she feels she has to endure, and she doubts her ability to successfully do this; something which speaks back to literature which positions the doctorate as something to be 'survived' (see Karp, 2009; Matthiesen and Binder, 2009; Phillips and Pugh, 2015). Liz's total inability to feel at ease as a doctoral student in these early stages of her PhD, along with her supervisors' failure to recognise her as a competent member of the academic community, mean that Liz is initially unable to establish a sense of belonging (May, 2013; Miller, 2003). May (2013, p.93) draws attention to the importance of feeling 'at home' in order for individuals to develop belonging, and it is clear that Liz struggles to establish these feelings – to the extent that she considers leaving her PhD altogether.

Like Liz, Pepper has not been able to take ownership of her research, which she reflects in our second interview is "the biggest thing about why I'm not enjoying it". She expected more autonomy, and would like to work more independently: "it doesn't feel like it's mine it feels like it's my supervisor's…I'm still being made to go in directions that I don't want to go in, it's really frustrating". Pepper's supervisor requires a weekly meeting with her to discuss her research, which she feels is too often. Further, she has periods where her struggles with anxiety are exacerbated by pressure from her supervisor. On one occasion when she communicated this to him, she felt that he would not respect her request for space:

> The week before I was really ill…he came to my office, and I was just like I'm finding it really hard to cope with everything right now like you need to just stop

> a bit, but even then you know it's still like you need to do this, you need to that, you need to do something else…it was still quite hard to really get him to back off…it was just quite hard when he does that and he comes into the office and it was like, coming into my space you know…it's quite difficult. It is quite difficult.

Thus, Pepper feels that not only is her work not her own, but neither is the space in which she does it. As argued earlier, participants' interactions with their physical workspaces are a key way in which they establish belonging to their academic community, and supervisors 'play a vital role in facilitating community belonging' (Morris and Wisker, 2011, p.5). Thus, the act of her supervisor invading her space in order to question her work, especially at a time where she felt vulnerable, completely undermines Pepper's sense of belonging, as she is unable to go about her everyday business with a sense of ease (May, 2013). Further, feeling belonging also involves a sense of mattering, where individuals feel accepted and valued (White and Nonnamaker, 2008), something which is also inhibited by the actions of her supervisor. Pepper's repetition of phrases like "quite hard" and "quite difficult" indicate the extent to which she has struggled with the power dynamics of her supervisory relationship. The physical spaces where student-supervisor interactions occur are significant, particularly because they are often private and enclosed; in these spaces 'the dry rationality of university board and funding-body rules and regulations gives way to the ebb and flow of emotions…the messiness of everyday human states such as vulnerability, anxiety, expectation' (Lucey and Rogers, 2007, p.22).

As they progressed through the doctorate, some participants developed the ability to exert agency within their supervisory relationships. Many referred to learning to manage their supervisors to produce desired outcomes, reflecting literature which argues that this is part of the process of becoming an independent scholar (Phillips and Pugh, 2015; Wisker, 2007). Though Liz continues to experience difficulties with her main supervisor, by her second year she is better able to deal with this because she has developed a sense of belonging through interacting with her peers, and feels more secure in her position as a doctoral student. She acknowledges that "it feels like two different experiences almost the first year and the second year…possibly because it's taken me a while to settle". Thus, by her second year, Liz employs a number of

strategies in order to manage her relationships with her supervisors and negotiate an increased sense of belonging.

The first of these strategies that Liz employs is to become more self-sufficient, and "find my own stability" with support from her husband and friends, rather than relying on her supervisors. Secondly, she makes efforts to be more pragmatic about their relationship, and tries to take her supervisor's comments less personally: "there are going to be times when I'm going to be completely flavour of the month and…times when I'm not and that's ok". Further, Liz uses empathy to develop a more sympathetic view of her supervisor: "I know she's had her struggles…I am dealing with human beings here…I mustn't think of them as these big authoritarian… professors that never have…any kind of issues". Finally, Liz has altered her conception of her supervisory relationship to one which reflects an employment situation, which has helped her to consider how she can work most effectively with her supervisors:

> It'd be ideal if we all got on but the truth is this is a job…we are a team, sometimes teams work together sometimes teams don't work so well what I need to do is to take the best out of that team.

Others were able to manage their supervisors in more active ways. By her second year, Jane feels less intimidated by the seniority of her supervisors, and is able to be assertive within her supervisory relationships. Her supervisors have different views about her attending conferences; whilst her male supervisor does not see the value in attending unless she presents work, her female supervisor feels "it's a very worthwhile experience… just to be there, and network". Thus when Jane wants to attend a conference, she asks Helen rather than Ian. She has learned to manage her supervisors to get the outcome she wants, taking their advice but making her own decisions. She appreciates that this approach has taken time to develop: "you kind of see with the first years they are still learning…it's all quite new, the whole managing supervisors thing". Participants therefore managed the power dynamics of their supervisory relationships differently, though some were more able than others to engage in this process. Further, the confidence required to engage in these activities took time to develop, as they negotiated their belonging within their academic communities.

However, in contrast to Liz and Jane, Pepper is not able to demonstrate this agentic behaviour. This is partly due to the alienation she experiences from her discipline, combined with her struggles with anxiety, which are compounded by the difficulties she experiences with her supervisor, and other academics in her field.

6.4.2 Conflicting conceptions of PhD students: Power and Affect

A significant barrier to some participants developing a sense of belonging was the clash between how they understood their role as PhD students, and their supervisors' expectations. Belonging is often predicated on a sense of a particular identity: 'we know who we are partly on the basis of knowing who we are *not…*individual and collective identities are always constructed in relation to an 'other'' (May, 2013*,* p.79, emphasis in original). Thus, the conflict between participants' and supervisors' understanding of doctoral students' roles limited participants' abilities to feel a sense of belonging to their academic communities. Positive relationships with supervisors are critical to doctoral students' success (Churchill and Sanders, 2007; Matthiesen and Binder, 2009; Parry, 2007; Phillips and Pugh, 2015). Yet, a number of participants experienced difficulties within their supervisory relationships because of their conflicting conceptions of the role of doctoral students.

This conflict within supervisory relationships was most often present within scientific research environments, where supervisors (or principal investigators – PIs) expected PhD students to engage in additional activities, such as supervising other students or publishing work. Despite this being usual within the context of supervision in these disciplines (see Cumming, 2009; Delamont *et al.*, 2000), participants were surprised by these expectations. The clash between supervisors' and participants' expectations often generated conflict in relation to working practices. In this section, I focus on the individuals who particularly experienced this conflict; Harriet and Jane. It is significant that these participants are both from scientific fields. For participants in these fields, the difference between how they viewed their role and how their supervisors viewed them as PhD students materialised in the expectation that they would take on extra work. They had not anticipated this, and felt under pressure to acquiesce to their supervisors' demands. These experiences reflect the power dynamics within supervisory relationships in the sciences which are often characterised by 'rigid status

distinctions' (Parry, 2007, p.55). They also draw attention to how the experience of doctoral study does not always match students' expectations (Wisker *et al.*, 2010)

In Harriet's lab she is frustrated that “they see you as workers” as doctoral students, which has implications for her ability to feel a sense of belonging. Harriet is given additional responsibilities because PhD students are expected to contribute to the wider work of the lab. In her first year she was allocated a Master's student to supervise because there were not enough senior scientists: “it was just because I’m a free person, you know, available to help”. However, this prevented her from focusing on her own work and caused difficulties in her relationship with her own supervisor, with negative implications for her sense of belonging. She has doubts about her capability to supervise this student, and has struggled to do so: "I’ve only got one year's more experience than him…I’m not going to stand there and say I know everything because I don’t". Harriet is under pressure to help the student succeed as his work is important for a paper that her lab wants to publish. She feels she has been “attacked quite a lot” by her PI and senior colleagues for his lack of progress: “him messing up is suddenly my fault…they want me to literally stand over his shoulder and tell him how to do it, show him what to do you know absolutely everything”. This is a disempowering experience for Harriet, who resents the imposed responsibility of supervising this student and is made to feel 'out of place' (May, 2013, p.93) by being the subject of what she feels is unfair criticism from her supervisor. The power differentials which Harriet describes are widely acknowledged in literature about supervisory relationships in the sciences (see Delamont *et al*., 2000; Parry, 2007; Pearson *et al*., 2009), and her comments indicate how she does not feel at ease within her immediate environment (Miller, 2003), meaning her ability to feel a sense of belonging is compromised.

Rather than facilitating her belonging, the way Harriet's supervisor treats her and other doctoral students makes her feel increasingly frustrated and prevents her from developing a 'a sense of accord' (Miller, 2003, p.220) within her immediate working environment. Harriet is frustrated because she feels that even on a day-to-day level, her experience of supervision is very different to those of her peers in other labs, as there is an expectation that students will keep to particular working hours in her lab:

“everyone else like can just go off in the afternoon and just do something for an hour or whatever…which we struggle with a lot and if we are not in by half 9 then John gets annoyed”. Her frustration is compounded by her supervisor's attitude towards PhD students taking leave over holidays:

> [John] got annoyed because obviously a lot of us are leaving not on Christmas Eve we are leaving a couple of days earlier…our families don’t live [here]…and obviously it was like oh…you know you think you can just leave and all this sort of stuff.

Individuals feel belonging through an everyday sense of ease; when 'we can go about our everyday lives without having to pay much attention to how we do it' (May, 2013, p.89). Yet Harriet's everyday activities are closely monitored by her supervisor in a way which she feels is unfair. She is unable to develop a feeling of belonging to the wider doctoral student community because she feels she is made to work in a way which is not reflective of other doctoral students' experiences. Harriet's comments highlight the difficulties she encounters in trying to belong to a lab which has a culture which makes what she feels are unreasonable demands of her. Understanding belonging as shaped by power dynamics, it is clear that for Harriet, whose everyday activities are called into question by her supervisor, developing a sense of belonging is not straightforward.

For Jane, her ability to develop a sense of belonging is also complicated by the conflict between how she sees herself as a PhD student and how her supervisors see her, which emerges in relation to their different attitudes to publishing work. Jane did not expect to experience pressure to publish, particularly in the early stages of her doctorate. Though in her first year, when she had been determined to become an academic, Jane recognised that articles were “important in terms of getting me where I need to be”, she also acknowledged that she did not want to “get bogged down too much with this pressure to publish…papers do not equal success necessarily”. She feels that some individuals “go into academia and lose sight of the actual point of being a conservationist…just publishing papers willy-nilly", and does not want to embody this type of academic: "that is not what I want to do”. Yet in the sciences there is an

expectation that doctoral students will contribute to their field by publishing their results (Delamont *et al*., 2000), indicating a clash between what is expected of students in these disciplines, and what they expect when embarking upon a doctorate. Jane's perception about academics and publishing echoes literature about performativity in academia (Gill, 2009; Hey, 2004), and the increasing pressure on academics to play the 'research game' of academia (Lucas, 2006). Yet, Jane's desire to avoid getting "bogged down" in publishing is overcome by the will of her supervisors, who "won't let me go to the field again until I have a manuscript ready…there is definite pressure to get on that at the moment…which is quite terrifying really".

Jane's ability to feel 'at home' (May, 2013, p.93) within her academic environment is compromised by the power which her supervisors exercise in overruling her views on publications. Her supervisors wield an enormous amount of power as gatekeepers, refusing to allow her to return to her fieldwork if she fails to produce a publication. The effect of this on Jane is significant; she uses the word "terrifying" to describe this pressure to publish, which reflects the level of stress that she feels, and indicates how her ability to feel a sense of belonging is compromised by this exercise of power by her supervisors. Jane's acquiescence to her supervisors' expectations speaks back to the argument that undertaking doctoral study means engaging in 'performative academic labour' (Bansel, 2011, p.543), and that the 'performative force' of undertaking activities such as this is what constitutes the process of doctoral students 'becoming academic' (*ibid*, p.543). Yet for Jane, the issue of publishing is a large part of what makes her question whether she wants to engage in this process of academic identity development; her views on the value of publication run counter to how publications are perceived within scientific and academic cultures. Thus, this experience both compromises Jane's ability to feel a sense of belonging within academia as a doctoral student, but also how able she is to imagine herself belonging as a future academic.

Whilst both Jane's supervisors pressure her to publish papers, the way in which they convey this is gendered. Whilst Helen, her female supervisor acknowledges when she is struggling and sees her "as a person who is a bit stressed", her male supervisor, Ian, views her as "a means to an answer of a question and lots of papers". Jane feels that Ian sees PhD students merely as producers of outputs: "I think he sees all of his

students really as little machines that he sort of feeds like settings into and then they churn out some answers and papers". Jane's supervisors' encouragement of her to publish is interesting in the context of research which has highlighted that women doctoral students are less likely than their male peers to be encouraged to undertake activities related to pursuing an academic career, such as publishing and presenting work (see Dever *et al*., 2008). This does not reflect Jane's experience, and her supervisors' efforts to engage her in publishing could be viewed as them attempting to facilitate her belonging by valuing her contributions to her discipline.

However, given Jane's reluctance to publish, and indication that she feels under significant pressure to do so, this interpretation seems less plausible. Further, there are implications around the power dynamics involved in Jane being encouraged to publish. There is a tradition of supervisors claiming credit for their doctoral students' work (Oberlander and Spencer, 2006); something which continues to be written about in higher education blogs and in newspaper articles (see Martin, 2014; Thomson, 2014). Thus, Jane's perception that Ian sees his students as "machines" which "churn out papers" raises questions about who benefits from doctoral students being pressured to publish work.

6.4.3 Gendered expectations: Affect, Negotiations and Power

Participants did not always consider that their experiences had been affected by gender discrimination, but in our interviews often reflected on day-to-day encounters in which they perceived gender to have played a part, particularly within supervisory relationships. As argued earlier, women doctoral students may find developing belonging more challenging than their male counterparts due to the 'outsider' status of women in academia (White, 2004). Yet supervisors and other academics may facilitate students' belonging (Denicolo and Becker, 2008; Wisker, 2007). Further, educational relationships such as the student-supervisor relationship can enable students to imagine themselves in similar roles, and thus identify as future members of the academic community (Rossiter, 2004). Yet, though supervisors could be role models for some participants, they could also inhibit belonging and discourage participants from academic careers. In this section, I focus on participants who observed gender to have influenced their supervisory relationships; Sally and Harriet.

Sally, a doctoral student in Sport Psychology at Modern University, perceives gender to have been an issue within her relationships with her supervisors, and her interactions with them illuminate how this affects her ability to feel a sense of belonging. For the majority of her studies Sally has a partner who lives overseas, a situation which she finds “stressful” and often affects her research. She reflects in our first interview that she considers that she could be more open with a female supervisor about the difficulties that her personal circumstances cause: “I have actually come out of the supervisor meeting and thought, would I feel better if I had a female supervisor”. Sally's admission, especially in comparison to Eleanor's wariness of women academics, reflects the argument that gender may be more significant in some supervisory relationships than others (Deem and Brehony, 2000). Though her supervisors are academically supportive, Sally finds it frustrating that “they don’t know anything about my personal life”, but finds it hard to admit to having difficulties because she feels she might “lose their respect”. This perception reflects the idea that belonging is a 'negotiated accomplishment involving other people’ (May, 2013, p.84), and that it requires the validation of others. Sally fears that admitting to having personal problems would negate this potential validation by her supervisors of her as being a legitimate member of her academic community (Lave and Wenger, 1991), and thus impacts on her ability to feel a sense of belonging.

A further way in which gender poses a barrier to Sally developing a sense of belonging relates to lad culture. One of Sally’s male peers has the same supervisors, and she perceives that he is more able to discuss his personal life than she is: “he like had a laugh with them about…like going on a stag do and that kind of stuff”. She feels that her relationship with her supervisors is quite different: “I don’t really have that banter”. Thus, Sally does not feel a sense of ease within her immediate social context (Miller, 2003); even in simply making small talk with her supervisors, she is unable to make a connection with them, and thus her ability to feel belonging is compromised. Sally's experiences echo research commissioned by the National Union of Students, which argues that "banter" represents an exclusionary, gendered discourse which negatively impacts women's experiences of higher education (Phipps and Young, 2013). Further, academics can also play a role in perpetuating lad culture, and Jackson and Sundaram (2015) argue that institutions should take action to address this. Yet there has been

little action from higher education institutions. The National Union of Students' (NUS) Lad Culture Audit report (2015, p.13) reviewed a range of sexual harassment and anti-discrimination policies from across twenty universities and Students' Unions, found that 'there was no evidence to show that the term lad culture was being used or that institutions were outlining ways in which they would seek to address it'.

Harriet's ability to develop a sense of belonging is inhibited by gendered expectations. Belonging is not a straightforward accomplishment, and must be continually re-negotiated (May, 2013). This is certainly the case for Harriet, who as a woman doctoral student in a male-dominated discipline, is already at risk of being marginalised (de Welde and Laursen, 2011). She perceives that academics who she works with, including her supervisor, treat her differently to her male peer. Sam, a student a year ahead of her, is actively encouraged by their PI to undertake additional activities in the lab to expand his skills and experience: "John would come over and be like oh Sam we're having a meeting to talk about what you're doing and stuff…they'd just have a one-on-one sort of thing". She comments in our first interview that she feels it is unlikely that she would receive the same individual attention. Thus, Harriet feels that she is treated differently to Sam. However, she is reluctant to immediately attribute this to gender, considering that it may relate to his advanced stage in the PhD:

> It could be nothing to do with like a gender thing, but I do feel like it's a…maybe they don't think that you know, I can handle being pressured to do things…which is probably just because I'm a first year, but they also don't, you know, John probably wouldn't call me over just for a meeting to talk about what I'm doing.

Yet despite considering that their different treatment might be a result of Sam being a year ahead of her, Harriet still feels that gender has shaped her experience: "it feels like sometimes that I'm not…being as pushed or being as like…treated you know the same as they would Sam like last year". Her comments indicate how she feels that she is not recognised as an equally legitimate member of her departmental community, which has implications for her ability to feel belonging (Lave and Wenger, 1991). Harriet's experience reflects research which illuminates how women doctoral students are less likely to be encouraged to engage in additional academic career-related

activities than their male peers (see Dever *et al*., 2008). Harriet perceives that the expectations of her and Sam are gendered, and that she is seen as not able to "handle being pressured" in the same way as him. Harriet continues to encounter situations in which she is reminded that she does not 'belong' in academic science in the way that her male peers do, reflecting the argument that belonging is 'something we have to keep achieving' (May, 2013, p.90). For example, early on in her PhD she was asked to write a literature review for a lab research project. However, she was given little support, which she feels was due to others' gendered expectations:

> They assume that I'm more confident in the writing side of things…than the practical side of things, which I think is quite a standard gendered stereotype…in the back of probably a lot of people's minds it's kinda like oh you should be doing writing and teaching and that's where you're stronger…rather than…lab stuff.

Harriet's perception that those in her lab have gendered expectations of her skills echoes literature on gendered roles in academia, which highlights the assumption that women's academic abilities are in teaching rather than research (see Cotterill *et al*., 2007; White, 2013). Analysing Sally and Harriet's experiences, it is clear that some participants perceived their supervisory relationships to be shaped by gender, and that gendered expectations played a significant part in how far they felt able to belong to their academic communities.

6.5 Conclusions

This chapter has explored how institutional, disciplinary and departmental cultures influenced participants' sense of belonging to their academic communities, and within academia more broadly. Using four key concepts about belonging – affect, connections, power and negotiation – I have shown how participants' lived experiences during the doctorate were gendered, and often impacted on how they perceived a future in academia. My analysis is important in a number of ways. Firstly, understanding belonging as an affective, embodied feeling (May, 2013), has produced insights into how feelings of belonging, or not belonging, could have a significant impact on individuals' motivation to continue their research. Secondly, seeing belonging as informed by connections with others within academic communities has shown how

physical workspaces and peers played key roles in facilitating or precluding participants' ability to feel at ease within academic environments. Thirdly, examining the power dynamics involved in belonging has allowed me to contribute to knowledge in relation to supervisors' roles in facilitating doctoral students' belonging, and the potential for alienation if they failed to make efforts to do so. Finally, understanding belonging as contested, fluid, and requiring continual re-negotiation (May, 2013) has generated key insights into how women doctoral students needed to develop particular strategies in order to combat gendered barriers to belonging.

This examination of belonging, and barriers to belonging, has highlighted how participants negotiated the challenges of becoming encultured into their academic communities, and constitutes a significant contribution to knowledge about women's experiences of doctoral study. Belonging has been a useful lens through which to explore how women doctoral students struggle to fit in and gain acceptance to a highly gendered environment. As outlined in Chapter 5, at the beginning of this research the majority of participants wanted academic careers, and developed strategies to pursue this career. Yet during the doctorate participants encountered barriers to belonging within academia, including gendered expectations and difficulties within their supervisory relationships. These issues, compounded by institutional, disciplinary and departmental cultures, made it challenging for them to maintain their initial academic aspirations, as they perceived that they would have to change in order to fit in to academia. These arguments are taken further in Chapter 7, where I explore how participants perceived the values, working practices, and expectations involved in becoming an academic, and discuss how individuals viewed the possibility of embodying an academic identity. This chapter has started to illuminate how participants' perceptions of whether they belonged in academia shaped their horizons for action, and how able they were to construct academic career-possible selves. These themes are picked up and explored in depth in the next chapter, which discusses the ability of participants to construct academic identities in the face of these barriers to belonging.

Chapter 7

Academic Identities

> Identity is about belonging, about what you have in common with some people and what differentiates you from others. At its most basic it gives you a sense of personal location, the stable core to your individuality…at the centre, however, are the values we share or wish to share with others. (Weeks, 1990, p.88)

7.1 Introduction

In this chapter, I explore the extent to which participants were able to form viable academic identities during the doctorate, and how this informed their career-possible selves. Identities are relational, and whilst 'scholarly identity is performed within doctoral candidature' (Barnacle and Mewburn, 2010, p.433), '*independent* academic identities are sought only after the PhD is awarded, and do not emerge during progression toward the degree' (Jazvac-Martek, 2009, p.254, emphasis added). Defining academic identities is complex because they are continually in flux, highly individualised, and often contested (Clegg, 2006). My understanding of identity is based on the idea that identity involves 'issues about who we are and what we want to be and become' (Weeks, 1990, p.89), and that individual identities are multiple, socially formed, and potentially conflicting (Stets and Burke, 2000). I utilise a narrative perspective wherein identities are viewed as stories constructed by individuals in order to make sense of experience, and which are constantly revised (McAdams, 1993; Polkinghorne, 1998; Woodward, 2003).

In exploring how participants did, or did not, develop academic identities, I use Henkel's (2005, p.155) helpful framing of academic identity, which argues that a strong link with one's discipline and academic autonomy are 'values central to academic identity'. It has been argued that doctoral students form identities during the PhD in relation to their experience of academic cultures (Delamont *et al.*, 2000). I extend this argument in this chapter, maintaining that participants developed identities in relation

to how able they were to identify with the values of being an academic. This understanding of identity relates to possible selves theory, exploring how participants' ability to construct academic identities during the doctorate shaped the career-possible selves that they imagined.

Situating my analysis within literature which illuminates the gendered impact of neoliberalism on academics' working practices (Gill, 2009; Hey, 2004; The Resisters, 2016), I argue that the knowledge participants gained during the PhD about becoming an academic influenced their ability to develop academic identities. Baker and Lattuca (2010, p.809) contend that 'scholarly identity emerges during the PhD experience', yet this process may not be straightforward, as it involves 'negotiating entry to a culture; acceptance there entails identity shifts' (Carter *et al*., 2013, p.340). This echoes the argument that doctoral study is a 'liminal experience' wherein students 'stand on the threshold' of an academic career (Delamont *et al*., 2000, pp.176). This understanding of doctoral study constitutes the rationale for this chapter, in which I use academic identities as a theoretical tool to explore how participants' experiences of the doctorate shaped their perceptions of academic identities, and thus their career aspirations.

I begin by drawing attention to the conflict which participants perceived between their existing identities and what they felt constituted academic identities. This conflict manifested itself in a number of ways: firstly the perception that there were deep divisions between academia and the 'real world', and secondly the feeling that their personal values did not correspond with the values they would need to espouse as academics. I then use the concept of academic identity to consider how participants envisaged facing barriers relating to the structures of academic careers, and to gender, as early career academics. These included the possibility of insecure academic employment, and the perceived difficulty of balancing an academic career with family life. This chapter addresses research question three, examining the barriers that participants perceived to pursuing an academic career. Building on arguments made in Chapter 6, here I show that participants' experiences during the doctorate meant that they not only struggled to feel belonging to their academic communities as doctoral students, but also struggled to envisage themselves belonging in the future, as

academics. As Chapter 4 examined participants' imagined futures based on their letters to future selves, this chapter discusses the barriers that participants imagined facing if they pursued an academic career, using the concept of academic identity.

7.2 Conflicting Identities

Many participants perceived conflict between their personal values and those they felt they would need to take on as academics. This made them reflect on the compromises they would need to make to develop and maintain independent academic identities, and thus shaped how they viewed the possibility of becoming an academic after the PhD. Thus, perceptions of academic values had significant implications for academic identity development (Weeks, 1990).

7.2.1 Real and academic worlds

In this section, I discuss the experiences of Bella and Freija, who equated taking on an academic identity with embodying particular working practices which they perceived were different to those in other sectors. Bella, a doctoral student in Psychology at Modern University, values the autonomy implicit within academic work and perceives an academic identity as congruent with her personality and preferred ways of working. She feels she is suited to working within the academic environment because of the freedom that it provides. Bella struggled with the structured nature of her undergraduate degree, and in our first interview reflects that she would find a traditional job difficult: "I would struggle in a 9-5 job where I had to…be at my desk doing a task…for solid time". She enjoys independent research and feels that an academic career would allow her freedom to "do things in your own kind of way", whereas in other jobs "you're very monitored". Bella's views echo the argument that 'autonomy is integrally related to academic identity' (Henkel, 2005, p.172). These aspects of an academic career lead Bella to imagine an academic future as possible: "that is the one thing that I am very constant about, however it's going to happen, it's going to be something academic".

For others, taking on an academic identity was more problematic, as they perceived that in becoming an academic, they would become divorced from the real world. In our first interview, Freija – who is studying for her PhD in the discipline of Geography –

describes some doctoral research as "really abstract, in the clouds", whereas she wants to "try and have a bit more of a link between the real world and the academic world". This perception is significant, linking with debates about the value of certain kinds of disciplinary knowledge over others (see Barcan, 2016; Parry, 2007). Freija is keen to ensure that her research will have a measurable impact, but feels guilty for doing academic work, which even in the first year of her PhD, she perceives as not "useful". Though Freija aspires to be an academic, her desire to realise this career-possible self is complicated by the conflict she perceives between taking on an academic identity, and doing work which will make an impact. This is evident in the way in which she describes most of her friends as having "really helpful jobs", and finding it hard to justify what she does to them:

> When you're chatting to like supervisors or people in your office, everyone kind of gets it, and they're like oh yeah that's really interesting, whereas when you start saying what you're doing in the real world, I feel like people are a bit like ah, ok…

Thus, Freija experiences a division between who she is able to be as an aspiring academic, and who she is in her personal life. She perceives her interactions with others in her personal life to be entirely separate from her doctoral research, and the "academic world" she inhabits when she studies. This even extends to the language she uses in these different worlds; she recognises that the ways in which she would speak to her peers about her research are not appropriate in her personal life. Further, she is concerned about appearing arrogant or elitist to her friends outside academia:

> The stuff I would say to someone who sits next to me in the office makes complete sense…but then you just realise that if I say that to someone else, they're just going to look at me like I'm crazy.

Freija's perception of the division between real and academic worlds shapes the way she considers taking on an academic identity. She started the PhD intending to pursue an academic career, but by her second year begins to have doubts. She is influenced by the perceptions of those close to her, internalising their scepticism about the impact of

academic work, thus calling into question her future academic identity – her career-possible self – and making it more difficult for her to sustain this possible self: "my family and Finn's family, are always a bit like so why are you doing this, you know what is the point in this and it just being oh it's just academic isn't really enough". Freija's concerns reflect research which highlights that doctoral students may leave academia in favour of other sectors where they feel they can make an impact on broader social issues (see Diamond *et al.*, 2014; Wellcome Trust, 2013). Thus Freija's horizons for action shift during the PhD, illuminating how doctoral students' identities should be viewed as dynamic and emergent; as 'identity-trajectories' (McAlpine *et al.*, 2010). Though she perceives being an academic as an opportunity to pursue her research interests, she experiences guilt and doubt about maintaining this identity beyond the PhD. An academic career for Freija is therefore perceived as possible, and even desirable, but potentially not appropriate. Her doubts about this career are in large part due to her perception that working as an academic will mean that making a difference to people's lives will be difficult. This view of academia may prevent Freija from constructing an independent academic identity and lead her to re-work her 'identity story' (McAdams, 1993, p.123), as she begins to question her original aspirations: "if I stick in academia what am I actually going to be doing, like what am I contributing to the world, like how am I actually making anything…better?".

7.2.2 Conflicting values

Values are central to identity (Weeks, 1990), and participants' career aspirations were significantly shaped by whether or not they could align their personal values with the values which they saw as being implicit within an academic identity. In what follows, I discuss the experiences of Pepper and Jessie, who express – either implicitly or explicitly – views which position academic values as contradicting their own values. Despite this, the ways in which they responded to this was very different: Pepper outright rejects the possibility of taking on an academic identity at an early stage, whereas Jessie takes up an ambivalent position.

Pepper, working towards a doctorate in Engineering, is motivated by making a contribution to society through her research, echoing literature which highlights that a significant driver for PhD students is the potential to make a difference in their field

(Brailsford, 2010; Churchill and Sanders, 2007). Significantly, though she references her discipline as being important to her – a key component of academic identity (Henkel, 2005) – Pepper perceives a clash between her personal values which she connects with being an engineer, and the values of academics in her discipline. In our second interview she comments that:

> In research like, you obviously you want to show off what you've been doing, but for me as an engineer…I want to do it for like the greater, for the greater good…but in academia it's a bit like…they're just kind of doing it for themselves and for their own like gain rather than for like the bigger gain and that's where like there is quite a big difference between industry and academia.

Thus, the identity which Pepper wants to take on – that of an engineer working "for the greater good" – is positioned in opposition to the identity she feels she would need to embody as an academic. She perceives that being an academic means prioritising career advancement rather social change, a view reflected in critiques of the neoliberal academy (Gill, 2009; Mountz *et al*., 2015; The Resisters, 2016). Indeed, in academia 'the pursuit of unbridled self-interest (rationalized in terms of a 'career') has not only been normalized, it has status and legitimacy' (Lynch, 2010, p.59). In the same interview, Pepper describes how she is unable to envisage a future as an academic:

> This PhD is kind of teaching me…where I really want to go like afterwards and I've ruled out already that academia is absolutely not where I want to go…I was away for quite a long time, when I was working in an industry placement so it was…a nice change. You know it was kind of like this is definitely what I want to do.

Here, Pepper indicates that her experiences of working in academia and industry have enabled her to construct a career-possible self of someone who works in industry, where she can work in a way which corresponds with her values (Weeks, 1990). Thus, her rejection of the possibility of developing an academic identity is linked to her construction of an alternative identity which does not require her to compromise her values, and enables her to work in a way which she feels is authentic. This finding

therefore troubles the notion that 'defining…academic identities is at the heart of the doctoral pursuit' (Jazvac-Martek, 2009, p.253), illuminating how the doctorate may have a very different purpose for individuals who do not view the PhD as the start of an academic career (Park, 2005), and demonstrating how identities may be formed in ways which are both affective and rational.

Similarly, though Jessie has a strong connection to her discipline, she is ambivalent about forging an academic identity as she struggles to equate her values with those she perceives in academia (Weeks, 1990). In our first interview Jessie describes her motivation as “improving people’s health and wellbeing”, but by her second year perceives that within academia there is a "sort of ivory tower…lack of genuine…connection and effort to making a real difference to people”. She has found it increasingly difficult to communicate her research to those outside of academia: "I have to make sure I retract myself from this…academic kind of wormhole to be able to then speak to a real person again". Jessie is concerned that she is being drawn into an environment where she is detached from others, and worries that taking on an academic identity will prevent her from being able to communicate with "real" people, implying in the above that in order to do so, she will need to reject an academic identity. Identity is both 'a product of personal desire and activity, but also of interactions with members of local academic communities' (Baker and Lattuca, 2010, p.813), and though Jessie considers a future in academia, her interactions with some academics make her increasingly frustrated. She is cynical about academics at her institution who participate in research and evaluation exercises such as the REF: “it's about what can we demonstrate to show how good we are as opposed to what are we doing that makes a difference to people”, reflecting wider criticisms of the REF (see Lucas, 2006; Martin, 2011; Scott, 2013).

Jessie’s experiences are worthy of further analysis, because for all her concerns about academia, she does not dismiss the possibility of taking on an academic identity. She left a successful career in market research to study for her doctorate, and in our second interview, reflects on her expectations of academia: "one of the reasons I came back to academia was because I was, I felt like I was lacking people to learn from…people to inspire me". Her comments resonate with the argument that 'for

some, the identity shift to becoming a student, having been a professional, was particularly challenging' (Morris and Wisker, 2011, p. 61). Jessie's relationship with academia is complex. She is sceptical about the impact of academic work on people's lives, but simultaneously hopes that she may be wrong:

> I actually feel like I would really have failed if I left academia…I would be really disappointed if it wasn't possible to do that sort of thing through academic [work] because that would just confirm my suspicions that there's…a lot of money being wasted, a lot of resources being wasted, in both people's intellect, and the actual physical money it takes to do it, that's not making a difference to real people's lives.

Despite her concerns, Jessie does not completely reject the possibility of developing an academic identity, and maintains an academic career-possible self. Her admission that she would feel like a failure if she did not embody this academic self resonates with literature which highlights that this is common amongst doctoral students, who often enter doctoral study with the assumption that this is the usual post-PhD career trajectory (UK Council for Science and Technology, 2007) and have the 'perception that leaving academia is a failure' (Royal Society, 2014, p.1). However, though Jessie still perceives an academic career as possible, she questions the appropriateness of this career for achieving her goals: "I'm not sure that it is the route that will help me to achieve what I want to achieve". Thus, Jessie's horizons for action – her 'perceptions of what [is] possible, desirable or appropriate' (Hodkinson *et al*., 1996, p.123) shift during the PhD, producing an ambivalent reaction. Jessie's shifting horizons for action and growing ambivalence towards the possibility of developing an independent academic identity indicate how individuals re-work their identities over time, in response to particular circumstances: 'as our views of ourselves and our worlds change over time, we revise the story' (McAdams, 1993, p.91).

Pepper and Jessie connect their values with the vocational side of their discipline, whether as an engineer or public health advocate. Yet despite the argument that identification with a disciplinary community is a key component of academic identity (Henkel, 2005), for these participants, their discipline formed a significant part of their

personal values and motivation for their research, but was not linked to taking on the traditional academic identity associated with learning their disciplines. Personal values were often seen as in conflict, if not incompatible with, the values some participants perceived they would need to embody as academics. This stance took differing amounts of time to develop, according to participants' experiences, but had a significant impact on how able they were to develop academic identities, leading individuals to revise their identity stories (Woodward, 2003).

7.3 Structural barriers

A number of the barriers participants encountered to developing academic identities related to 'structural features of the contemporary University' (Gill, 2009, p.234) such as the competition for academic jobs, and the pressure to publish, derived from a culture of performativity (Ball, 2003) which pressures academics to 'produce and keep producing' (do Mar Pereira, 2016, p.103). These working conditions have been normalised within contemporary academia, a cultural shift which has been linked to the neoliberalisation of the academy (Ball, 2012; Brooks, 2001; Collini, 2012). The practices that participants perceived that they would have to embody as academics were discouraging; for example being expected to totally dedicate themselves to work, which often clashed with personal values (Weeks, 1990). Many participants were also concerned about the intense competition for academic jobs, often advertised on short-term, precarious contracts. Some of these factors were more discouraging than others, depending on personal goals and priorities, and some of these issues – such as the proliferation of insecure, temporary contracts – became more off-putting over time, as participants' future priorities shifted during the doctorate (Baker and Lattuca, 2010). The extent to which these issues were perceived as barriers to formulating an academic identity was influenced by factors such as social class, and different levels of need for financial security. In what follows, I begin by exploring how the pressure to publish was experienced as problematic by participants, and how this impacted on academic identity development.

7.3.1 Pressure to publish

Witnessing academics under pressure to publish work influenced understandings of what becoming an academic would require, and the majority of participants struggled

to envisage taking on an identity they perceived would involve embodying negative working practices. Literature highlights that changes to UK higher education over the last two decades have placed neoliberal values at the centre of the sector, leading to the development of the 'entrepreneurial university' (Clark, 1998; Slaughter and Leslie, 1997; Slaughter and Rhoades, 2004) and the commodification of academic practices relating to teaching and research (Ball, 2012; Collini, 2012). Within this context, where individuals are increasingly valued for the quality of their academic publications – reframed as research 'outputs' for the purposes of the REF – academics are recast by the neoliberal academy as 'productive individuals, new kinds of subjects…[who] are the central resource in a reformed, entrepreneurial public sector' (Ball, 2012, p.20). In Chapter 6 I showed how doctoral students are becoming inculcated into this performative culture as a result of pressure from supervisors to publish during the PhD. In this chapter, I discuss how participants perceived the prospect of continuing to experience this pressure as academics, and how this structural aspect of academic careers influenced how they considered the possibility of taking on academic identities. I draw on the experiences of Liz and Harriet to show how participants imagined negotiating this pressure in different ways; whilst the dominant reaction of participants was negative, Harriet considers that she could become encultured into this way of working.

Liz, studying in Health Sciences, struggles to imagine taking on an identity which involves continuously working under pressure to produce publications; something she has already experienced from her supervisors. She feels that they want her to "just churn out articles", and is unwilling to fulfil their expectations, which she perceives as burdensome: "I just don't know if I can be this publishing machine for them". Her perceptions of what becoming an academic would involve, developed by witnessing her supervisors' working practices, means Liz does not construct a positive academic career-possible self. Observation 'can lead students to reject certain possible selves' (Rossiter, 2004, p.149), and doctoral students have been found to reject academic careers on the basis that they did not want to lead lives like their supervisors, who they perceived to be under significant pressure and lack an appropriate work/life balance (Mason *et al.*, 2009). This phenomenon is evident in Liz's comments about her supervisors' working practices:

> They have said to me you know, we are under pressure, so we are putting you under pressure, this isn't personal, this is business…we are under pressure from above so, if it feels like we are putting pressure on you [it's] because we are under pressure…they were talking to each other about the pressure they were under and…I said you are not selling this idea to me at all.

Understanding identity as 'who we are and what we want to be and become' (Weeks, 1990, p.89), it is clear that Liz is reluctant to embody an identity which involves constant pressure to produce work. Her perceptions of what becoming an academic would involve, developed by witnessing her supervisors' working practices, means Liz does not construct a positive academic career-possible self. Further, her supervisors' description of their treatment of her as being "business" rather than "personal" speaks back to literature illuminating how neoliberal values have become central to institutional and individual attitudes to research (Ball, 2012; Hey, 2004) where academics must demonstrate their productivity to prove their worth. In discussing her post-PhD career options in our first interview Liz appears to reject these neoliberal values, reflecting that being subjected to this pressure as a doctoral student and witnessing her supervisors' experiences, have led her to conclude that "the world of academia is not for me". Whilst the pressure to produce publications has been argued to have a greater impact on early career academics – 'the culture of 'publish or perish' is acutely felt by those at the lower rungs of the academic career ladder' (The Resisters, 2016, p.268) – I argue that the impact on doctoral students as a distinct group has not been fully considered. This pressure has damaging consequences for doctoral students like Liz, who are discouraged from taking on an identity which means working under significant pressure, and may leave academia after their doctorate as a result (see Grant and Sherrington, 2006). This has clear implications for academic institutions and the higher education sector as a whole in terms of the future recruitment and retention of academics.

Whilst Liz refutes the possibility of taking on an academic identity on the basis of not wanting to engage in these practices, Harriet expresses a degree of ambivalence in relation to publishing work. She is critical of the value placed on publications within the structures of academic science, commenting in our first interview that it is "really

unfair" that "the whole…career structure and everything is literally just…based on…how many papers you get". She is intimidated by the prospect of having to embody a role where she would be expected to constantly produce publications, and acknowledges in the same interview that her experiences of the pressures implicit within this environment discourage her from pursuing an academic career: "I think the atmosphere does put me off…quite a lot". This feeling is exacerbated by the comments of a senior member of staff in her department, who warns her and her peers that a lack of publications will have negative career consequences:

> He was talking about like who he'd hire and stuff like this…he said yeah basically it's not worth a lot if you don't have a first authored paper out of your PhD and stuff which is just like, I think that's what scared quite a few of us.

Yet, at the same time, Harriet acknowledges that she could change as a result of participating in this competitive environment. She reflects that if she were to fulfil one of the key criteria of success for an academic scientist – publishing a paper as first author – she would be more willing and able to embody an independent academic identity. In acknowledging this, Harriet imagines a possible self who could be seen as becoming complicit within the competitive academic environment that she herself has criticised:

> I guess if suddenly I'm the one with the first authored paper, I'd be like this is great…I can do this now! I just have no idea…until that happens, hopefully…(laughs)…I'm not really sure um, but yeah I think it's quite, it's quite a toxic environment I would say.

Despite her view of this environment as "toxic", by her second year Harriet appears to have become inculcated into this way of working, and view her supervisor's focus on getting her to publish positively:

> I know some people…are just working on just their PhD and are really worried about getting papers whereas I feel like…I should be able to get a couple out of it because he is pushing me to do all these different things.

Thus "getting papers" is something that becomes important to Harriet as a result of being under pressure to publish during her doctorate. Though her values do not initially correspond with the 'publish or perish' culture, she realises that in order to be successful in academia, she will need to fulfil the expectation of other scientists, echoing the argument that 'the claim to the identity of scholar is determined by the most central members of the community' (Baker and Lattuca, 2010, p.821). Thus, to establish an independent academic identity which is confirmed by others, Harriet perceives that she would need to work to the publishing agenda, and thus alter her behaviour.

Understanding identity as a developing narrative where 'we are constantly having to revise the plot' (Polkinghorne, 1988, p.150), it seems that by our second interview, Harriet begins to see herself being in a position to take on an academic identity, and considers applying for a post-doc:

> When you don't really know what is out there it's kind of hard to say oh I'm just going to stop and think and look around whereas if I know I could just go into a post-doc hopefully like somewhere else, then it's just the easier thing to do.

Yet Harriet seems to consider becoming an academic as a result of a lack of other available career identities and because she perceives it as "the easier thing to do", rather than an academic identity necessarily reflecting what she wants to 'be and become' (Weeks, 1990, p.89).

7.3.2 Expectation of total dedication to work

The majority of participants perceived that becoming an academic meant totally dedicating themselves to work, being willing to work long days, and on evenings and weekends. This perception reflects the intensification of academic work in the neoliberal academy (Gill, 2009), and the expectations of individuals to model themselves on the 'ideal academic' (Lynch, 2010, p.58). In Chapter 6 I explored how participants negotiated the culture of over-work as doctoral students. Here, I discuss how participants perceived the possibility of having to conform to this expectation as future academics. Jane expressed the most concerns about what she felt were

unreasonable expectations of academics in relation to work, and I begin by exploring how her experiences led her to reject an academic identity. Yet alternative stances could be developed. I discuss Freija's experiences as a point of contrast, illuminating how doctoral students may become encultured into academic working practices as a result of engaging in 'performative academic labour' (Bansel, 2011, p.543).

Jane struggles to develop a positive academic identity because she comes to view her values of maintaining a positive work/life balance as in conflict with the culture of over-work she perceives in academia (Weeks, 1990), and which is normalised by the behaviour of academics in her department. In our first interview, she describes her desire to maintain her wellbeing: "I am trying to constantly keep checking…while I am doing my PhD…that I am happy…working hard but not killing myself". This care that Jane demonstrates for herself echoes feminists who have advocated self-care as a form of resistance (Ahmed, 2014; Lorde, 1988). Yet, in our second interview, Jane reflects that witnessing academics in her department working long hours mean that these 'norms, values and recurrent practices' (Becher and Trowler, 2001, p.24), become normalised, and thus encourage others to work in similar ways:

> It just makes me really angry…the expectation to work…the idea that the more you work, the more productive you are is just silly because there is so much evidence that killing yourself and working too many hours and not having enough breaks is counterproductive…but still I find I look around me and everybody, the first years who have only just arrived sometimes are there way after I've left, one of the Master's students slept here the other day. I was like what are you doing? This is really unhealthy…I think, a lot of it is seeing other people doing that and, and just thinking well they are doing it, I must have to do it, it's kind of I don't know it's so deeply ingrained…lecturers work like that as well half the time so that doesn't help.

Thus, Jane's desire to be "happy" and avoid working in a way which is detrimental to her health is in conflict with the academic identities she sees performed by lecturers in her department, making it difficult to sustain her original intentions. Despite being "really angry" about the expectation to work "too many hours", in the same interview

Jane acknowledges that she is influenced by the behaviour of others: "it's really difficult to get up and go I'm leaving now…I don't always manage it, sometimes I'm like oh but nobody else has left yet, it's really difficult". Her repetition of the phrase "really difficult" indicates the extent of her struggles. Further, Jane is aware that the culture of over-work extends beyond her department: "I read a horrible statistic the other day that said…they reckoned 53% of academics in the UK had some mental health issues, and somehow that it's just kind of brushed under the carpet". Jane's concerns are reflected in literature about wellbeing amongst UK academics, which highlights that a poor work/life balance is common, and that technological advancements have meant that individuals now work in an 'academia without walls' (Gill, 2009, p.237), which has a negative impact on academics' mental health and wellbeing (Gill and Donoghue, 2015; do Mar Pereira, 2016). High levels of psychological distress amongst academics are also reported, due to role conflict between individuals' home life and their job (Kinman and Jones, 2008). Concerns about academics' mental health have been linked to increasing pressures on individuals in the context of the performance-driven culture in UK higher education (Davies and Bansel, 2005; Gill, 2014).

Understanding identity as 'what you have in common with some people and what differentiates you from others' (Weeks, 1990, p.88), it is clear that Jane is not willing to embody the model of the 'ideal academic' (Lynch, 2010, p.58) who is prepared to dedicate themselves totally to academic work. It is therefore perhaps unsurprising that Jane develops significant doubts about taking on an academic identity. She reflects in our second interview that "life would be easier outside of academia", recognising that "other jobs are a lot more 9 to 5". Therefore despite initially aspiring to develop an academic identity, by her second year Jane plans to pursue a career in policy instead, illuminating how identities shift during the doctorate (Baker and Lattuca, 2010; Jazvac-Martek, 2009; Wisker *et al.,* 2010). Jane's experiences are not uncommon, reflecting literature which highlights that 'not all individuals doing doctorates continue to desire academic careers when they see close at hand the actual work expectations' (McAlpine and Akerlind, 2010, p.11, see also Mason *et al.* 2009). Jane's aspirations follow the same trajectory, and she comes to reject the possibility of developing an academic identity due to her perception that this would mean embodying behaviours which

conflict with her values of self-care, and require her to work in a way which she feels is "unhealthy" (Weeks, 1990).

Yet the expectation that being an academic would involve total dedication to work was not discouraging to all participants. Freija is aware that being an academic would involve working under pressure to fulfil a range of expectations. As a PhD student who teaches alongside her research, she has encountered some of these pressures already; a common experience for doctoral students:

> Doctoral students actively take on academic duties such as teaching…presenting at scholarly conferences, writing applications for grants, and publishing research...there are thus many instances where doctoral students take on the same tasks and responsibilities as early career academics. (Jazvac-Martek, 2009, p.256)

Undertaking these tasks requires doctoral students to 'enact academic role identities' (*ibid*, p.256). Indeed, this understanding reflects Freija's perceptions; when she is teaching she gets little time to familiarise herself with the material because of others' lack of preparation. Yet, in our second interview she considers that she expects to have to work in this way as an academic, and therefore feels she ought to become used to it:

> I'm teaching on one guy's course and I don't even see the slides until about 15 minutes before the lecture, because that's when he's finished…but I think it's good to realise that that is how it is as well because it is busy, and you do get things flung at you from different directions, and you have to deal with them, and then you have to try and fit in your research and your funding and whatever else, you have to, you just have to squeeze things in. Which probably isn't a brilliant work environment and I know…there are obviously a lot of unhappy academics and there is a lot going on around you know workload and short term contracts and precarity there is a lot out there about that because academics are under a lot of pressure so, yes just getting experience of that (laughs) so that I'm prepared.

Freija's perceptions reflect literature which shows how neoliberal working cultures have resulted in the 'intensification of academic work' (Gill, 2014, p.13), and how contemporary academic careers require individuals to demonstrate flexibility, availability and resilience (see Gill and Donoghue, 2015; Mountz *et al*., 2015). It is perhaps surprising that given the range of challenges that Freija envisages experiencing as an academic, she is not discouraged from embodying this identity, and instead considers that her experiences as PhD student will help her to assume this identity in the future. Whilst acknowledging in the excerpt above that the conditions of contemporary academia produce "a lot of unhappy academics", Freija maintains that she wants to be "prepared" for working in this role. Thus, Freija's understanding of what taking on an academic identity will involve corresponds with the view of academics as having to "produce more, better, and faster" (do Mar Pereira, 2016, p.100), and shows how she has become inculcated into this culture of productivity; though Freija acknowledges the negative implications of working in this way, she appears to relish the prospect of embodying this identity beyond her PhD.

7.3.3 Competition for jobs

A number of participants expressed concerns about the competition they would face in applying for academic posts, which had implications for their academic identity development. Here, I draw on the experiences of Jane and Eleanor, who both worried about this, but whose concerns provoked different responses. In our first interview, Jane describes her initial ambition of pursuing a post-doc position after the PhD, but expresses fears about the implications of the competition for these positions:

> Only like 5% of people end up doing post-docs after PhD…obviously the competition's really high…if it's like high to the extent that they require millions of publications and stuff that I…would not be able to achieve without making myself…stressed and miserable…that would be a barrier.

Jane's reflections on the competitive climate of academia echoes Hey's (2004, p.40) wry observation about the link between competition and performativity; 'as we jostle for places on an ever-escalating elevator to climb higher, we have to do more'. Significantly, Jane is not concerned that the competition for these positions may mean

that she is unable to be successful, but that she would have to compromise her happiness and her mental health in order to succeed. She equates a future in which she would have to have "millions of publications" with one where she would be "stressed and miserable" as a result. This makes her question the desirability of embodying this post-doc identity, echoing the argument that increasing demands have not only influenced 'what educators, scholars and researchers do' but also 'who they are' (Ball, 2003, p.215). Thus, Jane is worried about what taking on this identity would mean for her personally, and perceives compromising her mental health in this way as a "barrier" to embodying this academic identity, thus questioning her dedication to realising this career-possible self.

Eleanor, in contrast, is more ambivalent. She is aware of the difficulties that would arise from the competition for academic jobs, but is keen to maintain her academic career-possible self, and works to shape her identity towards achieving this. Eleanor is critical of the "incessant competition" that she perceives in academia, and has witnessed during her PhD. However, she acknowledges that she is both affected by, and complicit within, this culture. During our first interview she indicates that her past experiences of studying in a competitive environment during her Masters have shaped how she approaches competitive situations:

> I suppose it's coming out of [Elite University] as well, they're a really competitive crowd and I can't quite shake the competitive…like I'm going to win and do you know what the prize is, an academic job…the prize is more work.

Eleanor's reflections about her own competitive nature are therefore imbued with a critical awareness of the reality of success. This view of the doctorate as a kind of competition wherein winning means being awarded the "prize" of an academic job speaks back to warnings outlined in research on the 'perverse pleasures' (Hey, 2004, p.39) of academic work:

> As we garner (or not) the vulgar 'goodies': of grants, the publication of prestigious papers, the tonic invite to keynote leading conferences, we also know

> that the pleasure of winning is very short lived, almost a redundancy since success is forever postponed in the race for the next prize. (*ibid*, p.40)

Further, Eleanor is pragmatic about the realities of pursuing an academic career in an increasingly competitive sector, describing this in our first interview:

> I would say 90% of the people I know want to be academics, and there just aren't the jobs for that but everyone thinks it's going to be me cos I've done really well so far, without thinking yes but everyone else here has done equally as well…I think there is this strange collective assumption of success with PhD students and I think that might make it all the more worse when inevitably most of us don't get academic jobs…that will be the hardest thing to take.

Eleanor's desire to take on an academic identity is therefore not undermined by her knowledge of the competition for academic jobs, but is informed by her critical awareness of the realities of an academic career, and her understanding of the likelihood of failure. She acknowledges that failing to embody this identity after the doctorate will have negative implications for her and her peers, echoing research which draws attention to the potential for doctoral students to become distressed when their academic identity is not confirmed by the wider academic community (Jazvac-Martek, 2009). Further, Eleanor's observations echo the widely reported sentiment amongst doctoral students who do not become academics that they have somehow failed (see Royal Society, 2014; UK Council for Science and Technology, 2007). Beyond personal implications, there are also broader consequences of the cultural assumption that leaving the academy constitutes failure for doctoral students. In their report about the professional development of doctoral students and early career researchers (ECRs) in the Arts and Humanities, Vitae (2017, p.26) found that 'this perception of failure, as compounded by the narrow focus of academic research, can make it challenging for doctoral researchers and ECRs to imagine themselves in 'alternative' careers'. Thus, traditional notions about the purpose of doctoral study may limit doctoral students' abilities to construct alternative identities and imagine other career-possible selves.

7.3.4 Insecure academic employment

This section focuses on participants' perceptions of the temporary and short-term nature of many academic contracts (Lopes and Dewan, 2014; UCU, 2016), which a significant number of participants viewed as a barrier to embodying an academic identity. In this section, I discuss the experiences of Freija and Eleanor, who both perceive insecure academic employment as problematic, but who respond differently to this. Having witnessed peers often needing to take up temporary, precarious employment after finishing their PhD, in our first interview, Freija reflects that "things are quite short-term in academia, especially as an early career researcher". This perception echoes literature which highlights the increasing precariousness of academic work (Barcan, 2017; Lopes and Dewan, 2014; Thwaites and Pressland, 2016), and reflects statistics which show that 53.6% of all academic staff are employed on insecure, fixed-term contracts (UCU, 2016). However, at least in the early stages of her studies, Freija's ability to develop an academic identity is unaffected by her perception of academic work as insecure, and in our second interview, she comments that she has little desire for stability as she does not plan on settling down after the PhD:

> It doesn't massively phase me because I…don't really have that need or that want for something really secure…it's not like one of the things that worries me is I really just want a permanent job so that I can, I don't know buy a house, and that kind of thing.

Yet as she progresses through the PhD, Freija's views change in line with her shifting personal priorities. In an entry in her research diary in March during her second year, Freija reflects on her changing plans for the future, as she begins to desire a more stable future. She acknowledges that witnessing others struggle to acquire permanent contracts has affected how she perceives the possibility of embodying an academic identity:

> I'm not 100% convinced that I'll be happy battling my way to a permanent academic position. I'm just becoming more and more aware of how competitive it is, and how precarious your employment is for the 3, 5, 7+ years until you find a permanent job. Even then, I see senior academics having to move to advance

> their careers…I've not been settled since leaving home for university…part of me just really wants a home where I know I'll be indefinitely.

Understanding identities as narratives under constant construction (Woodward, 2003), this shift in Freija's priorities can be viewed as a significant development in her personal identity story (McAdams, 1993). This shift has implications for her career aspirations; the conditions that she observes others have to work within to maintain their academic identity no longer seem acceptable. Through a process of 'observational learning' (Rossiter, 2004, p.149), Freija becomes increasingly dubious about embodying an identity which necessitates precarious working for a significant number of years. Thus, her perceptions of academic employment make it challenging for Freija to sustain a positive academic identity, and make her doubt her academic career-possible self as she progresses through the doctorate. She begins to perceive that becoming an academic is unlikely to be compatible with her new priorities, which are to establish "a home where I know I'll be indefinitely". Though Freija still views an academic career as possible, she is not "convinced that I'll be happy" in this role. Her concerns reflect the findings of research which highlight ECRs' concerns about job security and dissatisfaction in relation to their career prospects (see Council for Science and Technology, 2007; Diamond *et al*., 2014).

Social class compounded the extent to which participants perceived insecure employment as a barrier to developing an independent academic identity. Eleanor, who identifies as working-class, is particularly concerned about the prevalence of insecure academic contracts, because of the lack of financial security. Like Freija, she has also witnessed others struggle to secure a permanent academic job, but is aware she would not be able to take up temporary employment. Even in our first interview, Eleanor constructs a career-possible self who has had to leave academia because of this:

> It's alright for people who are from…a wealthy background and able to support themselves for two years whilst on, you know bits and pieces like holding out for this job until you've got the experience to get it, but I'm not from that background.

Eleanor's resentment of those from a "wealthy background" who are able to "support themselves" echoes the argument that identity is inextricably linked to class; 'some aspects of our selves, such as social class, are written into our bodies and minds and operate at a deep emotional level' (May, 2013, p.92). Precarious contracts are particularly problematic for those from working-class backgrounds, and Eleanor's concerns echo the argument that higher education may be a 'dangerous' place for working-class women employed on precarious, insecure contracts (Reay, 1998). Further, Eleanor's comments speak back to literature which illuminates how working-class women are othered within the academy, traditionally a space for the white, male and middle-class (Anderson and Williams, 2001; Coate *et al.*, 2015), and how women doctoral students from working-class backgrounds are more likely to feel like outsiders within the academy (Leonard, 2001). Thus, social class has a significant influence on Eleanor's ability to construct a viable academic identity; she cannot afford to work on precarious contracts; her concern is being able to "pay my rent", and she is aware that this will mean taking "a job very quickly", whatever this might be. Thus, she imagines a possible self who has had to sacrifice her academic ambitions in order to support herself financially. Eleanor's perception of the insecurity of academic employment as a barrier to becoming an academic reflects research which argues that only individuals with a certain amount of privilege are able to withstand the precarity involved in pursuing this career (see The Resisters, 2016). Thus social class, financial circumstances and shifting personal priorities shape how Eleanor and Freija perceive the prospect of becoming an academic, and how willing they are to take on an identity where they would have to live 'precarious lives' (Gill, 2014, p.18).

7.3.5 Academic hierarchies

Drawing on the experiences of Sally, in this section I argue that perceptions of academic hierarchies influenced how able participants were to envisage themselves taking on academic identities. This was particularly felt in relation to how they were treated as doctoral students by their supervisors and senior academics. Literature highlights that the 'uncertain status' (Wisker *et al*., 2010) of doctoral students can be problematic for students' academic identity development, and the implicit and inscribed power of supervisors within supervisory relationships has been well documented (Bartlett and Mercer, 2010; Hemer, 2012; Manathunga, 2007). Some

supervisors behaved in a way which participants felt reinforced academic hierarchies, and was experienced as disempowering. In her second year, Sally worked on a paper with her supervisors alongside academics from other institutions. On accidentally walking into a meeting of her supervisors with the co-authors, she was frustrated at not being introduced:

> I was well aware that there were people in that room who were my co-authors, and they are important people…very senior…and I wasn't introduced to any of them and I felt at that moment I felt extremely invisible…and afterwards I thought, well why wasn't I introduced you know why wasn't I important enough for…my supervisors…to say oh everyone this is our PhD student…she is the one that's writing the article.

Sally sees her supervisors' failure to introduce her as an important element in the power dynamics of this situation, and ascribes this to her status as a PhD student. Her perception that she wasn't "important enough" to be introduced to senior academics, reflects literature which argues that doctoral students may be treated as subordinates by academics rather than equal members of the academic community (Delamont *et al*., 2000; Morris and Wisker, 2011), with negative implications for individuals' confidence and identity development (Jazvac-Martek, 2009). Her experience shows how doctoral students are 'not always seen as equal to academic staff, although they may simultaneously be working in academic roles and contributing to their academic communities' (Morris and Wisker, 2011, p.8), drawing attention to issues of power within the academy, and how academic contributions may be valued differentially, according to the perceived status of individuals.

Encounters such as the one described by Sally are indications of what have been referred to as the micro-politics of the academy: the 'increasingly subtle and sophisticated ways in which dominance is achieved in academic organisations' (Morley, 1999, p.5). These encounters are significant in informing how individuals feel about their 'place' within academia, and how able they are to envisage themselves continuing to participate in this environment. By virtue of their position in the academy, doctoral students are assigned a 'role identity…which implies certain

hierarchies', but are often simultaneously 'endeavouring to develop another identity (that of scholar)' (McAlpine and Amundsen, 2009, p.112). Yet in this instance, Sally's ability to develop an academic identity may have been impeded by the failure of her supervisors to recognise her as a scholar. This affects her ability to envisage herself as an academic after the PhD: “my supervisor is always going on about post doc stuff…I don’t know that I can see myself doing that”.

7.4 Gendered barriers

Gendered issues could also pose barriers to participants developing academic identities. These issues are explored in this section. In Chapter 6 I discussed how participants encountered gender discrimination as doctoral students. Here, I explore how the majority of participants witnessed women academics also experience this, and how seeing their career experiences shaped participants' career-possible selves. Some participants developed concerns about how they might be perceived as women academics in the future, and imagined experiencing future discrimination, echoing literature illuminating the ‘chilly climate’ women may experience in academia (Hall and Sandler, 1982; Savigny, 2014; Soe and Yakura, 2008), as discussed in Chapter 2. More than half of all participants also outlined pragmatic concerns about taking on an academic identity as a woman, questioning whether working as an academic would be compatible with having a family, and doubting their ability to fulfil expectations of geographic mobility. For many, their desire for stability in the future – inclusive of job security, owning a home and having a family – conflicted with what they perceived was involved in embodying an academic identity, and thus acted as a barrier to envisaging themselves as academics in the future.

7.4.1 Women academics’ experiences of discrimination

During their doctorates, a number of participants observed that women academics had different career experiences than men, and encountered gendered expectations and discrimination. These kinds of experiences have been ascribed to a culture of sexism within academia, which constitutes 'a significant, invisible, normalising barrier to women’s progression within the academy' (Savigny, 2014, p.795). For some participants, witnessing women academics have these experiences made constructing a positive academic identity challenging – though not necessarily impossible. Literature

highlights how some doctoral students may experience difficulties in their identity development during their studies, and may be 'uncertain as to how they fit into academic culture' (Morris and Wisker, 2011, p.8). Here, I examine how Jane perceives the career experiences of women academics, and how over the course of her doctorate, this informs her perception of how she fits into academia.

As a result of her experiences during the doctorate, Jane recognises that developing a viable academic identity would mean having to change her approach to career development. Before the PhD, Jane had had little awareness of gender as a factor which could affect her career; a view which changes dramatically. Early on in the first year of her PhD, when Jane had strong academic aspirations, she attended an event on implicit bias and women in science. Jane expressed concerns about how this might affect her, but was frustrated at the advice she received from the Chair of her departmental Athena SWAN committee about improving her career prospects:

> She said…how women are really affected is when it implies that they are a mother on their CV…that really massively affects their career progression so she said if you can…make your CV…look more masculine almost, you know and don't put hobbies down, and things like that then you are kind of hiding away, if you are a mother, you are kind of hiding it away and trying to look more…masculine which is kind of…tough…I could see where she was coming from that it was a pragmatic solution, but also it was a bit like shit…if we're at the stage where we are having to hide the fact that we're women that is not very good.

Understanding identity as informed by 'the values we share or wish to share with others' (Weeks, 1990, p.88), it appears that Jane is unwilling to embrace the approach the career development which she is recommended, as it is underpinned by values which she does not hold. The language Jane uses to describe her feelings about being advised to "make your CV look more masculine" – that it was "a bit like shit" – indicates her frustration at this attitude. The existence of gendered barriers for women working in male-dominated disciplines such as the sciences, has been well documented (Blickenstaff, 2005; Smith, 2010; de Welde and Laursen, 2011), and Jane's

encounter draws attention to continuing gender discrimination, despite the existence of national initiatives such as Athena SWAN.

Yet, Jane's previous successes in the face of barriers to her aspirations – such as failing the 11 plus test but attending an elite university – means that initially, in our first interview when she still aspires to become an academic, she feels she will be able to overcome these potential barriers to an academic career. Though she is aware that other women in academia have come up against challenges such as gender discrimination, in the same interview Jane reflects that she does not view this as something which will necessarily affect her:

> I'm quite stubborn, so if somebody says I can't do something then I'm like, damn you, I will. So, that is another argument for being an academic which is what I have always wanted to do and just because…lots of other women have not managed it doesn't mean that I can't.

Thus, Jane's past experiences enable her to imagine successfully negotiating potential future gender discrimination, and construct a viable academic identity.

Yet Jane becomes aware of the role of gender in relation to academic career development and progression through interacting with her supervisor Ian, and witnessing the experiences of his wife, Monica, who is beginning her academic career. In our first interview, Jane describes becoming aware of how gendered expectations may shape individuals' ability to be successful in applying for academic posts, after discussing this with her supervisor:

> Ian was saying that on average men will put themselves forward for things that they think maybe they're not entirely qualified for, and then just have the confidence and the…charisma to sell it and make themselves appear better than they perhaps are, and get that job whereas the women can be a little bit more reserved, and maybe wouldn't, wouldn't even apply for things that they weren't 100% sure they, they could do…I feel like Monica is…the epitome of that, where

> she is clearly very good…but she's very self-doubting and she doesn't push herself forward.

Through these encounters with her supervisor and his wife, Jane learns that a successful academic identity is manifested in confidence and charisma, rather than reticence. Her reflections echo literature which highlights how male academics expect career success more than women (Baker, 2012; Gasser and Shaffer, 2014), and speak back to literature which argues that a major obstacle to women's career advancement across employment sectors is their lack of confidence and self-promotion (Chesterman, Ross-Smith and Peters, 2005; Doherty and Manfredi, 2005; Sandberg, 2013). Through a process of 'observational learning' (Rossiter, 2004, p.149) based on Monica's experiences, Jane perceives that she will have to alter her values and her behaviour in order to embody a successful academic identity, commenting in our first interview that: "[it] makes me…feel like I have to act more…confidently and sell myself more than I perhaps would…in order to get the…the job that I want because…men do it".

Jane's comments resonate with research which illuminates how some doctoral students may feel more confident about performing their academic identities than others (Barnacle and Mewburn, 2010; Wisker *et al.,* 2010). Jane constructs an academic career-possible self on the basis of her understanding that she will need to behave in a more masculine way in order to be successful*,* outlining her intention to behave "like a man" in trying to progress her career. This understanding reflects literature which highlights that adopting masculine behaviours is a common strategy amongst women in male-dominated environments (van den Brink and Stobbe, 2009; de Welde and Laursen, 2011), and one which is often successful in terms of individual career progression (Blackmore, 2002). Yet, Jane constructs an academic identity within certain parameters, and is not willing to fully embrace an identity which requires her to behave in a way which runs counter to her values (Weeks, 1990), elaborating in the same interview her intention to progress her career whilst maintaining her sense of self:

> I'm going to try and walk the fine line between…being true to myself but perhaps pushing myself a little bit more…to sell myself a little bit more…I suppose in a

> way act a little bit more like a man, but not too much more. Because I, I do feel like…if I'm good enough I'm good enough, and that should be evident…at the same time I don't want to cut, cut off my nose to spite my face, so I guess I will end up doing it a little bit but I will try not to do it too much, if you see what I mean.

Thus, as a result of learning about the 'game' of academic career development (see Lucas, 2006; The Res-Sisters, 2016) through interactions with her supervisor and his partner, in the first year of her PhD Jane plans to self-consciously play the game, hoping to negotiate gendered barriers by "walk[ing] the line" and demonstrating masculine behaviours in order to embody the identity of a successful academic whilst being true to herself. Identity involves 'issues about who we are and what we want to be and become' (Weeks, 1990, p.89), but what Jane wants to become and what she is prepared to compromise shifts as she progresses through the doctorate (see pp.118-120), and revises her identity story (McAdams, 1993); by her second year, Jane comes to reject the possibility of taking on an academic identity (see Table 4).

7.4.2 Balancing motherhood with academia

The majority of participants expressed concerns about the difficulties they observed in simultaneously taking on the identity of an academic and mother. As discussed in Chapter 2, mothers in academia face gendered expectations in relation to their social and academic identities (Morley, 2013; Ward and Wolf-Wendel, 2016), experience discrimination (Bagilhole and White, 2013; Correll, Benard and Paik, 2007), and may struggle to fulfil the demands of both roles (Acker and Armenti, 2004; Coate *et al*., 2015). Participants' concerns about working as an academic and having a family largely related to structural aspects of academic careers, such as the dearth of permanent contracts and opportunities to work part-time. Though two participants – Freija and Jane – commented that because their partners were willing to take on the majority of the domestic workload and future caring responsibilities, they could envisage themselves as academic parents with relative ease, their experiences are not the focus of my analysis. Most participants commented on the challenges they envisaged in imagining themselves simultaneously as academics and mothers. Therefore in what

follows, I focus on these experiences, drawing on the accounts of Eleanor and Harriet; the participants who expressed the most concerns about this issue.

The prevalence of insecure academic contracts – as discussed in section 7.3.4 – compounded the difficulties that participants experienced in imagining themselves as academics and mothers. This was perceived as particularly challenging for those who had started the PhD in their mid/late twenties. Successful academic careers are usually formed during the years when women are likely to have children, and thus women who want a family are disadvantaged in trying to advance their careers at the same rate as men (Nerad and Cerny, 1999; Wolfinger *et al.*, 2008; Ward and Wolf-Wendel, 2016), particularly when early career posts are increasingly advertised on insecure contracts (Lopes and Dewan, 2014; Thwaites and Pressland, 2016). This phenomenon is visible in Eleanor's comments; even in the first year of her PhD she feels under time pressure to obtain a job which offers the contractual conditions to enable her to have a family:

> At some point I'd like to have children and that kind of puts things uncomfortably close to the time when I'll be trying to get my first academic job…I'll finish my PhD when I'm 28, I'll need to have…a permanent job that'll pay me maternity leave before I can have children, so that kind of gives me a few years to try and get this magical job.

The negotiations that Eleanor makes to try and imagine a viable, long-term academic identity resonate with research highlighting the strategic behaviours that women academics adopt in order to further their careers, such as delaying children until after securing a permanent contract (see Acker and Armenti, 2004). It is significant that even in the early stages of her studies, Eleanor is already considering the conditions of employment she would need to realise her parent possible self. She perceives being able to maintain a stable academic identity as unlikely, shown through her sarcastic use of the word "magical" in relation to securing a permanent post. Eleanor therefore seems to consider her academic career-possible self as achievable only within a certain timeframe; she discusses the time when she will want to have a family as "uncomfortably close" to when she will want to obtain her first academic job, and only

having "a few years" in order to try and secure this position. Eleanor's comments indicate her doubts about her ability to concurrently embody an academic and parental identity. Her reflections on the difficulties she may encounter lead her to conclude that her academic aspirations would have been easier to fulfil if she had started her PhD sooner – "I wish I had started this slightly earlier" – echoing research which highlights that women doctoral students are more likely to start their PhD later in life, and have a non-linear educational trajectory (Brown and Watson, 2010; Leonard, 2001).

Despite her concerns, Eleanor tries to resist the negative conceptions of academic motherhood that she has encountered anecdotally, and in the media (see Bawden, 2014; Grove, 2014b). In our second interview, she expresses frustration with the prevailing attitude about being an academic and a mother:

> There is a lot of negativity about how shit academia is and oh you won't get a job and if you do the job will ruin your life and it will take over and you are going to be miserable and you can't have children because there is no time…it is easy to get sucked into that.

As she progresses through the doctorate, Eleanor becomes increasingly keen to counter this discourse and construct a more positive identity of an academic parent. She reflects on alternative accounts of motherhood in the academy, describing in our second interview a newspaper article highlighting the benefits of an academic career for parents: "she was saying you know sometimes it's quite nice to have the baby on your lap whilst you are writing a paper, and…it gives you flexibility that other jobs don't". Eleanor also draws on the experiences of academics in her department, including one colleague who brings her child into work: "she will just be like walking around the department sometimes with her baby and you're just like, that's nice". These encounters reflect how Eleanor makes efforts to positively envisage a future where she is able to embody both of these identities.

Even those with no immediate plans to have a family had doubts about being able to take on an academic identity as well as become a mother. Witnessing the difficulties

that Margaret, the only woman post-doc in her lab, faces in returning to work after having children has a significant impact on how Harriet considers the possibility of becoming an academic. Harriet perceives that the opportunity to work flexibly in labs is rare, describing in our first interview how Margaret's part-time contract was “a struggle in itself” to obtain, echoing research highlighting how the lack of part-time opportunities acts as a barrier for women in science (Wellcome Trust, 2013). She describes the practical difficulties that Margaret faces and the strategies that she has to employ:

> She gets frustrated when she has to leave at like half 2 because she might be in the middle of something…it just makes planning so much more important…she has like everything she’s going to do every day kind of all written out in her calendar and stuff.

A further barrier to taking on an academic identity was the discrimination that participants envisaged experiencing as women academics with children. In our second interview Eleanor imagines experiencing discrimination from potential employers because she is a young woman: “I wonder whether you know universities would avoid hiring people if they could, without ever saying it because you know if you hire someone my age, I am going to be taking time off”. Similarly, Harriet reflects that Margaret's position as part-time post-doc is not a comfortable one. She feels that others in the lab “took a while to warm up to her” due to discriminatory attitudes: "I think instantly everyone in their mind was just like oh she’s been out of the lab for this many years, having her babies…so, she definitely had to work harder, I would say". Even in the first year of her PhD, Harriet is aware of how men and women academics are perceived differently as parents: “I think for a woman…people doubt you a lot more after you’ve had kids, whereas I think it’s the opposite for men”.

Harriet's perceptions echo research which has found that whilst having a family negatively affects women's academic career progression, it does not inhibit men's careers (Correll *et al.,* 2007; Jackson, 2017; Mason, Goulden and Wolfinger, 2013). Her perception of academia as discriminatory towards mothers informs how Harriet views the possibility of taking on an academic identity, as she imagines she would encounter

the same challenges that Margaret has faced: “it’s like…how do you be a good mum and…do all your research?”. Harriet’s inability to construct a possible self who can successfully embody both of these roles reflects the difficulty she has in reconciling her personal priorities with an academic identity. She acknowledges in the same interview that: “some days I just get really put off by it, and like, it's not worth doing”. Harriet’s perceptions reflect research which highlights that women are more likely to be discouraged from an academic career than men, because they perceive academia as not family-friendly (Royal Society of Chemistry, 2008; Wellcome Trust, 2013). Harriet connects her own concerns about the future with the lack of women who pursue this career, reflecting in the same interview that her own worries may also prevent others from continuing in science:

> I’m not even thinking about having a family now, like, at all, but in the back of your mind you’re like oh, what if I get to the stage where I want to and I can’t, because my job…I think that’s what like, deters women from doing it past the post-doc level.

Harriet's doubts about pursuing an academic career because of the perception that it is incompatible with motherhood resonates with literature which highlights the lack of women in senior academic roles; what has been termed the 'leaky pipeline' (Morley, 2013; Soe and Yakura, 2008), and illuminates the importance of enabling women doctoral students to envisage these two future identities not as mutually exclusive, but as compatible, and even potentially desirable.

7.4.3 Geographical mobility

Most participants were aware of the 'implicit expectation of mobility' in academia (Ackers, 2010, p.84); something recognised within the literature as a gendered issue (van Anders, 2004; Jöns, 2011), and which has become ‘an indispensable element in the career trajectory, especially of early career researchers' (Leemann, 2010, p.611). Around half of all participants perceived the expectation of mobility as challenging, particularly due to the increase in short-term, temporary contracts. Here, I discuss the experiences of Jessie and Freija, who had different initial reactions to the idea of moving to pursue an academic career. Jessie, who has two young children, is only able

to construct an academic identity within certain geographical limits, narrowing her options. In an entry in her research diary at the end of her first year, she comments that: "I don't have the flexibility to move anywhere for an academic career, so do really need to work on building my profile here". This is likely to impact how able she is to develop an independent academic identity; geographic constraints have a significant, negative impact on the career progression of women in academia (Leeman, 2010).

In contrast, Freija's desire to embody an academic identity shifts considerably over the duration of her PhD, as she becomes increasingly discouraged by expectations of mobility. A narrative understanding of identity holds that 'stories may change and adapt to circumstances; there is fluidity in these narratives of identity' (Woodward, 2003, p.28), something clearly visible in Freija's experiences. In the early stages of her studies, Freija expresses a strong desire to travel and work abroad, and in our second interview, is unconcerned about the insecure nature of academic work (see section 7.3.4). Yet as she progresses through the PhD, Freija's identity shifts, as is evident through comments she makes in her research diary.

In an entry in her research diary midway through her second year, Freija reflects that she is starting to have "other priorities creeping in", and desire a more stable future. In the same diary entry, she comments that her partner feels similarly: "it's odd…the idea of being settled has never really been something we've cared about before". Freija's identity-trajectory (McAlpine *et al.*, 2010) is therefore informed by her changing personal priorities, based on values such as stability, which do not easily correspond with the values required of those who wish to embody an academic identity (Weeks, 1990). Freija goes on to imagine an ideal possible self which is not career-related, reflecting her new-found desire for stability: "if I think about what my ideal future looks like, it involves owning a home in Scotland…having a dog, doing lots of climbing, and maybe a baby or two at some point". She acknowledges that witnessing her friends becoming more settled has also had an influence on her aspirations:

> In the past year, 4 of my friends have bought houses…and I can't help being a bit envious! They all have more space, they all have a garden, and they all pay less for their mortgage than I pay in rent!

She begins to doubt whether her aspirations of home ownership and having a family can be reconciled with embodying an academic identity: "I guess I just don't know if the PhD is going to be what leads me to all these things that I'd like to have in my future". She acknowledges that given expectations of geographical mobility and the lack of permanent jobs, she is "not 100% convinced that I'll be happy battling my way to a permanent academic position". These reflections depict a significant shift in Freija's identity, and echo research findings which show how 'women, more than men, self-select away from academia in response to specific systemic barriers related to parenting and mobility' (van Anders, 2004. p.519). Yet Freija's stance reflected in her comments here may not be a fixed position, as participants' priorities fluctuated according to their personal lives, and over time. Thus their identities are not static, and instead should be understood as constantly under construction (Baker and Lattuca, 2010).

7.5 Conclusions

This chapter has explored how participants perceived and negotiated the possibility of taking on an academic identity. It has shown how doctoral students' identities are multi-faceted and are complex, shifting, and require ongoing negotiation. Identities can also be understood in a number of ways: as relational to belonging and values, but also as narratively constituted. I have shown how participants' identities were dynamic, shifting according to personal priorities and in response to witnessing the experiences of other women in academia. In this chapter I have illuminated how participants learned during the doctorate that taking on an academic identity would mean embodying different traits, ascribing to different values, and demonstrating other behaviours than they had initially imagined. My data have shown how some participants felt unable to embody an academic identity because of the conflict between their values and those they perceived were espoused by academics (Weeks, 1990). Many became disenchanted with the prospect of becoming an academic as a result of this realisation, though they had initially had strong academic aspirations, reflecting research which highlights that taking on an academic identity may be more difficult for individuals from traditionally marginalised groups (Baker and Lattuca, 2010; Lynch, 2010). My research indicates that doctoral study involves the 'renegotiation of identities' (Wisker *et al.,* 2010, p.29), and demonstrates the

strategies that participants employed to try and fit the mould of what they perceived as the identity of a successful academic. They often moved between these approaches at different stages of their studies. Firstly, some participants tried to strategically develop an academic identity by self-consciously performing a masculine approach to career development, involving personal compromise. A second approach was to develop an ambivalent stance towards taking on an academic identity. Finally, others rejected the possibility of developing an academic identity, and decided that an academic career was not for them.

My findings indicate that participants struggled to develop academic identities during the PhD, and illuminate how career aspirations were constructed and reconstructed over the course of the doctorate, highlighting how academic identities are formulated, re-negotiated, and in some cases abandoned altogether. This research takes forward literature on women's experiences of doctoral study and career aspirations in interesting ways. My study adds to knowledge in understanding why more women than men do not pursue academic careers after the PhD across disciplines (Royal Society of Chemistry, 2008; Wellcome Trust, 2013), and makes an original contribution through its longitudinal design. Drawing on possible selves theory, I have shown how participants' ability to develop academic identities during the doctorate shaped the career-possible selves that they could imagine. These methodological and theoretical approaches have enabled me to conclude that the doctorate operates as a site of formative experience, wherein women doctoral students decided whether or not they were prepared to re-mould themselves to fit an academic identity. This finding constitutes a key contribution to knowledge, which I explore further in the next chapter, which concludes this thesis.

Chapter 8

Conclusion

This thesis has explored the career aspirations of a group of women doctoral students, and examined how their experiences of studying for a PhD informed how they imagined their futures, and particularly how these experiences shaped their perceptions of becoming an academic. Chapter 4 illuminated how on starting the PhD, participants imagined their future in particular ways. In Chapters 5-7 I showed how these imagined futures shifted during their studies. This thesis has highlighted how women's experiences of doctoral study are shaped by gendered expectations, academic cultures, and in some cases, gender discrimination. It has demonstrated how participants' experiences during the PhD impacted on their levels of career awareness and savvy, their sense of belonging to their academic communities, and their ability to develop viable academic identities.

In this chapter, I briefly consider the findings outlined in previous chapters, indicating how I have addressed the research questions which motivated this thesis, and outline the key insights derived from the research. In the second section I present the original contributions to knowledge that this thesis makes, which are both methodological and theoretical. I then reflect on the challenges and pleasures involved in undertaking this study, and conclude by considering the limitations of this research, and the possibilities for future work.

8.1 Summary of findings

Chapter 4 focused on how participants envisaged their futures early on in their PhD, drawing attention to the future-oriented stories that they imagined for themselves. Analysis of participants' letters to their future selves using possible selves theory (Markus and Nurius, 1986) revealed that imagined futures more frequently related to domestic life and personal goals, rather than specific career ambitions. Participants seldom had fixed career goals, and often career aspirations were constructed in

relation to personal priorities. Some viewed the PhD as a time to make career plans, whereas others saw it as a personal rite of passage through which they could grow in confidence. What is significant about these findings is that they counter stereotypical views of PhD students as career-motivated, and the doctorate simply as an academic apprenticeship (Park, 2005). Data have revealed that participants expected the doctorate to involve emotional upheaval; just a few months into their studies, participants expressed considerable concerns about the potential impact of their studies, anticipating struggles with their mental health. Using letters to future selves as a method has enabled valuable insights; in particular my analysis of the letters illuminated how the future stories that participants imagined within them were often not the stories that actually unfolded – as seen in Chapters 5-7.

Chapter 5 explored how participants' academic aspirations shifted during different stages of the doctorate, and analysed the strategies that some individuals undertook to realise imagined academic futures. Though not all participants aspired to become academics, initially the majority considered an academic career to be either strongly desirable, or at least possible (see Table 3, pp.91-92). In this chapter, I used the theoretical concept of horizons for action to illuminate how participants constructed aspirations and possible selves within particular constraints. I discussed participants' differing levels of awareness relating to academic career development, highlighting the variation in individuals' career savvy. Individuals' academic aspirations fluctuated during the doctorate as they witnessed the experiences of peers, academics and supervisors. This chapter highlighted the role of tacit knowledge in informing approaches to career development; some participants learned from the strategies of peers, whereas others had pre-existing knowledge about how to play the 'game' of academic career-building.

In Chapter 6 I demonstrated how institutional, disciplinary and departmental cultures influenced how participants developed a sense of belonging to their academic communities. I showed how interactions with peers, supervisors, and workspaces could facilitate or inhibit participants' enculturation. This chapter illuminated barriers to belonging, such as struggles with the power dynamics of supervisory relationships. It generated key insights into how academic cultures shaped participants' experiences of

doctoral study, such as how conflict between participants' and supervisors' conceptions of the role of doctoral students affected participants' ability to feel at ease within their academic communities. In this chapter, I outlined how participants demonstrated agency, resisting what they perceived as unreasonable expectations and learning to manage their supervisors. Further, I illuminated the gendered expectations which participants encountered, particularly within their supervisory relationships, and the continued existence of gender discrimination within male-dominated disciplines.

Chapter 7 showed how participants perceived and negotiated the possibility of taking on an academic identity. Perceptions of becoming an academic shifted during the doctorate, as participants learned more about what being an academic would involve. I outlined how structural and gendered issues within academic careers – such as the pressure to publish, and perceived difficulties in combining family life with an academic career – made it difficult for participants to maintain viable academic identities. Using theoretical ideas about identity (see Henkel, 2005; McAdams, 1993; Weeks, 1990), I showed how participants considered academic values as conflicting with their personal values. For most, this meant they were unable to imagine embodying what they perceived as a successful academic identity without making considerable compromises. I argued that the doctorate operates as a site of formative experience, wherein participants constructed and re-constructed career aspirations, and within which academic identities were formulated, re-negotiated, and in some cases abandoned altogether. This chapter provides key insights into understanding why some women choose not to pursue academic careers after the PhD.

8.2 Addressing the research questions

Here I discuss how this thesis addresses the research questions set out in Chapter 3, as well as the broader aim of the research, which was to illuminate the stories that participants told about their experiences. Their stories have often been small-scale, relating to day-to-day encounters with family members, peers and supervisors. Yet these small stories have significant implications not just for individuals but for the academy as a whole, often revealing exclusionary practices operating at the micro-level, drawing attention to broader narratives about gender, structural issues within academia, the micro-politics of research environments (Morley, 1999). Participants'

stories have been distressing at times, hopeful at others, and for me as the researcher, often inspiring. Their stories revealed how they often struggled to develop a sense of belonging within their academic communities, and encountered barriers to developing independent academic identities.

Eliciting the common threads of participants' stories reveals a number of policy implications for doctoral education. This research illuminates the lack of understanding of the complexities of women doctoral students' lives, and the monolithic view of doctoral students in institutional and sector policy. Despite individual motivations for doctoral study being wide-ranging (see Brailsford, 2010; Churchill and Sanders, 2007), there is a continuing assumption in the higher education sector that the purpose of the PhD is to pursue an academic career. This assumption shapes doctoral students' experiences, as supervisors often consider that they are 'training apprentice researchers' (Park, 2007, p.8). At the start of this study, 12 out of 13 of the participants either considered or strongly aspired to an academic career, but statistics highlight that they would be unlikely to be successful, with the majority of doctoral graduates going on to work in other sectors (Vitae, 2012). Despite this, the term commonly used to describe careers outside of academia is 'alternative' or 'alt-ac' careers (Nowviskie, 2010), reinforcing the stereotype I have illuminated in this research of the doctorate as purely an academic career-related endeavour. Though institutions and research councils have done some work to promote careers outside academia, in this thesis I have drawn attention to the lack of awareness amongst doctoral students about the full range of post-PhD options, and shown the disparity in individuals' ability to access opportunities such as placements which would enable them to pursue these 'alternative' careers (Higher Education Academy, 2015; Vitae, 2017; Wellcome Trust, 2013). In addressing my research questions, my findings aim to counter the traditional conception of doctoral study as an academic apprenticeship, and broaden understandings of the purpose of the doctorate for candidates, supervisors, institutions and the sector as a whole.

Research Question 1: What shapes women's career aspirations?

Factors influencing participants' career aspirations were structural and gendered. During the doctorate, participants learned what becoming an academic involved, and

were often discouraged by the structural demands of this career, including the pressure to publish, expectations of geographical mobility, and the prevalence of insecure contracts. Their career aspirations were shaped and changed by witnessing the gender discrimination faced by other women in academia, and informed by the perception that taking on an academic identity would be incompatible with becoming a mother. Personal goals shaped career aspirations, and the desire of some to settle down in one place, to travel, or have children, often outweighed any particular career goal. In constructing their imagined futures, participants' career aspirations were forged in relation to personal priorities, which often shifted over time due to changes in personal circumstances, and life stages.

Research Question 2: What influences do academic, peer and personal environments have on participants' career aspirations?

Experiences of working within particular academic environments significantly shaped participants' career aspirations. Witnessing the experiences of those already working in their discipline, particularly early career academics, informed how able participants were to imagine themselves in these roles. During the PhD, participants developed knowledge about the structural and working conditions of academic careers, and the career experiences and trajectories of women academics. This knowledge, often derived from interactions with their supervisors and other academics in their department, made a number of participants – Harriet, Freija, Eleanor and Jane – feel discouraged from pursuing an academic career, despite having academic aspirations at the start of the PhD. Further, interactions with peers contributed to perceptions of gender discrimination in the academy, with participants witnessing differences in the experiences of men and women. Peers also influenced how career-focused participants were, with 'career savvy' peers encouraging them to adopt similar behaviours. Participants' personal circumstances also had a significant impact on their aspirations; others' perceptions of academic careers influenced how participants viewed this possibility, and individuals' personal values also shaped how they perceived working as an academic, which was often viewed as involving the embodiment of values very different from their own.

Research Question 3: What sorts of barriers do participants perceive to pursuing an academic career?

The barriers that participants envisaged related to both the structural aspects of academic careers, as well as gender issues. The nature of academic careers, involving considerable competition for largely insecure, temporary jobs, and significant pressure to publish work, was discouraging to those who had other, personal goals. Particularly for those who wanted a family in the next few years, or those who already had caring responsibilities, the expectation of geographical mobility was perceived as a barrier to an academic career. Moreover, the perception of academia as not compatible with caring, and the view that establishing a positive work/life balance would be difficult, posed a barrier to a number of participants. These common elements of participants' stories reiterate the cultural significance of the notion of the ideal worker (Williams, 2001), and particularly how conceptions of the 'ideal academic' (Lynch, 2010, p.58) can have negative implications for women considering a career in academia.

8.3 Original contributions to knowledge

This research provides a range of original contributions to knowledge, including methodological and theoretical contributions, which I detail below.

8.3.1 Substantive contributions

This thesis makes a valuable contribution to literature on women doctoral students' experiences, and how these experiences impact on their career aspirations. It therefore adds to existing research on women's lived experiences of the doctorate, but contributes to the gap in knowledge about the impact of doctoral experiences upon aspirations by providing empirical findings. Further, it addresses the lack of empirical work on doctoral education from the perspective of doctoral students.

Secondly, its cross-disciplinary approach allows the impact of academic environments on individual's career aspirations to be examined. Most empirical research on the career aspirations of doctoral students has focused on the experiences of those in STEMM subjects (Royal Society of Chemistry, 2008; Wellcome Trust, 2013), yet my study explores career aspirations across academic disciplines – including Public Health, Geography, Politics, Psychology and English as well as Engineering and Biology – thus

broadening out and adding to literature which examines academic cultures and their impact on individuals.

Thirdly, this thesis begins to address the existing gap in knowledge about feelings of belonging for doctoral students, something which is important to understand given the links between belonging and retention (Ali and Kohun, 2007; Lovitts, 2001), and the positive impact that belonging can have on integration and identity development (Morris and Wisker, 2011; Vigurs, 2014, 2016). Further, my findings make a significant contribution in this area, given that belonging is largely overlooked within literature on doctoral education in the UK (see White and Nonnamaker, 2008 for US context), despite often being discussed in relation to undergraduate students (see Read, Archer and Leathwood, 2003).

Finally, my research makes an original contribution through the analysis of how women doctoral students adopt career development strategies through the introduction of the 'career savvy' concept. This concept generates understanding of how women learn to use academic career-related knowledge to gain relevant skills that improve their position in the battle to get onto the academic career ladder. This concept contributes to knowledge about how women doctoral students negotiate their own career development within a gendered culture.

8.3.2 Theoretical and methodological contributions

My research also makes a theoretical contribution to knowledge. In combining possible selves theory, derived from Psychology (Markus and Nurius, 1986), and the sociological concept of horizons for action (Hodkinson and Sparkes, 1997), I have positioned participants both as agentic, but also as constrained in their aspirations by structural factors. These theoretical concepts have not been used in conjunction before, and using them together therefore constitutes a unique theoretical contribution to knowledge, as well as contributing to the respective literature on possible selves theory and the horizons for action concept by applying them in a new context.

This study also makes an original methodological contribution in its design. The longitudinal perspective I have used allows change in participants' aspirations to be

explored over time, an element lacking in many other studies of doctoral experience. This research therefore responds to calls for longitudinal explorations of doctoral students' career intentions (see Baker and Lattuca, 2010; McAlpine *et al*., 2014; Wellington and Sikes, 2006). Moreover, it makes a significant methodological contribution in its use of letters to future selves, within which participants conceptualise their imagined futures. This is an innovative method which is rarely utilised in academic research. Using letters to future selves as a key part of my methodological approach has produced new ways of knowing in relation to how women doctoral students imagine their futures. This approach has enabled understandings of how aspirations may be constructed during the early stages of the PhD, and insight into existing fears, hopes and dreams for the future from the vantage point of a particular moment in time.

8.4 Implications and recommendations

In this section I consider the overall implications of my findings for individuals, universities and the higher education sector, particularly in relation to belonging and possible selves. I make a number of recommendations to address some of the issues that many women doctoral students face during the PhD.

8.4.1. Belonging to academic communities

Developing a sense of belonging is a complex endeavour and women face particular barriers to belonging to academic communities, something not fully acknowledged and understood by institutions and those working with doctoral students (White and Nonnamaker, 2008; Wisker *et al.*, 2010). Belonging is affective, involving forging connections within a community and negotiating power relations, and has implications for how individuals feel valued by others (May, 2013; Miller, 2003; White and Nonnamaker, 2008). Given the link between belonging and retention (Lovitts, 2001), and the importance of strong peer networks (Wisker and Morris, 2011), institutions and departments should take further actions to facilitate supportive communities for doctoral students which enable them to feel a sense of belonging. This could take the form of providing regular opportunities for students to meet, as well as providing shared spaces within departments.

Further, formalising the role of doctoral students and being clear about expectations in relation to teaching and publishing work would help students to negotiate the power dynamics of their departmental communities, giving them a sense of status and help them to feel that they matter within their 'departmental home' (White and Nonnamaker, 2008, p.539). Clarifying the roles and responsibilities of doctoral students, where these are absent, would also be useful for recruiting future doctoral candidates, as there would be clear guidelines as to what students can expect. Finally, there is an urgent need for universities to address the culture of sexual harassment present in higher education institutions, acknowledging the negative impact that it has on women students' sense of belonging. Actions should be taken to address gender discrimination in its various forms, including tackling lad culture and sexual harassment, but also acting positively to build inclusive networks for women which are welcoming to doctoral students and early career academics.

8.4.2 Reframing possible selves

This thesis has shown that women doctoral students' possible selves are multiple, shifting, and relate to all aspects of life rather than just their future post-PhD careers. Throughout this research, a number of participants constructed academic career-possible selves at different stages of their studies, but there was a general lack of elaborated career-possible selves relating to jobs outside of academia. Thus, traditional notions about the purpose of doctoral study constrain doctoral students' abilities to construct alternative identities and imagine other career-possible selves. Possible selves theory could therefore be useful in helping doctoral students to reframe their imagined futures, enabling them to view the doctorate not as an academic apprenticeship, but as an opportunity to develop valuable skills and knowledge which could be applicable in a number of different sectors. Further, possible selves theory is useful in reframing the doctorate as something beyond purely a qualification, but as a rite of passage and a time for personal development.

There are clear opportunities for letters to future selves to be used to develop supervisory practices, for example encouraging new doctoral students to consider writing a letter during the early stages of their studies, and reflecting on this during supervisions in order to better support new doctoral students. Further, this could be

developed further by using students' letter to their future self as a reflective tool during the upgrade process; a significant milestone for individual students. Beyond this, students' letter to their future self could be utilised within supervisions during the final year of study, in order to encourage individuals to consider how their imagined futures may have shifted, and reflect on their desires for the future. Thus, there are a range of opportunities for supervisors, careers advisors and others supporting doctoral students to use possible selves theory, along with letters to future selves, in order to help students envisage a variety of possible futures, and thus take a broader view of the doctorate than purely as an academic qualification.

My research demonstrates that the issues outlined above need to be addressed by institutions, academics, and support staff in order to ensure a positive experience for women doctoral students and enable them to flourish in academia. Diana Leonard argued in 2001 that 'women are made to feel not quite first-class citizens in the academic community' (p.161), and I argue that little has changed in the period since. Without any action from the sector, or from individual institutions, many women doctoral students will continue to struggle to belong within their academic communities and find it difficult to envisage themselves as academics.
This has clear ramifications for the future of the higher education sector, which will lose out on the talents of highly qualified individuals (Morley, 2013), and may struggle to recruit and retain academics in the future if this career continues to be unattractive to a large proportion of doctoral graduates (Coates and Goedegeburre, 2012). Failing to address the issues outlined above will contribute to the persistence of inequality in the academy. In order to combat the 'leaky pipeline' (Barinaga, 1993), whereby women become more likely to leave academia as they become more senior, the serious issues that women face during their doctorate – a prerequisite for an academic career – must be addressed.

8.5 Limitations and future directions

In this final section, I reflect on this study as a whole, and consider the limitations of my research, as well as the potential for future work that this project has revealed.

8.5.1 Challenges of this research

In laying bare the challenges I have faced in undertaking this research, I make myself vulnerable, knowing that this thesis is under the close scrutiny of examiners, and that I will be judged on its merits and flaws. In order to reflect on these challenges, I return to the description outlined in Chapter 3 of research as 'messy' (Bechhofer, 1974, p.74). The feeling of being overwhelmed by the sheer volume of data is something I had to become accustomed to throughout this study, and it has been a matter of continuing with the faith that order would emerge from the chaos as Delamont *et al.* (1997) observe. Beyond this, I feel that the main challenges I have encountered during this research have been theoretical, ethical and practical.

I have particularly struggled with some of the theoretical aspects of this research. Choosing a particular approach when many more could have been used was difficult, and being able to consistently apply a theoretical lens to my data was even more so. Further, though I am confident that it has produced interesting insights, I am conscious of the tensions in the approach I have taken in combining elements of sociological and psychological theory. In relation to the ethical challenges I have encountered in this study, the most difficult of these has been doing justice to my participants. Other feminist narrative researchers have also grappled with this ethical consideration, with no easy resolution (see Josselson, 1996; Riessman, 2002; Woodiwiss *et al*., 2017). At this stage, what I have found particularly difficult has been leaving participants and their stories behind, as I move forward into a new chapter of my life. Having spent more than three years reading, writing and asking about their experiences and learning about their lives, we now part ways, and it is unlikely that I will get to know where their lives will take them next.

There have been many practical challenges. As is common for doctoral students, I have struggled to finish this research within the allotted timeframe, and to focus on completion in the face of impending financial difficulties due to the end of my funding; what has been termed the ‘pinch point’ (Wellcome Trust, 2013, p.19). Yet I recognise my privilege in having this pressure alleviated during the last few months by successfully gaining part-time employment. The final stage of this research, writing up, has been the most difficult, requiring me to overcome my own struggles with mental health issues, as well as the physical challenge of dealing with repetitive strain injury as

a result of intensive periods of writing. A significantly challenge has been maintaining my focus on this topic as a research project, given that the subject matter has not allowed me to escape the often discomfiting nature of my own experiences as a woman doctoral student.

8.5.2 Pleasures of this research

Taking time to recount the pleasures I have felt as part of this research process pushes back against the 'dominant discourse of affectless rationality' in traditional research (Clegg, 2013, p.71), and works as an act of resistance to the increasing managerialism which dominates research practices (Manathunga, Selkrig, Sadler and Keamy, 2017). There have been so many joyous moments during this research. First and foremost is the pleasure I have gained from being given the space and time to do this research. Like a number of my participants, I never intended to do a doctorate and did not expect to be offered a paid opportunity to conduct a research project almost entirely of my own design. As Jessie described it, it has been a privilege. I have appreciated the huge amount of autonomy I have had, and am grateful for all the benefits that doing a doctorate has brought my way – not least the opportunity to embark on an academic career myself.

As Matthiesen and Binder (2009, p.83) note, there are many 'sidelines of the doctorate'. It is engaging in these additional activities which have kept my days varied and interesting, which have prevented me from becoming isolated, and ultimately which have increased my confidence and self-belief. Presenting work at conferences, working on other research projects, organising events and teaching have enabled me to forge positive relationships with colleagues in my department, and at other universities, have helped me (mostly) overcome my fear of public speaking, and made me feel like a member of a community. I have surprised myself in what I have been capable of, particularly in relation to not only learning how to teach, but also how to enjoy it.

Above all, it has been a pleasure and a privilege to meet and know my participants. They have been inspiring and their stories have never failed to motivate me to reach the end of this research. I am glad to have had the opportunity to share their

experiences and draw attention to how universities, departments and academics might change doctoral education and the support provided for women doctoral students for the better (see section 8.4)

8.5.3 Limitations

Inevitably, there are limits to this research. In designing this study, I recruited a small number of individuals from two institutions. This self-selecting sample produced a group of participants who do not reflect the wider population of women doctoral students; though many begin their studies later in life, my sample has a high number of students who have recently graduated from their undergraduate or Master's degrees. Further, though statistics highlight the relative lack of ethnic diversity amongst doctoral candidates (ECU, 2016), I feel that my group of participants is particularly lacking in this respect, with just one participant from a BME background. The doctoral experiences of disabled women, and those from the LGBT+ community, have also not been able to be explored in this research, as none of my participants disclosed these attributes.

A further limitation of this study has been its focus on the experiences and aspirations of full-time PhD students. I wanted to try and analyse how the whole experience of the doctorate influenced individuals' career aspirations. This would not have been possible with part-time students, who take between 5 to 7 years to complete the doctorate. Yet, there is little research on the aspirations and experiences of part-time doctoral students, and this group is largely dominated by women (ECU, 2016). This is an area which would be worthy of further research. Moreover, this research has had a singular focus on those doing a PhD rather than a professional doctorate. Given the focus of this qualification on developing practice-based skills relating to particular professions (see Wellington, 2013), it would be interesting to do a similar comparative study of the career aspirations of those undertaking professional doctorates.

The volume of data that I have gathered throughout this study has also meant that I have been limited in what I have been able to discuss in this thesis. Particularly participants' research diaries, completed to different extents by individuals over the duration of their studies, generated a significant amount of data, which it has not been

possible to analyse in full alongside interview data and the letters to future selves. I plan to draw on this in future work, which I will now discuss in more detail.

8.5.4 Future work

The findings of this study lend themselves to a range of future work. From this thesis, I hope to develop specific policy recommendations for institutions and graduate schools, which can be used to inform policies and practice in the support of women doctoral students.

Possibilities for future research include a project examining the provision of support for doctoral students' mental wellbeing. This study and relevant literature consistently illuminate the impact of mental health on participants' experiences of the doctorate, and there has been an increase in reports revealing the extent of this issue amongst the doctoral student population (see Bothwell, 2017; Hargreaves *et al*., 2017; Havergal, 2017). A further possibility for future work includes a project on the affective dimensions of belonging experienced by women doctoral students, which would explore how individuals do, or do not establish belonging within their immediate academic environments. This project would build on the findings from this thesis, attending to the impact of physical workspaces on individuals' sense of belonging.

A further piece of work which would extend knowledge about the destinations of women doctoral students is a similar qualitative and longitudinal project with recent graduates, examining their experiences of seeking employment both inside and outside academia. This would provide in-depth understandings about the strategies that doctoral graduates engage in to identify appropriate employment opportunities, their perceptions of academic and non-academic careers. It would produce insights into how graduates consider they can use their skills in careers outside of academia, as well as adding to knowledge about how women navigate the early academic career stage. It would therefore contribute to knowledge about the career pathways of doctoral students from across disciplines, extending the work of initial studies completed by the Royal Society of Chemistry (2008) and the Wellcome Trust (2013), as well as complementing the work of Vitae (2012). I hope that I will get the opportunity to undertake this important and timely piece of research.

Postscript

During this study, I have been keen to ensure that despite being a member of the group whose experiences I have been examining, the focus has been on participants' experiences rather than my own. Yet over the course of this research, I have identified with many of the issues raised by participants. I have witnessed their agency in constructing various possible futures, but also their frustration at encountering structural barriers such as gender discrimination. I have observed the negotiations, compromises and strategies that they devised to position themselves to best advantage within the 'game' of academia. I have seen how their experiences as doctoral students have influenced how able they felt to imagine themselves as women academics in the future.

I have heard – and felt, during my own doctorate – many of participants' hopes, fears, dreams and doubts. My letter to my past self, written three years after I began this research in September 2017, is included here in an attempt to be reflexive about my own experience of the doctorate, and which echoes a number of the issues that participants raised during this research.

Letter to my past self

Dear 2014 Rachel,

First of all, don't worry. You're going to be good at this. You have so much motivation, so much faith in your research topic and you're full of zeal and optimism, having finally found something that you want to do as a career. I'd like to offer what wisdom and advice I can, from this not-quite end point.

I can't believe the things you've done since you started. The feminist methodologies conference, attended by over 100 people, which you put together with little support. It was successful but equally stressful, and perhaps isn't an experience you'd like to repeat! You went to a huge conference in Paris even though you were scared to get on the plane. You presented twice at the biggest conference in your field, and won funding from the BSA. You helped set up a network for women postgraduates.

What will probably surprise you the most to learn is that we have discovered that we really enjoy teaching. It has been a bit of a revelation, and not something you ever thought you were capable of. In spite of all the fear, the sweaty palms and the stress, and most of all the anxiety of being 'caught out', you've realised that you are actually capable of doing it, and doing it well. You've loved having your own seminar group, getting first years to become political and engaged critiquing educational policy (maybe not all of them, but still). You've loved getting to know your students, having a laugh with them and learning from Lucy, who has been so supportive and encouraging. The feedback you've had from the Head of Department has been wonderful and really motivating. You feel now that you would really enjoy being a lecturer. But will that opportunity ever materialise? I'm not sure.

So much has changed since you started. The world is a very different place, and one that you would struggle to recognise. You've felt so disempowered by the state of the world, and have alternately struggled to see the point of your work in the context of so

much political turmoil, or hidden in your work to escape the enormity of the problems in the wider world. I can't say there's a benefit to either approach, but I do know that avoiding the news is sometimes an act of self-care that you should feel no guilt about. Onto happier reflections though – your relationship with Ed was so new at the start of all of this. It won't surprise you to hear that he has been wonderful, ever patient and supportive. You're probably going to need him more than ever during this final stint. Make sure you appreciate him, and your parents, who you are so fortunate to have to depend on. You have two gorgeous nephews now, chubby bundles of smiles and energy and you can't believe how much and how instantly you loved them. See them as much as you possibly can whilst you have this gift that is time and flexibility.

Some words of advice though, and I'm going to be stern now. Believe it or not, there really is only so much that you can achieve in one day – and it's not as much as you think. You're good at making to-do lists, but many of them are not reasonably achievable in the timeframe that you give yourself. Perhaps it won't surprise you to learn that you nearly always have unrealistic expectations of what you are able to do. Please try not to constantly beat yourself up for not achieving unrealistic goals. This whole thing is really just an exercise in tenacity. You see that in your participants as well as yourself. Sustaining motivation and good mental health has been difficult, and you're still learning that you can't always 'push on til Christmas' or some other arbitrary point in the future. You will be encouraged at various points by wiser people than you to take some time off, so listen to them. Make sure you give yourself the best chance of finishing this thing by taking care of yourself, first and foremost.

Another nugget of wisdom from future-you is that you absolutely can write. You can produce worthwhile pieces of writing which hopefully, one day not too far from now, will turn into a doctoral thesis. If it isn't good enough yet, it will be. Remember that it is the job of your supervisors to point out the flaws (I know it hurts), but keep the faith! Don't conflate your work with yourself. You are good enough.

You won't always have to work the dismal dungeon that is Unit 9, by the way. One day you'll pluck up the courage to ask for your own desk, and you'll build a little community in Unit 7 where you'll work alongside some lovely people. You're so lucky

to work opposite Chris during your PhD. He's a constant source of advice, support and without him around this whole thing would have been a lot more lonely and difficult.

Who knows what life beyond the PhD looks like. Right now you're tired and wishing that you were closer to the end. You want your life back and to have some certainty about what's next. Your friends are getting married and promoted and you are envious on both counts. You're also aware of how much longer this last stage might take than you had initially imagined. Three years seemed like such a long time, didn't it?

Listen, I know you felt that you had found your place in academia when you started this thing. I'm not so sure, now. I both can and can't see myself as an academic in the future. I love the work but I hate the demands, and the constant expectations of more. I'm not sure I want that for our future. I'm not sure it's good for us. I also really doubt whether you have it in you to face the pretty much constant rejection and criticism. I hope you're not too disappointed reading this; I'm not ruling anything out, but my eyes are wide open to the realities of this career. Seeing the ECRs on your part-time research project struggle as they have has been hard. They both only just got their first permanent academic jobs, five years after the end of their PhD and after being rejected over and over again despite their obvious competence and experience. It looks soul-destroying. I don't think I want it that much.

I like the idea of a life. A full life, with friends, family, and time to read proper books. Time for long walks, weekends away, and for playing with my nephews. Maybe, eventually, time to start my own family. Am I willing to wait the average of 5 years after my PhD (I'll be 33/34) to get the holy grail that is a permanent academic job, before I can try and establish that life, pushing back against the relentless expectations? Or can I find a job that is interesting, has a social purpose, is useful and challenging, but also is limited to the hours of 9am and 5pm five days a week? It doesn't seem like an awful lot to ask.

Good luck for what's ahead. I'll try to work out a plan for afterwards.
Love, Rachel

Post- postscript

Obviously the above letter and postscript was not the end of my own story, though it does provide an insight into my struggles to develop a viable academic identity, and the barriers I envisaged to feeling a sense of belonging within academia in the long-term. Yet the past six months, during the last stages of my doctorate, have brought more uncertainty and further shifts in my own career aspirations.

At this point, at the time of writing in March 2018, I am working part-time as a Research Fellow in Education within a contract research centre at a university, a job I was thrilled and delighted to be offered in September 2017. My current levels of dissatisfaction and disillusionment with this job, and my general lack of enthusiasm would be surprising to this past self. As I continue to apply for a range of academic and non-academic jobs, I am aware of how long it may take to reach any level of career certainty, satisfaction and security, even once I have got my PhD.

The intention of this post-postscript is to illuminate how my identity story (McAdams, 1993) remains under revision, as I try to work out where my place in the world is, post-PhD.

Word Count: 81,652

Glossary of Terms

Athena SWAN

Athena SWAN is a national scheme run by the Equality Challenge Unit which aims to address gender inequality in academia and increase the representation of women at all levels. Introduced in 2005, it initially was limited to addressing issues of gender inequality in STEM subjects, but since 2015 has been extended across disciplines.

BME

Individuals from black and minority ethnic backgrounds.

Confirmation Review

An institutional process which doctoral students go through, usually within the first year of their full-time degree. Also sometimes referred to as an upgrade, this process requires students to present on the progress of their research, and examiners will judge whether or not the candidate's work is of a doctoral level.

Early Career Researchers (ECRs)

ECRs, usually defined as researchers who recently completed their doctorate. For the purposes of funding applications, the Arts and Humanities Research Council define ECRs as being within eight years of the award of their doctorate.

Post-doc

Post-doctoral positions, often called post-docs, describe academic research positions which are usually taken up by individuals who have recently completed their doctorate.

Principal Investigators (PIs)

PIs are how supervisors of doctoral students based in scientific fields are often known.

STEMM

Refers to a group of disciplines: Science, Technology, Engineering, Medicine and Maths.

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Appendices

Appendix 1- Guidance sheet for participants about letters to future selves

Guidance for Participants

The purpose of this research is to explore the career aspirations of women PhD students across disciplines, focusing on how these might change over the course of the degree. As participants in this study, I would like to do two interviews with you during your PhD. These interviews will be 60-90 minutes long and will be arranged at your convenience.

I'd like to capture your initial feelings about starting your PhD as well as your feelings during it. I would like you to write a short letter to your future self, when you will be about to complete your PhD. Further guidance about this exercise can be found below.

Guidance on Writing Your Letter to Your Future Self

This letter should be addressed to your future self, when you are about to finish your PhD. It doesn't need to be very long, ideally no more than one side of A4. There is no right or wrong way to do this, but thinking about these questions might help:

- How do you think you'll be feeling about your PhD by 2017?
- What advice would you give yourself as you're coming to the end of your PhD?
- What are your hopes for your future self?

Appendix 2

Ethical approval letter from Sheffield Hallam University

Sheffield Hallam University

Our Ref AM/SW/D&S-37-HAN

Ms R Handforth
21 Midhill Road
Heeley
Sheffield
S2 3GT

17th January 2015

Dear Rachel,

Request for Ethical Approval of Research Project

Your research project entitled "Career Aspirations of Women PhD students" has been submitted for ethical review to the Faculty's rapporteurs and I am pleased to confirm that they have approved your project, with minor modifications.

I wish you every success with your research project.

Yours sincerely

Professor A Macaskill
Chair
Faculty Research Ethics Committee

Appendix 3

Martina's restoried account in full

Martina applied to do a PhD because she had a passion for learning, and had intended on doing further study after her undergraduate degree. The PhD was something she "always wanted to do", but she felt that after her Master's "it would be good to take a break…and get some professional experience". After working in an administrative role for an NGO for a couple of years, and developing her ideas for future research, she "started to get a sense of the topic that I wanted to write on" and "decided that I wanted to progress to the PhD". Her decision to do the PhD was timed around her personal life; "I really thought that the PhD was the thing to do, now, before I… sort of turned 30 and then have children". However, she only managed to secure part funding from the university, and had to get financial backing from her parents in order to move to the UK and start her doctorate. Her parents were "encouraging" of her doing the PhD, as was her partner, who moved to the UK with her. Due to these changes, her lifestyle has altered dramatically and she feels that "my life now is my PhD" and that it is her main priority; "I live around my PhD commitment".

Her choice to return to studying without full funding was "not an easy decision". The financial implications of this and the contrast between her old professional lifestyle and that of a PhD student made her occasionally question her decision. Though her parents were "very supportive", she found relying on her parents and losing her financial independence difficult. During her PhD she became increasingly frustrated that she would have to wait "years" before being "able to start going back to the job market again". This frustration was "always in the back of my mind…it makes me even wonder if I did the right thing in choosing to study again". However, she tried to take a positive view of it, as an "investment…in my education". Considering her choice in the long-term helped her "let go of that nagging feeling that you should already be financially independent and you’re not".

A further implication of Martina's decision to do the PhD was the guilt that she felt about not having a job, which also made her question her decision to return to study; "I sometimes wondered on the worst days when things are not going so well… whether I did the right choice in going for the PhD or whether I should just have kept in my… professional career". Martina had more free time doing the PhD than she had when she was working full-time, and had a "nagging feeling" that she was "not being productive enough", and that she "could be doing more things on top of my PhD to… take advantage of this time, that I…took off from the job market". Though nobody criticised her decision to return to study, Martina felt "a sort of social external pressure" that made her feel that she "shouldn't be studying" due to how different her lifestyle was to that of her peers. She compared her situation with her peers who progressed in their careers, and felt she was "sort of the opposite". This was "difficult to handle" because of her frustration with her own situation and lack of financial independence. However, Martina was critical of this social pressure; "most people in our society are conditioned to think that if to equate success with…a job and with earning money, and with also with productivity". As someone not engaged in these things, she occasionally felt "like a failure" or that she was "wasting her time" with the PhD. However, she reminded herself that "not everyone's lives…have to follow the same straight path".

She is concerned about the time that writing her thesis will take and the size of the project, but also about the expectation that it will be an original contribution to knowledge; "being able to put together 100,000 words that seems very daunting…also the thing about contributing something original to the literature that seems quite daunting to do". Initially, she found it difficult to narrow her focus and decide on a specific topic to research. This was a "constant struggle" during her first year, and was "much harder than I thought". Martina was aware of the career implications of this decision; "they would lead me to different…. different research paths, and…my area of expertise would be a bit different", and eventually took the advice of her supervisor who suggested that she choose the topic which she would most like "to be known as an expert in". The PhD is harder than she thought it would be, because it is less "linear", more "messy" and more "uncertain" than she had expected: "I thought that things would sort of progress…very smoothly…with hard work but…I would always be sure

what I was going to do… and that's really not the case". She has struggled to adjust to the independent nature of doctoral research and in her first year was frequently questioning herself; "it's just up to you…sometimes that's a bit scary because you don't know what you are doing". Martina had expected that her supervisor would give her more direction, and found it hard to get used to the autonomy of doing a PhD. She has been surprised at how challenging it has been to motivate herself to work "without having…someone to tell me what to do", and "thought I was actually more self-disciplined than I actually am". She has adjusted to this during the PhD, but feels that it is much easier to motivate herself if she has particular deadlines and "someone to account to".

Martina struggled with imposter syndrome during her PhD. An early supervision where she was told that she ought to be writing more was a shock, and she questioned her abilities; "I thought that I might not be able to do this, might not be PhD material". After observing her peers present their work at departmental seminars, she felt that "some people seem to have it all together" in comparison to herself. She had a "nagging feeling…about whether or not I'm actually able to do this", which made her question whether she was "cut out" for the PhD. Passing her confirmation review at the end of her first year was a "massive relief". It was a hurdle that she been concerned about, and therefore passing it was significant. Receiving positive feedback from her supervisor during this process helped to ameliorate her doubts, and she felt that she had "proved myself". Passing her confirmation review made her feel that she was "on the right track" and "squashed most of my doubts". She felt that afterwards her supervisor had more confidence in her too, and that it was a significant moment in their relationship; "before that we were both maybe unsure if things were going well or not but after that, then he became more, I think more confident in myself".

She has found the PhD to be "quite a lonely process". During her first year, she lived in the city in which she studies, but in her second year her partner got a job based in the European country she is from, so Martina moved there to be with him. Whereas in her first year she attended compulsory taught modules with peers in her department, and felt "part of a broader community", Martina is finding her second year "more lonely" because she is at a distance from her department and does not see other PhD students.

She feels "out of touch with what's happening" and misses being around her peers and knowing what they are doing. She enjoys going to conferences and being able to share and discuss her work with others, because she finds that doing the PhD "you're very stuck in your world and inside your head". Despite living in a different country and missing out on regular contact with peers, Martina appreciates the flexibility of her PhD in enabling her to prioritise her personal life and live with her partner, as "you can work anywhere". However, this flexibility means that she does not have a particular routine, or a dedicated work space separate from where she lives. She struggles with this, and has learned that "I need a more fixed routine than I thought I did", and so has tried to establish a routine of going to work in the local library to address these issues.

She is unsure of what she wants to do in the future, though she has mapped out some career options and considered the skills she might need. In the past she aspired to be a policy-maker in a large European institution, and this had been "a long standing ambition or dream of mine", but after working as an intern in one of these institutions she reconsidered this, though does not dismiss it as an option. She has also considered a policy career in an NGO that works for women's rights, but has concerns that it is "not an easy sector" because it mostly involves charity work and voluntary positions, and Martina worries that it would be difficult "actually making a living out of it". She feels that an academic career is "an obvious choice for someone…doing a PhD", and that "it is the closest thing to what I'm doing right now…so it's easier to imagine myself doing that". An academic career appeals to Martina because she has always been interested in research, but it would "very much depend on the topic that I would be focussing on…and also where I would be based". She is also less interested in the teaching and administrative responsibilities involved in academic work, and so is "really not sure" about a future in academia, and hasn't "yet figured out what I would like to do".

She actively avoids discussing the future with others, as she feels that it is 'still a bit early' to be thinking about the future, and she wants to 'concentrate on what I'm doing now'. She intends to leave her decision until her final year when she will 'start to actually think about it and start looking for jobs', and she feels that 'I still have a year to make up my mind'. She occasionally discusses the future with her partner but not

often because "he knows that I really have no idea yet". She avoids having conversations about the future because she doesn't have a clear idea of what she wants to do, and wants to have a "strong conviction" about a particular career path rather than "half-heartedly saying oh yes I would like to do that". She wants to wait and have these conversations when she is more certain of what she wants to do. She is "a bit sad" that she doesn't "have any strong feelings about what I want to be doing", because in the past she had a clear aim and "real passion" about what she wanted to do. What she does after the PhD will also depend on what opportunities are available when she starts looking for jobs. Martina is confident that when she begins to look for jobs she will be able to get advice and guidance from the careers service at her institution. However, she feels that "the time hasn't come yet for me to seek that advice" and that "if I start thinking about it and obsessing about it, I won't be concentrating on the present work that I have".

Martina had some awareness of what she would need to do to pursue the career options which she considered. In relation to working as a policy-maker, Martina considered which institutions she would like to work for in the future, and ensured that she kept up to date with the activities of these organisations. In terms of an academic career, she signed up for weekly notifications of relevant job advertisements and assessed whether her experience and skills meet their requirements, so that she knew "what is expected". She was also aware that teaching experience was "important to have" for someone pursuing an academic career, and wanted to get some teaching experience in her final year to "to leave the academic career door open". She was also encouraged by her supervisor to present and publish her work, which is "more pertinent" if she were to pursue an academic career, and he encouraged her "to have all my doors open". Her uncertainty about the future was a "big worry" because she did not know when she would be financially independent again, and was aware that she may have to take a lower paid and more junior position after the PhD, in order to "work my way up a career ladder". Martina's career plans also depended on her personal life. She lived with her partner and would make her career decisions around what would work best for their relationship; "I don't look at what I'll be doing after my PhD as a standalone thing I also have to think about what he is doing right now…where he's based and how then it would work…our sort of lives together".