Telling Stories: A Thematic Narrative Analysis of Eight Women's PhD Experiences

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Submitted in fulfilment of the requirements of the degree of Doctor of Philosophy

Abstract

This research examined eight women's stories about their PhD experiences to explore their lived experience of this journey and if gender was a consideration in their PhD journey. The aims of this thesis were firstly, to provide a more in-depth understanding of women's decisions to participate in doctoral education; and secondly, to provide a more in-depth understanding of women's experiences in undertaking doctoral degrees and the factors that increase their chances of successful completion. Using thematic narrative analysis, the study found that motivation to do a PhD is multi-faceted. In some instances the motivations were complementary, such as a personal interest in the topic and/or the discipline and wanting to begin or build an academic career. In some cases they were incongruent – being awarded a prestigious scholarship was motivation for one woman to start her degree, but the departmental pressure and expectations that went along with it were de-motivating.

The second important finding was in relation to effective supervisory models. Several key factors were central to effective supervision. These include: due diligence in choosing a supervisor/s; two supervisors are essential for effective supervision; a team approach empowers the student; clear communication of expectations and boundaries by all parties; encouragement and support, especially during rough patches; availability and timely, consistent feedback from the supervisor are critical to successful completion; having a female supervisor does not necessarily produce a good supervisory relationship for female students and good supervision helps students to build their academic careers and introduces them to scholarly networks.

A third finding was that resilience is a key component in successfully navigating through PhD candidature. This includes: learned resilience in formative years; strong self-knowledge and focus and the ability to find peer support and connect can help to build resilience.

A further issue was that most of these women did not proceed to PhD research after completing an undergraduate degree and therefore greater flexibility in university policies and procedures is required to open up opportunities for other groups of students. Another significant finding was that women in this research were able to combine research and having babies. Finally, this research suggests that the gendering of academic careers begins during PhD candidature where some supervisors and Departments treat women differently to male PhD students.

I, Lesley Jane Birch, declare that the PhD thesis en Narrative Analysis of Eight Women's PhD Experie in length including quotes and exclusive of tables, references and footnotes. This thesis contains no material previously, in whole or in part, for the award of any Except where otherwise indicated, this thesis is my	ences" is no more than 100,000 words figures, appendices, bibliography, laterial that has been submitted y other academic degree or diploma.
Signature:	Date:

This thesis is dedicated to my parents, Ann and Ross, for their love, unwavering belief, constant support and encouragement not only in my academic pursuits, but in everything I do.

Acknowledgements

This PhD has been part of my life for an extended period of time and it would have been much more difficult, if not impossible, for me to have reached the end of this process without the ongoing support and encouragement of many people – family, friends and colleagues. Some people have been with me right through the journey, and others have been pivotal at particular stages, but all have been important in reaching the finish line. Taking on this project, while working full-time, has often been more than challenging. At various stages, especially towards the end, I have been absent from many of my friends' lives and missed important events. For that, I hope that I will be forgiven. Words can never be enough to express how I feel.

Dr Kate White first encouraged me to consider doing a PhD, and was initially my cosupervisor and then my principal supervisor. Her dedication to me and to this project is an example of one of the best supervisory models. She has balanced the necessary academic guidance and critical feedback with availability, understanding, mutual respect and friendship.

Associate Professor Barbara Brook was a wonderful principal supervisor over the first six years of the thesis and continued to provide invaluable support and guidance over the last twelve months of the journey.

Dr Delwyn Goodrick provided invaluable guidance and knowledge when she agreed to be a critical reader for my thesis. Not only am I in awe of her methodological knowledge and know-how, she is also a wonderfully supportive friend who nurtured me throughout the process.

Central to this thesis and the journey are the eight women who so willingly shared their stories with me for this project. They gave me their time and their trust – I hope that I have used what they so graciously gave me with the respect it deserves.

I have been incredibly lucky to have had three very supportive managers during my candidature. Dr Kate White initially suggested that I consider undertaking this project and helped to convince me that I was more than capable of doing it. Professor Elaine Martin provided much needed support throughout the majority of my candidature,

ensuring that where possible I took leave to reconnect with my research. She was also a pivotal person involved in bringing Professor Cathy Riessman to Victoria University for several conferences and seminar series which were so important in developing my methodological understanding in the area of narrative inquiry. Over the last three years, Professor Helen Borland has encouraged and listened to me, supported my leave requests and always worked to find ways to help me gain time and space to finish my thesis. In this last year since my return to work, my immediate supervisor Natalie Gloster has provided constant support in finding ways for me to take periods of leave, rearrange my working hours and ensuring I had administrative support which meant my job did not become overwhelming.

My family have been a source of strength and comfort throughout my life. The last ten years have not been easy going at times; however, I knew I was never alone. My parents, sister and nephew are the foundation of my life. They may not understand what I was doing, or why I was doing it, but they have always believed I *could* do it.

I am blessed with an amazing circle of friends who have listened, supported, fed, consoled and encouraged me throughout. They have understood the times when I needed to be PhD focused and incommunicado for stretches of time, as well as the times I needed to be dragged from the house to eat, talk and reconnect. They may live five minutes from me, interstate or overseas, but they were never out of reach. Visits with Cheryl have been wonderful times to look forward to – much valued rewards for hard work – and helped me as always to ground myself. Vanessa has fed me more times than I can count, made me endless cups of coffee, and during my study leave was sometimes my only human contact during the week. In the last weeks of my thesis I have been lucky to have welcomed Deb and Nik back to Australia and into my house - they have looked after me and kept me sane and focused. Deb's wizardry with formatting and proofreading has polished the final draft better than I could have hoped. George earned his PhD years ago and has given me words of encouragement throughout – he was right, it is easier when you stop trying to talk yourself out of it. Jo has always encouraged and supported me, particularly in my academic pursuits and is always available to remind me what I am capable of. Michelle, Maria, Coleen, Ann, Jeanne, Deborah, Michael and Lauren's support made a huge positive difference to this experience. Luckily for me, my friends have understood the importance for me of finishing the thesis over almost

everything else particularly over the last 18 months. Catching up and reconnecting are things I am really looking forward to. Thanks also to my online friends, in particular CT, Cryssi, and Luke who encouraged me to keep going towards the end, made me accountable, and understood the need for me to be offline for most of the last few months. Special thanks to CT for his constant harping to keep my eye on the goal and reminding me that sleep was a non-negotiable part of the equation. In most instances, I heeded that advice.

I am lucky to work in an area of the university with colleagues who I also count as friends. They have lived through this journey with me, providing practical and emotional support, insightful comments, challenges to push myself harder, and hugs. Nicole, Katie, Rita, Bhanuka, Angela, Natalie and Helen within the office, and Tina, Grace, Liz, Arnie, Jane, Greg, Michele, Michelle and Enza in other areas of the University, have done more than I could have asked for throughout this time.

The advantage of working where I do is that I am in constant contact with PhD students who have also embarked on their own "odyssey". The informal conversations and support offered by sharing your experience with other PhD students should never be undervalued.

And lastly, thanks to my two cats – Ember and Agatha – for reminding me that sometimes you need to stop and play or just take a nap.

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Glossary of Terms

This is a glossary of terms used within this thesis for which readers from outside the Australian higher education system may need further clarification.

Australian Postgraduate Award (APA): prestigious, government-funded scholarship awarded on the basis of academic merit for students who are undertaking a research degree.

Candidature: The period of enrolment of a research student at a University until they submit for examination.

Candidature proposal: The research project proposal submitted by the student outlining the project they are planning to undertake and the methodology and analysis they propose to use. Normally these are submitted or presented at either six or twelve months full-time enrolment or equivalent part-time duration, depending on the university.

DEEWR: Department of Education, Employment and Workplace Relations. This is the Federal Government Department which oversees tertiary institutions and their funding.

DEST: Department of Education, Science and Training. This is the previous government department which oversaw tertiary institutions in Australia.

Dual sector institution: refers to one of the newer universities that incorporate both higher education and vocational education sectors.

Department: The unit within which the student is enrolled. The women interviewed in this study, depending on their institution, referred to this as "department" or "school" depending on their home institutions structure.

Group of Eight University: refers to one of the research intensive "sandstone" universities in Australia.

HECS (Higher Education Contribution Scheme): government scheme for university students to pay course fees for their degrees (both undergraduate and postgraduate). These HECS fees can either be paid up-front or deferred. Deferred HECS payments are deducted from a graduate's income on a sliding scale once they commence employment. Students who defer payments are not charged interest. However a "cost-of-living" index is applied to the outstanding amount.

Maximum candidature duration: The maximum period of enrolment for a research degree. Currently in Australia this is two years full-time equivalent for a Masters student and four years full-time equivalent for a research doctorate.

Postgraduate Research Coordinator: An academic within the School or Department who co-ordinates research students within that School/Department.

School: as with "Department" above, this refers to the unit within which the student is enrolled. The women interviewed in this study, depending on their institution, referred to this as "department" or "school" depending on their home institution's structure.

Standard candidature duration: Currently in Australia, research students are expected to plan and undertake projects to be submitted in the standard duration of two years full-time equivalent for a research Masters degree or three years full-time equivalent for a research doctorate.

Chapter One — Introduction

The number of women in higher education, as both students and academics, has grown significantly over the last forty years. However, we are still a long way from achieving gender parity in relation to the senior academy. Comparatively little qualitative research has been undertaken on what has traditionally been considered to be the necessary precursor to an academic career – gaining a PhD. Understanding both women's motivation for enrolling in a PhD and the factors that impact on successful completion of the degree can assist in developing better support for new and continuing students. Looking at these in relation to the academic career path can also help us to understand the relative lack of women in senior academic positions and identify strategies to ensure greater representation of women as senior lecturers and associate professors and in turn to increase the number of women in the professoriate.

The "leaking pipeline"

Women's participation rates in Australian universities show a significant decline at five critical points: between undergraduate enrolment and Honours year; between Honours year and postgraduate research degrees; between completion of doctoral studies and postdoctoral research; between lecturer and senior lecturer level; and between associate professor and professor level (White, 2004). Husu (2000, p.221) noted that this "underrepresentation of women in academe is increasingly and globally recognised as a serious problem", a view echoed by Bagilhole (2007) who argues that women, both as students and staff in universities, still face a combination of prejudice and structural barriers.

Recent statistics from the UK and Australia estimate that at the current rate it will take at least another forty years to achieve parity with men in senior academic positions (Machado-Taylor, Carvalho & White, 2008). Barinaga (1992) refers to the funnelling process that occurs, where women continue to be over-represented in lower levels of

employment, as a "leaking pipeline". This research argued that women in neuroscience were leaking from the pipeline due to a complex set of problems centred mainly on two factors. Firstly, an attitude held by men but often internalised by women that women don't have what it takes to be top achievers. This places some of the responsibility for women not achieving high positions on women's own confidence. The second factor is the dual burden of balancing a scientific career with family responsibilities (Barinaga, 1992). Barinaga (1992) concludes that the leaks in the career pipeline may never be completely sealed, and that women would continue to leave academia for personal reasons. It is argued that rather than expect women's career paths to reflect those of men, the system should be broadened to accommodate different styles and equalise opportunities for women. More recently, Hatchell and Aveling (2008, pp. 3-4) note that the leaking pipeline metaphor suggests "a straightforward linear career progression that is quite restrictive and does not easily accommodate the more complex life-patterns of females; nor does the metaphor take account of the multiple layers of culture...". Are the barriers to women's academic career progression gendered? How much emphasis should be placed on women leaving academic careers for personal reasons, such as focusing on family responsibilities, and how much should be placed on external barriers to career progression?

Allen and Castleman (2001, p.151) argue against accepting what they call "the pipeline fallacy", which they assert is used to "dismiss gender inequality as something over which we have limited current control". They are more concerned to examine how organisational power is gendered, and consider that the main problem with the pipeline model is "its failure to acknowledge the complexities of male advantage, gender power and the gendered nature of organisational dynamics and the implications of organisational change" (Allen & Castleman, 2001, p.156). Other research also focuses

on how organisational culture in universities determines the gendered experience of women academics (Hearn, 2001; Hearn, 2004; Currie & Thiele, 2001; Husu, 2001; O'Connor 2008; Carvalho & Machado 2010).

In contrast, Sampson (2009) acknowledges the fact that women exit the academic pipeline more than men, which is therefore a gender issue. However, he argues that this is not the same as saying that women drop out because of the influence of men.

Sampson (2009) points out that if we look at sociology rather than the sciences, female doctoral students and female senior lecturers are in the majority in Sweden, and at professorial level the gender balance is even. Arguments have been made in scientific disciplines around the lack of role models and a lack of "critical mass" affecting women's likelihood of staying on an academic career path (Etzkowitz, Kemelgor, Uzzi & Neushatz, 2000). When there are role models in place and a "critical mass", other factors could be in play. Sampson (2009) argues that rather than male students receiving more opportunities and encouragement, or female students being marginalised and pressured, that changes to university life in general are impacting on everyone. But others assert that the rise of managerialism in universities has a more negative impact on women than men (White, Carvalho & Riordan 2010; Knights & Richards, 2003).

The "leaking pipeline" metaphor continues to be utilised almost twenty years after Barinaga's initial paper in 1992. However, researchers are still debating which factors are impacting on women's progress up the academic career ladder. As will be discussed in Chapter Two, recent statistics still show marked discrepancies in the number of women at different stages in the academic career pipeline. In the Australian context we already know that at the end of a PhD women earn less than men, are less likely to take up post-doctoral positions, and are more likely to be in casual and part-time

employment (Dever, Boreham, Haynes, Kubler, Laffan, Behrens & Western, 2008). As useful as these statistics are in providing an overall picture of the current situation, they do not elucidate in detail what women are experiencing and how this affects their decisions to continue to an academic career.

What this thesis examines is the experience of individual women undertaking PhDs and whether this is shaped by the same gendered organisational culture that research has shown to impact on women's academic careers. Are there differences in the experiences of women in arts based disciplines compared to those in science or business? What do the eight women PhD students in this study emphasise when asked to relate their doctoral experiences?

The thesis has chosen to focus on the experience of women rather than men undertaking PhDs because it is interested in understanding at a micro level what is happening during their candidature and if, and what, gendered elements are discernable. I have therefore examined standpoint theory as a lens and a way of making sense of individual women's experience as postgraduate researchers. Anderson (2010) emphasises that dominant knowledge practices can disadvantage women by producing theories of social phenomena that render gendered power relations invisible. Standpoint theory endeavours to develop a feminist epistemology, or theory of knowledge, that delineates methods for building effective knowledge from women's experience (Harding, 1986). The central tenet of feminist epistemology is that of the "situated knower", and thus of situated knowledge that reflects the particular perspectives of the subject (Anderson, 2010). According to more recent work in feminist philosophy, feminist standpoint theorists have moved away from the search for a *single* feminist standpoint

towards acknowledging *multiple* epistemically informative situated standpoints (Harding, 1991; Harding 1998).

As a researcher, I position myself with the view that developing knowledge that draws on the insights of marginalised groups, and starts from the assumption that their issues will be richer and more useful, is a more productive stance than confining one's thinking to the insights and issues of privileged groups alone (Anderson, 2010; Harding, 1998). Thinking from the standpoint of marginalised groups is, according to Hartsock (1997), more productive for pragmatic reasons than confining one's thinking to dominant perspectives. Thinking from these perspectives or standpoints enables us to envision and realise more just social relations (Anderson, 2010; Hartsock, 1993; Hartsock, 1997). Another reason for taking a feminist standpoint in this research is that I am interested in the experiences of women undertaking research degrees. Anderson (2010, p.44) points out that "many standpoint theorists have turned to focusing more sharply on the epistemic value of the experiences of subordinated people." Both women and men experience difficulties during their PhD experiences that may impact on their decisions to continue to academic careers. This research adopts a feminist standpoint which proposes to make women's experiences, instead of men's, the point of departure. The focus is on women because they are still under-represented as PhD students and academics in some disciplines. I also wanted to explore in detail if and how the PhD experience is gendered.

What can women's stories of their PhD experiences tell us? How can we use these stories to help other women undertaking doctoral studies and to provide both information and strategies for University policy makers? Also, can these stories shed light on the complex power relations within university departments that can be gendered

and therefore mean that women's experience of doing a PhD will be significantly different simply because of their gender?

This project uses the very lengthy narratives of eight women at a number of Australian universities to investigate their experiences of commencing, undertaking and completing a PhD.

My story

In light of the discussion above on standpoint theory, and in line with feminist qualitative research methods, I believe it is important for me to be reflexive about my story, thus making explicit my own position and experience as a women undertaking a PhD (Reinharz, 1992). I thought about sub-titling this section "If it was easy, everyone could do it", which is what one of my friends reminds me if I complain about the magnitude and complexity of the difficult task I have faced in pursuing my PhD. The inspiration came from a project that I began working on eighteen months before commencing the PhD. I was the project officer at Victoria University on a project to implement strategies to increase women's participation in research higher degrees. The research methodology included a questionnaire and focus groups to determine potential strategies to increase participation. Analysis led to the development of a number of strategies, some of which were implemented throughout the University. However, the part I found most interesting was precisely what was not being captured – the anecdotes and stories people shared when dropping off their survey responses or after a focus group, sometimes around issues that had not been addressed in the survey. This had potential as a rich source of information, which I discussed with Dr Kate White who later became one of my supervisors. We agreed that there was potentially valuable information in these stories that could be uncovered.

The Postgraduate Research Unit, where Dr White was Acting Head, had a vacancy for an Acting Scholarships Officer. I was asked to fill the Acting role while they advertised the position and also encouraged to apply for the permanent job. I succeeded in gaining the position. A year later, after presenting some of the outcomes and strategies from the initial research project at two conferences, I discussed the possibility of doing a PhD. We both thought that there was scope in this area but as she was my manager at the time, she could not be my principal supervisor. We had discussions with Associate Professor Barbara Brook in the Faculty of Arts who was interested in the project and happy to become principal supervisor.

Thus I enrolled part-time in a PhD at the end of 2001, not fully comprehending the journey that awaited me. Of course I knew from the earlier project that research degrees could be difficult, and I interacted every day with research students while administering postgraduate scholarships. My role involves administering the annual scholarship round, day-to-day administration of scholarships including payroll, a strategic role in advising University committees on scholarship matters and conducting training, often in conjunction with other presenters, on scholarships and other processes and procedures. I enjoy helping students, sometimes just being a friendly ear outside of their School or Faculty; at other times providing advice on issues in relation to leave, scholarships and, occasionally, supervisory issues. Anecdotes and stories continued to be exchanged, and I often found a useful way of assisting students was through sharing the experiences of other students. I could not anticipate the challenges that awaited me in both my work and personal life that would impact on my research candidature. One of the women in this project referred to her journey as a rollercoaster and that aptly describes my personal experience. I have had many wonderful times, especially meeting the eight women who shared their stories with me. We talked, laughed and commiserated. Each

story is individual in its own right, contextualised by the time and space in which it is told, and the audience to whom it is related. But there are commonalities in issues raised, difficulties faced and obstacles overcome. Persistence and resilience shone through in many instances and their stories inspired me to continue and also to reflect on my own journey.

There are specific characteristics of my story: I work full-time and was enrolled parttime; I was not on a scholarship; and I do not have children. One major difference from
most of the eight women I interviewed is that I worked full-time while doing my
candidature, fitting my research into the gaps created by study leave days and into
weeknights and weekends. Often study days vanished in a flurry of urgent work
commitments. In addition, almost every year I have taken three months leave of absence
from my degree to concentrate on the scholarship allocation round. Leave of absence, as
I tell students when they are starting, is a very useful tool to use when life gets
complicated and busy. What I didn't realise in the early years was that it can also lead to
a sense of disconnection from your research and it can take a while to refocus and
become re-motivated after each break. Tasha, the final participant, also noted this
challenge of regaining momentum.

I have also taken leave for a number of personal reasons. In the space of nine months I presented a paper at a European conference on Gender Equality in Higher Education in Oxford, went through the breakdown of my de facto relationship, refinanced my house to take over the mortgage on my own, ran the annual scholarship application round, found out from the Head of School that my principal supervisor was on extended sick leave and then found out my current boss was seriously ill. Extra responsibilities at work, due to my manager's occasional absences, meant that I took Leave of Absence for

the last three months of 2005 and then the first three months of 2006. During that period, study days became non-existent and I lost focus on my PhD. I started to pick up the pieces of the research with my co-supervisor at the same time that my boss firmly insisted that I take two months annual leave in mid-2007 to have some solid time on the thesis. She also stepped in to hold proxy supervision meetings while I was on this leave as my co-supervisor was overseas. My principal supervisor left the university and my co-supervisor moved into the principal supervisor role.

There has been a constant tug-of-war between my job and my PhD As I am in a highly specialised senior research administration role, for which, as it was bluntly pointed out to me by an academic, "You don't need a PhD", the fact that I was doing the PhD primarily for my own intrinsic motivation and interests meant that it almost always played second fiddle to my job.

In order to quarantine a block of time to draft the thesis, my supervisor recommended that I apply for paid study leave from the university and I spent considerable time and effort on the application. Study leave is primarily available for academic staff.

However, administrative staff at a senior level can apply. It was necessary for me to apply for an exemption to the policy in order to be considered. This was submitted at the same time that my manager left the university at the end of her contract. The first conversation with my new manager, prior to her commencement, was to inform her that I was applying for this extended leave, which would mean that we would need a replacement scholarships coordinator. I had support from my supervisor, my exmanager, my new manager, the postgraduate coordinator of the School in which I am enrolled, and an internationally respected academic in narrative methods who took an interest in my research. Frustratingly, my application was initially rejected and I grew

increasingly worried about ever getting a decent period of time for writing up my thesis.

After months of negotiation – and my offer to take half the time as long service leave – the application was approved. It is important to note that the difficulties were not with my immediate manager who was incredibly supportive and helped me to also investigate alternative ways to manage the leave.

In the six months prior to taking the leave, I worked on finalising the transcribing of the last two interviews and outlining a schedule for the six month's leave. Work impacted strongly on my ability to do more than this as we not only moved office, but also had to find my replacement – creating a procedure manual as well as training her – in addition to my usual responsibilities. In the chaos of my last week at work, my father had a minor heart attack and was hospitalised prior to surgery. This event, difficult as it was to deal with, helped me reassess the importance of the work about which I was so stressed. I did everything I could manage in the time available. On my last day, as usual, I struggled to leave on time and was twenty minutes late for supervision.

The block of paid leave to have solid time on analysis and writing was wonderful – and fear inducing at the same time. As one of the participants, Ebony, pointed out in her story, a solid block of time is necessary for thinking and writing. One of the most constructive supports that I believe a university can offer all staff who are also research students is to provide this opportunity for the student to engage with their research on a full-time basis.

This period of leave meant that I had a limited time and had to finish my thesis. Work was no longer a reason for not making progress. I had devised a schedule with my supervisor and managed to meet most of the deadlines – aided by weekly supervision

sessions. While the end was in sight, still I struggled with the emotional and intellectual rollercoaster. Days spent on your own with only the cats to talk to could feel endless and distractions were many. I occasionally felt isolated but was able to keep in email, internet and phone contact with work colleagues, fellow PhD students and family and friends. I knew many of my friends and family didn't completely understand what a PhD entailed or why it had taken over nine long part-time years, but I knew I could rely on them for moral support, time out, food, company and a shoulder to cry on should it be needed. I also knew that they often showed their support by leaving me alone to get on with it, patiently waiting to hear from me when I was available. Isolation has long been an issue mentioned by PhD students, and I believe that not talking to other students only helps to magnify problems. What I have learnt through this research, and also through my job and my friendships with other PhD students, is that many issues are common ones. By sharing knowledge and experiences, we feel less isolated and perhaps learn a few different approaches and strategies to the issues that we face. It is a gruelling, demanding and often frustrating process. Sharing the positive as well as negative parts of the PhD journey, even with students from different disciplines, helps! Different perspectives on common problems can help us reach solutions that we may not find on our own.

In the final months of writing up my thesis, many old issues resurfaced. I had questioned why I was doing it, giving too much weight to the little voices that whisper negative thoughts and becoming increasingly anxious about submitting and failing.

What kept me going in the last few months were the stories I have read and re-read from the interview participants, as well as anecdotes and support from other PhD students in books and online. Many students face numerous and varied problems throughout their candidature, as will be evident in the cases discussed here. The decision to undertake a

PhD is one that is not simply made once before enrolment, but continually throughout the degree. We commit and then re-commit to it over and over. This persistence comes, I believe, from an inner resilience to keep going. One of the characteristics I share with some of the participants in this research is that I usually finish things that I start – a common thread in a number of cases in Chapter Six. This need to reassess and recommit is not often mentioned to new PhD students – we need to remind them that it is a rewarding but arduous journey, and their motivations will be challenged and change throughout. Supervisor relationships will have to be negotiated and re-negotiated as circumstances change; in some cases, they have to be re-built with a new supervisor. The supervisory relationship is key – knowing that my supervisor has always believed in me; has been available, supportive and understanding of the other issues in my life, which often took priority, has made this journey bearable. It is through this support, and sometimes the "tough love" needed to set high standards and meet tight deadlines, which has enabled me to work to a higher standard than I believed I was capable of reaching. This has been the case with both of my supervisors who have alternated roles throughout this journey. A strong supervisory relationship works to help build resilience and push past limitations, while teaching you that in the end only you can write your own PhD. In many of the narratives, this idea of persistence and resilience often comes back to also "knowing yourself and what works for you". Understanding how you best work and manage your time, the level of supervisory interaction, support and feedback you need, enable you to have a strong foundation on which to build, which can help you negotiate the more difficult experiences and "rough patches" that you will face.

What I thought were the final two months proved harder than anticipated. I was aware that returning to work would be difficult, not only for the time constraints on the thesis completion, but also because my job takes a lot of energy and focus. My replacement

did a superb job in handling the Scholarships Coordinator role in my absence. My return to work and focus on completion was disturbed to a degree by a number of issues with several friendships. For the last year I had been in contact sporadically, often only by text message or email, with the majority of my friends. Luckily most have understood why I have not been in contact. Nevertheless I was racked with guilt over missing key events in my friends' lives. It was difficult to tell a close friend that I couldn't fly interstate for a weekend to celebrate her 40th birthday at the end of February. Another two friends had separated and were heading towards a none-too-amicable divorce. The drama this caused was beginning to affect my ability to focus until I was reminded by my supervisor, and another friend who was also caught in the middle, that my priority had to be completion. On the weekend I was writing this paragraph, my best friend had serious problems with her mother. All I could do was be supportive through phone calls, instead of getting in my car and driving over to help. Again, she understood this and didn't expect me to stop writing.

In the last three months, I approached two critical readers and also gave a copy of the full draft to my co-supervisor for feedback. The first critical reader provided feedback on my methodology chapter (her area of expertise) and I made numerous small changes. The second critical reader eventually came back with devastating feedback. This was shattering. My principal supervisor was about to leave the university to work overseas for several months. The reader at first only provided vague email and verbal feedback. This was someone whose opinion I greatly valued and with whom I had worked closely in the past. I had thought that she knew my work and also respected me. My confidence was therefore severely shaken and until I knew her specific concerns they could not be addressed. Initially her comments were very negative but through discussion it became clear she had not clearly understood the methodology or aims of the thesis. Reading the

methodology chapter helped her to better understand the project and the subsequent feedback was useful. I discussed her comments with my principal supervisor and awaited feedback from my co-supervisor on the full draft. It was agreed by both supervisors that I needed to do further analysis to strengthen the thesis.

Going back to the analysis was difficult. My self-confidence wavered and I was overwhelmed with work. I had gone from believing I was one month away from submission to needing to do another six months work. I was tired, worried, and the long hours at work left me little time for the thesis. Two months passed with little progress and I developed a chronic ear infection. Realising I had to take back control, I negotiated with my supervisor at work and started using my annual leave to get weeks off where possible. I had support from my co-supervisor and the first critical reader, who helped me regain some confidence. When my supervisor returned from overseas, we reassessed my timeline and I finished re-analysing the first of the analysis chapters. The others followed in rapid succession. During this time I also talked to a couple of friends who were finishing, or had recently completed their PhDs. We shared the pain of these last few months and I realised I was not alone in what had happened to me. This peer support was crucial to rebuilding my confidence and moving forward. Also important was the social support network, particularly online, I had developed. One useful strategy was to make myself accountable to an online friend and report progress at the end of each day. I kept in regular email contact with another friend who was also in the final stages and had recently received critical feedback from her supervisor. Both on tight timelines, we kept pushing each other forward. The last few months were an emotional rollercoaster. I kept focused on one small step at a time. Resuming weekly supervision meetings helped keep up momentum in the final stages.

I find my job as Scholarships Coordinator rewarding primarily because of my contact with students and being able to help them in their journeys. As mentioned above, I don't *need* a PhD to do my current job, but I think that I, along with others, can use what has been learnt in *this PhD* to better inform the advice and support that I provide to students. Moreover, the findings may provide information and strategies to academics and universities on ways to support women throughout their PhD candidature to ensure successful outcomes. Providing advice informed by this research is one way of increasing the pool of women academics that can move up the ladder to senior academic positions, thus bring us closer to gender parity in higher education.

The aims of this thesis are firstly, to provide a more in-depth understanding of women's decisions to participate in doctoral education; secondly, to provide a more in-depth understanding of women's experiences in undertaking doctoral degrees and the factors that increase their chances of successful completion; and thirdly to inform the development of more effective university policy and strategies in relation to effective outcomes for women PhD candidates and to identify effective strategies for ensuring timely completion.

Structure of this thesis

The thesis is structured as follows: Chapter Two is a literature review of current knowledge of the PhD experience and its impact on future careers, situated in the literature on gender disparity in higher education and using the "leaking pipeline" analogy; Chapter Three is the methodology and methods chapter; the following four chapters offer analysis, three focus on each of the three major themes for which each narrative was analysed (motivation, supervision and resilience), and the fourth on the

analysis of the one participant who withdrew from her PhD; Chapter Eight discusses the analyses and is followed by the conclusion.

Chapter Two — Literature Review

Introduction

In Australian universities women comprise the majority of total undergraduate enrolments. However, they are still under-represented in postgraduate research degrees (Department of Education, Science & Training, 2005; Department of Education, Employment and Workplace Relations, 2009). As outlined in the previous chapter, there is a "leaking pipeline" effect – which differs between disciplines – as women progress from undergraduate degrees to postgraduate research and then to academic careers. This phenomenon is particularly noticeable with women doctoral students who start but do not complete their degrees; women who complete but do not continue in academia; and those who drop out at various stages of their academic careers (Barinaga, 1992; Hatchell & Aveling, 2008; Sampson, 2009). The "leaking pipeline", as discussed in Chapter One, has been described as a fallacy and masks very entrenched organizational cultures in universities that ensure women have a different experience of academia from the time that they plan to embark on an academic career. Nevertheless, the decreasing participation of women as they progress along academic career paths represents a huge wastage of human capital. As Bell (2009, p. 58) observes: "when we document 'attrition' we are mapping accumulated disappointment, frustration and unrealised expectations, impacting significantly on individuals. In response I contend it is our responsibility is to change the professional world our young scientists are entering".

This literature review draws primarily on Australian, UK and Western European research in the field. Given that the Australian higher education system was developed on the British model, some clear parallels can be drawn. Although the overall number of women in higher education has increased over the last forty years, these increases have

largely been as consumers and in lower staffing levels in universities (Husu & Morley, 2000; Gale & Lindemann, 1989; Leathwood & Read, 2009; Machado-Taylor et al., 2008; White, 2001). This is evident in the increased numbers of women in undergraduate degrees and lower percentages of women doing PhDs. This trend has also been identified among academics, with the highest proportion of female staff being found at lower levels within universities (Dever, Morrison, Dalton & Tayton, 2006; Bagilhole, Riordan & White, 2009; White & Birch, 1999).

The under-representation of women begins at the senior lecturer level and becomes more pronounced at professorial level. Women represent only 19 per cent of full professors in Australia and 16 per cent in the UK (Bagilhole et al., 2009). In Australia, women make up over half the academic staff, but only a third of senior academic staff (White, 2001). Female professors in Australia, as elsewhere, are a 'rare species' (Ward, 2000).

Organisational context

A woman's PhD candidature could be considered an induction into the gendered organisational culture of the university. Hearn (2001a, pp. 71-72) asserts that universities are "complex mixtures of gendered power relationships and practices, and gendered moral relationships." He goes on to observe that they "remain incredibly hierarchical gendered institutions...both *between* and *within* universities" (Hearn, 2001, pp. 72; see also, O'Connor, 2008). Consequently there is a "preoccupation with the masculine self and its insecurities" in keeping the hierarchies in place (Knights & Richards, 2003, pp.227).

The impact of this gendering is experienced by women in universities in various ways. Women are concentrated in the lower levels of academia and experience difficulty in becoming full professors (Bagilhole & White, 2008; van den Brink, 2009). Moreover, in newer universities women's sense of professional identity has been challenged by the move to more entrepreneurial environments (Blackmore & Sachs, 2001), whereas in older universities women continue to be outsiders and are still largely excluded from management (Bagilhole & White, 2008). Blackmore and Sachs (2007) noted that this move towards increased managerialism in universities, with their focus on strategic plans, client service and line management structures, is reshaping the field of education. However, patterns of inequalities still remain (Blackmore & Sachs, 2007).

As suggested in Chapter One, gendering of academic careers is often discipline specific. Each discipline has a different history, traditions, and social organisation (Hearn, 2001). Ironically, Hearn (2001, p. 75) asserts "the greater the domination of men, the more the academic discipline or department is likely to be presented as gender-neutral; the more homosocial, the more it may appear to those there as a gender neutral environment." Those disciplines that are most in denial about gendered gatekeeping are those that are the most prestigious (Currie & Thiele, 2001). This gatekeeping has the dual function of exclusion and control, at the same time it facilitates the obstruction of resources, information and opportunities (Husu, 2004). Van den Brink (2009, pp.127) argues that homophilous relationships in scientific disciplines mean that "the likelihood is greater that a male candidate will be selected when predominantly male gatekeepers search for candidates in their networks" (see also, Bagilhole & Goode, 2001). The impact is that women are largely excluded from the professoriate in these same disciplines and from "access to resources, influence, career opportunities and academic authority" (Morley, 1999, p. 4). They are also excluded from networks that would enable them to build

international research profiles, and consequently they are also often excluded from access to senior academia (Morley, 1999). This exclusion, Morley (1999) argued, is a form of micropolitics in academia that contributes as significantly to the continuing subordination of women in the hierarchy as the structures themselves. Micropolitics focuses on the way power is relayed in everyday practices. It is about influence, networks and alliances; and how power plays out in the minutiae of social relations (Morley, 1999).

Gendering of academic careers

The gendering of academic careers begins when women are doing PhDs and when they are casual academics and lecturers. From the outset of academic careers, starting at PhD level, women have a different career experience (Asmar, 1999; Dever et al., 2008). In recent years, the expansion of research on gender and organisations has focused on the gendering of universities, as scholars turned their attention to thinking about their "own" organisations (Hearn, 2004, Husu & Morley, 2000; Husu, 2001; Morley & Walsh, 1995). Universities are hierarchical gendered organisations and in most countries, the higher the status of the university, the higher the proportion of male academics (Hearn, 2004). Hearn (2004) notes that the gender shifts are sharply delineated as women progress from postgraduates and contract researchers, through lecturer levels to the professoriate. It should also be noted that these hierarchical differences often obscure gendered segregation and variations in different areas and discipline areas within universities (Carvalho & Machado, 2010; Hearn, 2004).

This segregation within universities is both vertical and horizontal. Women are not only less represented in the professoriate and in senior university management positions, but there are also marked differences in discipline (Carvalho & Machado, 2010). They are

still dominant in the humanities and social sciences, particularly in lower levels of academia rather than the professoriate, while men represent the majority in science, engineering and technology (SET) (Carvalho & Machado, 2010; Hearn, 2004; White et al., 2009). This male dominance in SET has a negative impact on women's careers from the outset (White et al., 2009), and leads to women scientists in particular exiting universities "and thus a loss of potential significant contributions to the scientific field" (Hatchell & Aveling, 2008, p.14). Moreover, large numbers of Australian women and men SET postgraduates travelled overseas for their first post-PhD employment due to lack of job security and poor generic "employability" skills (Giles et. al., 2009). This dominance of science, engineering and technology also has a direct impact on the organisational structure and culture of universities. Bagilhole and White (2008) found that the majority of Vice-Chancellors in both the UK and Australia came from SET backgrounds. Promotion to senior management positions is almost exclusively grounded in an initial professorial appointment, thus the gate keeping that works to exclude women from professorial positions in SET helps to preserve the dominant male leadership of universities (White et al., 2009; van den Brink, 2009).

Choice of discipline has also been noted as a key factor in research output and is clearly gendered. Female academics are concentrated in the humanities and social sciences, areas that are less likely to attract external funding (Dever et al., 2006). Promotion is often based on research performance, including publications and gaining external funding, rather than teaching and administration (Dever et al., 2006; Dever et al., 2008; White, Riordan, Ozkanli, Neale & Husu, 2008). But even in SET disciplines that have high research output women find it difficult to succeed. Bell (2009, p. 10) argues that "persistent vertical segregation in science and technology disciplines, in addition to continuing horizontal segregation, impact on women's capacity to participate,

contribute and succeed in "non-traditional disciplines". It is these disciplines, after all, that are the research and research training engines of our universities and critical to the nation's productivity and economic well-being".

Studies have shown that a range of factors impact on women's lower research performance. Probert (2005) argues that research is the only aspect of work that can be put off in a schedule filled with teaching, research, administration, children and other family responsibilities. Bagilhole and White (2003) and Neale and White (2004) both argue that gendered differentiation of academic roles leads to women concentrating on teaching, administration and pastoral care rather than research and publishing. Dever et al. (2008) concur, reporting that recent female graduates worked to a greater extent in academic teaching, mentoring or advising roles, while male graduates worked to a greater extent in research, supervision and management roles. Leonard (2001) also reported that a heavy burden of pastoral care falls to female staff in university departments. It is success in achieving external funding, research and publication output that are emphasised for promotion within universities (Bagilhole & White, 2003; Dever et al., 2006). Park (1996) argues that rather than encouraging women to act like men to increase their research productivity (that is, to do less teaching and pastoral care), it would be more useful to problematise this gendered division of labour and its influence on promotion and employment criteria.

Barinaga's leaking pipeline analogy highlights that women exit at a number of critical stages on the academic ladder (Barinaga, 1992; Hatchell & Aveling, 2008; Sampson, 2009). The two most critical leakage points occur between undergraduate and postgraduate levels, and between lecturer and professorial levels. Researchers have highlighted a number of reasons for the lack of women in senior academic ranks. In

terms of this research project, the most important point is that a postgraduate research degree, in particular a doctorate, is the traditional career path into academia in Australia as well as many other Western countries (Dever et al., 2008; White & Birch, 1999; White, 2001). At most universities, a doctoral degree is now an essential qualification for tenured academic positions (Asmar, 1999). Women who don't have doctorates generally have greater difficulty than women who have doctorates in gaining promotion (White, 2001).

The need for a critical mass of women has been highlighted as one way of overcoming this gender imbalance (Chesterman, 2003). This claim asserts that an increase in the representation of women will lead to an increase in their access to social networks and important resources. Fewer women in a department may lead to dissatisfaction and higher attrition rates for women scientists (Ferreira, 2003). Lang (1999) reported that the administration at MIT admitted there had been gender discrimination against its tenured female professors. A study by a committee of tenured female faculty members and male colleagues documented gender bias. Professor Nancy Hopkins noted that one of the main problems was that women represented only a handful of the staff in a very large institution. As knowledge about the project's findings was disseminated, committee members and the Deans at MIT received mail confirming that similar problems were common in academia worldwide (Lang, 1999). However, Etzkowitz et al. (2000) highlight the paradox inherent in this "critical mass" theory: the organisation and culture of academic science must change in order to encourage more women to enter the profession, but more women in the field – critical mass – would help to change both the culture and organisation.

This lack of senior academic women, and the difficulties they face in their careers, impacts on the number of women coming through from undergraduate courses (Allen, 1990; Kaplan, 1985). Allen (1990) argued that one of the reasons for lower numbers of female postgraduate students was the lack of female faculty staff. This resulted in students observing that the knowledge makers were predominantly male. Kaplan (1985, p.20) commented:

Young women, having poked their noses into tertiary institutions, are likely to acquire the knowledge of some of the less palatable social conventions and may thus decide not to continue to further degrees and/or not to consider a tertiary institution as a possible place for career advancement. Very capable and bright young women may be lost to higher tertiary education and employment.

It is thus important to listen to the stories of women's experiences and observations within, and outside of, the higher education sector. Jeffries and Palermo (2003) also noted that there is an interrelationship between women's experiences at different levels in organisations; that is, the experiences of women at one level impact on women at other levels.

Morley (1999) however, argues that the question of women achieving critical mass may be misplaced. The number of women who enter the professoriate is not as important as the impact they have on the dominant male culture (Bagilhole, 2007; Morley, 1999; Morley 2003; White, 2001). Kaplan (1985) also noted that while the presence of a successful female academic may sometimes provide a role model for younger women, experience has shown that such role models do little to facilitate greater participation by women at the postgraduate level. In other words, a few role models do not replace universities developing robust strategies to ensure more women complete PhDs (Kaplan, 1985).

While interpretations may differ, there seems little question that the lack of women in the upper ranks of the academy both affects, and is affected by, the lack of women continuing to postgraduate research degrees. An increased number of women with doctorates would increase the eligible pool of women to be appointed to senior lecturer positions and in later years, for promotion to the professoriate. However, we must be wary of the "give it time" argument. There are entrenched organizational cultures that will prevent women from achieving a critical mass. As van den Brink (2009) has demonstrated, systematic gate keeping in some disciplines effectively keeps many women out of the professoriate.

Women's PhD experiences

Several researchers have suggested that there is a clear link between women not progressing to postgraduate research degrees and the lack of women in the senior ranks of academia in Australia (White, 2004; Bagilhole & White, 2008). White and Birch (1999) argued that it is critical to encourage women to undertake postgraduate research degrees. The flow-on effect will in time increase the number of women eligible to progress through academia to senior positions in Australian universities (Chesterman, 2003; Jeffries & Palermo, 2003). In turn, the under-representation of women in university senior management has been clearly linked to their under-representation at professorial level (Ozkanli & White, 2008; Machado-Taylor, Carvalho & White, 2008).

A recent Australian study on gender difference in post-PhD employment reported that women are less likely than men to report positive outcomes of their PhD experience and post-PhD employment (Dever et al., 2008). The study found that male rather than female PhD candidates were more likely to receive assistance from principal supervisors in gaining employment. Moreover, a significantly higher proportion of

female PhD graduates were in less secure employment and more likely to work parttime; and fewer were in supervisory or managerial positions compared to male
graduates. This gender difference was more pronounced for graduates with children.
Moreover, Giles et al.'s (2009) survey of 1206 Australian men and women who had
completed SET PhDs and Masters by research found that women tended to earn less
than men. It found that gender differences for both PhD candidates and early career
researchers might help to explain the lower number of women progressing up the
academic ladder. This quantitative study confirms that the gendering of academic
careers has its origins in women's experience as PhD candidates.

While the research highlights specific barriers to women undertaking postgraduate research, there has been little investigation of the complex interconnection of personal and professional issues within women's lives. Complex life decisions may be better understood through more qualitative research methodologies that can capture the nuances of lived experiences. "Research on the multiplicities and complexities of genders provides data that is close to the realities of lived experience" (Lorber, 2000, p.3). In this thesis narrative inquiry will be used to investigate women's stories of their PhD experiences to elucidate these complex, nuanced interconnections.

PhD Completions in Australia

Research has consistently supported the argument that women are not proceeding to postgraduate research degrees in proportion to their numbers in undergraduate courses (Asmar, 1999; Harman, 1999; Jones & Castle, 1989; White, Birch & Nix, 2000). In Australia over the past decade this gap has started to close, although significant discrepancies still exist. Between 1995 and 1999 approximately 37 percent of all enrolments at doctoral level, and 44 percent of Masters level enrolments, were women.

Overall, women comprised about 40 percent of all postgraduate research enrolments (Harman, 1999). The most recent Australian statistics (DEEWR, 2009) show that 55.1 percent of all enrolled students are women. The figure for doctoral graduates for the 1999 – 2001 period showed that 42 per cent were women (Dever et al., 2008). These figures are averaged across all disciplines and all Australian universities.

A breakdown of the 2007 completions can be seen in Tables One to Three below where it should be noted that the trend of significant gender differences across disciplines remains. The Australian government data for 2007, published in 2009, is the most recent data available due to a time lag in reporting of completions. Women continue to be concentrated in Health, Education and Humanities fields in research doctoral completions, and are still underrepresented in SET fields. Women therefore continue to gravitate to the fields of Nursing, Health Sciences and Education even at postgraduate research level. These disciplines are generally regarded as female *ghettos*, characterised by low levels of the type of research, particularly in Nursing, that will attract external funding. It should be noted in these Tables, that while women now comprise over half of all doctoral completions in Health, Education, Society and Culture, and Creative Arts, their representation at doctoral level is significantly lower that their undergraduate representation. Further analysis of SET disciplines shows the lowest rates of completion for women at doctoral level are in Engineering and Information Technology. A significant difference between the number of female undergraduates in Business areas and the doctoral graduations in the same field is also evident.

Table One: Research Doctorate Completions by discipline and gender (2007)

	SET*	Health	Education	Management & Commerce	Society & Culture	Creative Arts
Females	1041	450	252	178	733	123
Males	1703	283	134	248	497	79
Total	2744	733	386	426	1230	202
% female	37.94	61.39	65.29	41.78	59.59	60.89

^{*}SET – sciences (natural and physical); engineering, technology, architecture and building, agriculture and environment. Source: DEEWR (2009) 2007 Full year summary – Student Statistics. http://www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Pages/Students.aspx Accessed on 15 July 2009.

Table Two: Research Doctorate Completions — SET disciplines by gender (2007)

	Natural & Physical Sciences	IT	Engineering & related technologies	Architecture & Building	Agriculture, Environment & Related Studies
Females	651	70	157	27	136
Males	718	158	615	36	176
Total	1369	228	772	63	312
% female	47.55	30.7	20.34	42.86	43.59

Source: DEEWR (2009) 2007 Full year summary – Student Statistics.

http://www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Pages/Students.aspx Accessed on 15 July 2009.

Table Three: Undergraduate and Honours graduations by gender and discipline (2007)

	SET	Health	Education	Management & Commerce	Society & Culture	Creative Arts
Females	13,241	14,918	8,719	22,177	19,063	7,917
Males	21,901	4,367	2,439	19,011	9,372	4,367
Total	35,142	19,285	11,158	41,188	28,435	12,284
% female	37.68	77.36	78.14	53.84	67.04	64.45

Source: DEEWR (2009) 2007 Full year summary – Student Statistics.

http://www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Pages/Students.aspx Accessed on 15 July 2009.

Table Four: Staff levels by gender and level (2008)

	Professoriate and senior	Lecturer C	Lecturer B	Lecturer A	Non- Academic
	management				
Female	2,579	3,970	7,248	4,627	35,425
Male	7,959	6,192	7,193	3,793	19,392
Total	10,538	10,162	14,441	8,420	54,817
% Female	24.47	39.07	50.19	54.95	64.62

Source: DEEWR (2009) 2007 Full year summary – Student Statistics.

http://www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Pages/Students.aspx

Accessed on 15 July 2009.

The staffing figures for 2008 show a continued trend for women to be overrepresented at Lecturer A and comprise half of all academics at Lecturer B, but the numbers drop sharply as they go up the academic ladder. The concentration of women at Lecturer A and B means that they continue to be the workhorses in academia who have disproportionately high teaching and administrative loads and little time to build the national and international research profile that will enable them to be promoted to senior lecturer level (Bagilhole & White, 2008; Neale & White, 2004).

A 2001 Senate Committee report, as well as other research, noted that these figures vary considerably between universities, across academic disciplines and also between Masters and PhD courses (Dever et al., 2008; Senate Committee, September 2001; White et al., 2000). A project carried out at a newer Australian university in 2000 demonstrated these trends, showing that enrolments by faculty varied significantly, with only the Arts and Human Development Faculties approaching equal male and female participation (White et al., 2000). Participation of women was highest at the Masters level and decreased in all Faculties, except Arts, at doctoral level. In most Faculties female participation in doctoral degrees was around one-third compared with male

participation, with the Faculty of Engineering and Science as low as twelve percent (White et al., 2000). However the participation rates of women in postgraduate research, at this and other Australian universities, has improved considerably a decade later.

Earlier research that examined why women do not undertake postgraduate research degrees, or why they fail to complete these degrees, often focused on a particular issue or aspect of the postgraduate research experience. McKay (1996) investigated supervision and departmental issues, while Conrad and Phillips (1995) examined the issues of isolation for women postgraduates. More recent research by Probert (2005), Dever et al. (2006) and Dever et al. (2008) has expanded on this issue by exploring the overall experiences of women in both undertaking research degrees and building academic careers. One of the issues with such research, as with that of Asmar (1999), is that it is focused primarily on PhD graduates who become academics. Thus it often does not examine the experiences of women who left academia following their degrees or those who failed to complete. A number of other Australian studies have identified barriers that women experience, leading to their under-representation at postgraduate levels (Hood & Sharples, 1995; Monash University, 2003; Moses, 1989; White, 1996; White, 1997; White et al., 2000). An important theme running through these studies is that most of the barriers identified were external to the student. Consequently the issues cannot be addressed on a purely individual basis, but need to be tackled on a systemic level as discussed above (White et al., 2000).

Dever et al.'s (2008) report highlighted some key concerns relating to gender differences in both PhD experience and post PhD employment. This survey examined the 1999-2001 PhD graduate cohort from the Group of Eight (Go8) universities within Australia. The Go8 universities are the prestigious, research-intensive universities. The

report notes that female graduates were significantly more likely to report that they pursued their PhD for intrinsic motivations such as intellectual and academic development, personal satisfaction or because of interest in their thesis topic. Female graduate were more likely to report completing their PhD as a solo project and were significantly less likely to be part of a research group (Dever et al., 2008). Research shows that team projects are much more common in SET disciplines, with a small group of students working on different aspects of a major project. Research in the humanities and social sciences generally entails solo projects. The representation of women is high in the humanities and social sciences, particularly at the postgraduate degree level.

Being involved in a research group during PhD candidature can impact on a student's development of important collaboration and networking skills, which subsequently are likely to impact on future career paths (Dever et al., 2008).

The use of narrative inquiry in this field as explored in detail in Chapter Three breaks new ground in terms both of application and analysis. Feminist research theory emphasises the importance of new methods to write women and their diverse experiences into academic disciplines in order to change traditional practices and pedagogies (DeVault, 1990). Using narrative inquiry fills a gap that has been missing in previous studies of women in higher education. It allows a much more complex set of relations to be investigated, overcoming the inadequacies of single issue/single solution models, and leading to richer data being collected.

The primary methods used for gathering information in the above studies were focus groups and surveys. A review of these studies corroborates the need for a more in-depth method of data gathering and analysis. A survey that poses "why" questions is acknowledged to elicit normative and perhaps self-justifying responses – what some researchers would refer to as "thin stories" (Leonard, Becker & Coate, 2005). More in-

depth probing allows people to present their stories in nuanced, complex detail. It became apparent that combinations of factors affecting one individual are not necessarily applicable to another. People's resilience and the way they cope with their experiences vary considerably (Bonanno, 2004). An experience which one person perceives and subsequently responds to as stressful may have little if any impact on another. Research students do not live in isolation during their candidature – they often work, have financial concerns and family commitments, as well as experience illness and other forms of trauma and loss. The way in which individuals cope in these situations and manage to successfully complete their research degree will be investigated here. By using in-depth interviews to gather women's stories of their research degree candidature, we can gain a clearer understanding of their experiences. This investigation of their motivation to undertake a research degree, how they negotiated the central relationship with their supervisor/s, and their resilience in coping with both the PhD experience and their lives while undertaking the degree, will provide a better understanding of their experiences. This knowledge may help future students, supervisors and universities to more clearly understand the complex set of factors that impact on the experience of women as PhD candidates.

A search of earlier literature found little substantial investigation of women in higher education using narrative inquiry. There were a few subject specific articles, such as research by Stage and Maple (1996) on graduate women in the mathematics pipeline. Their research examined narratives of women in the mathematics/science pipeline who left to pursue a doctorate in education. The narratives portrayed the differences between the women's views of themselves and the nature of their chosen discipline (Stage & Maple, 1996). Britton and Baxter (1999) interviewed 21 women and men on their experiences of becoming a mature student. Their research involved construction of four narratives from the 21 biographical interviews to explore some of the processes of

personal and social transformation involved in becoming a mature student. Four conceptions of self were identified. Britton and Baxter (1999) draw attention to the connections between these gendered concepts of self and the meanings of education, which they suggest are more complex than the simple gender dichotomies expressed in the literature.

More recently however, we have seen narrative methodologies becoming more prevalent in research on the undergraduate and postgraduate experience as well as the experiences of supervisors and academic staff across disciplines. (Hatchell & Aveling, 2008; McCormack, 2009; Povey, Angier & Clarke, 2006; Priola, 2007). Hatchell and Aveling (2008) used 'storying' to show how women in the sciences, as a result of their experiences, considered they had little choice but to leave their chosen field. They referred to these as "gendered disappearing acts" (Hatchell & Aveling, 2008). Priola's (2007) study suggested that, although women were numerically dominant in the particular business school studied, this dominance could lead to tensions between the women's identities as individuals and as managers.

This literature review has established that women in Australian universities do not enrol in postgraduate research degrees in proportion to their representation in undergraduate degrees and the impact that this in turn has on the number of women in the senior academic ranks. Previous studies have been mainly quantitative in nature and the following chapter outlines the qualitative narrative inquiry methodology used to gather and investigate eight women's stories of their PhD experiences in detail.

Chapter Three — Methodology

Ours is a field characterized by extreme diversity and complexity. There is no single way to do narrative research, just as there is no single definition of narrative.

(Riessman, 2008b, p.155).

Narrative inquiry has developed as a research methodology over the last thirty years. It provides a way of gathering, investigating and analysing stories of experiences and events. Webster and Mertova (2007) assert that storytelling is the most common form of human communication and that it is used to communicate the elements of experience that have affected an individual or a larger group. Andrews, Squire and Tamboukou (2008) also argue that the narrative form is the universal way in which people make sense of their experiences. People communicate and reinterpret their life experiences through stories (Riessman, 2002a; Riessman, 2002b). Hatchell and Aveling (2008) agree that stories can be used to reveal the ways in which people make sense of their experience through narrative while at the same time elucidating common threads of understanding. They offer "a way to gain insights into this complex relation between individuals' particular experiences, meanings and action strategies and their social and societal contexts" (Stroobants, 2005, p.49 as cited in Hatchell & Aveling, 2008).

Narrative inquiry takes as its object of investigation the story itself and can be used in many ways to understand people's first-hand accounts of their experiences (Riessman, 2002a). Stories have the ability to resonate with us in a way that other forms of information cannot. We relate to people's stories, we look for similarities and difference, and resonances with our own stories. Finding the ways our stories connect with others may enable us to navigate a way forward when stuck, or even just understand that on a highly individual and often isolated journey such as undertaking a

PhD, others have walked this path (Salmon, 1992). Using narrative inquiry to gather and examine stories of women's PhD experiences is not only important from a feminist research methodology perspective as outlined in the previous chapter, but is also a useful method for understanding the women's lived experiences and exploring the potential for providing a "road-map" for those who follow us on their own PhD journeys. It is anticipated that this research – in being able to use these stories to highlight the range of issues faced by women and how they have been overcome – will provide a range of insights and strategies to enable other women to successfully complete their PhDs.

The field of narrative research is extremely diverse both methodologically and theoretically (Riessman, 2008b). There are a wide range of definitions of what is meant by "narrative" itself, as well as of methods and theoretical underpinnings (Webster et al., 2007). Riessman (2008b) argues however that this diversity is a major strength in narrative studies. She describes "narrative analysis as a 'family' of analytic approaches to texts ... As in all families, there is conflict and disagreement among those holding different perspectives." (p. 151)

Studies using narrative inquiry as a methodology are found in a wide range of disciplines. These include education (Clandinin & Connelly, 1990 & 2000), medicine and illness (Frank, 1995), sociology (Riessman, 1990 & 1994), social action (Bell, 1988) and development (Daiute & Lightfoot, 2004). Central in narrative inquiry is the work done by Clandinin and Connelly (1990, 2000) in the field of education research. They claim that much of what is known in education comes from people relating their stories of educational experiences.

Narrative inquiry is therefore concerned with critical analyses of the stories we hear, read and tell on a personal level, as well as the larger societal narratives embedded in our social interactions (Webster et al., 2007). Narrative approaches have often been used in educational settings to help students and teachers to understand their own teaching and/or learning processes and experiences (Clandinin & Connelly, 1990; Lyons & Kubler LaBoskey, 2002).

The main justification offered for the use of narrative inquiry in educational research is that humans are storytelling organisms who, individually and socially, lead storied lives (Clandinin & Connelly, 1990; Stivers, 1993). Riessman (2002a) argues that the purpose of narrative analysis is to see how participants impose order on the flow of experience as a way of making sense of actions and events in their lives. Narrative inquiry as a methodology can therefore be considered as integral to the production of "unalienated knowledge" and allowing the depth of women's lived experiences to be better understood, and is consistent with the aims and values of standpoint as discussed in Chapter One. Giving voice to the women means that as a researcher I value the experiences related by my participants – their beliefs, views, perspectives, and opinions – and am taking them seriously (Hatchell & Aveling, 2008).

This research is being undertaken from a feminist research perspective. Feminism demands that those who have been objectified in the past are now able to define themselves and to tell their own stories (Stivers, 1993). One way of challenging concepts that advantage men is to "adopt forms of communication which express women's voices (through) storytelling" (Marshall, 1995 as cited in Eveline, 2000, p.1). The narrative approach therefore, with its deprivileging of the "expert" researcher, is consistent with these feminist research goals (Conti, Hewson & Ibsen, 2001). It allows

the individual to construct the content, focus and scope of their experience, as the researcher does not impose a structure on their story.

The types of data collected in narrative research are also diverse in nature, although most commonly these are first person oral accounts of experience (Andrews, et al, 2008). Data investigated includes, but is not limited to, archival documents including letters and diaries; life stories collected in community settings; brief, bounded segments of interview; a brief story in response to a single question; legal testimony before governmental and legal commissions; and in-depth conversational interviews (Riessman, 2008b).

Mishler (1996) supports narrative inquiry as a way of doing case centred research.

Cases may involve individuals, groups or communities. A frequent criticism of narrative inquiry is that it unduly stresses the importance of the individual over the social context (Clandinin & Connelly, 1990, 2000). Liz Stanley asserts however that social structures are as recoverable from single social beings as they are from groups (Stivers, 1993).

The methods of analysis used by narrative researchers also vary markedly. Riessman (2008a) proposes a typology of the four main types of analysis: thematic, structural, dialogic and visual. However she notes that the boundaries between these four groups can sometimes be blurred. Thematic narrative analyses differ, for example, in the extent to which they attend to the structural features and language of the narratives as well as to the content (Riessman, 2008a). Thematic narrative analysis, according to Riessman (2008a), is the most widely used analytic strategy. Its focus is on the content, "what" is said. Alternatively, structural analysis attends to "how" a story is told – the sequencing, specific words and metaphors. Riessman (2008a) argues that the thematic and structural

approaches are the two foundations of narrative analysis, and that the dialogic and visual methodologies build on these. Dialogic analysis is a broader interpretive approach to oral narrative that investigates how talk between speakers is produced and performed interactively as narrative (Riessman, 2008a). Visual analysis focuses on how people communicate using images, either through telling a story with images or telling a story about images that themselves tell a story (Riessman, 2008a).

This thesis utilised thematic narrative analysis to interrogate the stories of the women's experiences of their doctoral research degrees. The focus was on what content the narratives communicated. As Riessman (2008a) is careful to point out, thematic narrative analysis only appears straightforward and intuitive. The analysis of the narratives is methodical, focused and detailed, while still retaining a sense of the "whole" story. There is in this project, however, some focus on the "telling" of the story – an attendance to sequencing, specific language, pauses and emotion (particularly laughter) – which strengthens the analysis of each case. A thematic narrative analysis approach is suited to this kind of data; "it can generate case studies of individuals and groups, and typologies" (Riessman, 2008a, p. 74). Combining approaches in a way that makes sense of what the researcher wants to elicit from the data means that I have in this project carefully examined not only the themes of the women's stories, but also the way in which the stories were told. The pauses, silences, points of rupture, affect, language and metaphors, among other aspects, enabled the whole story to be explored. However the focus is on content and themes within each woman's narrative rather than a detailed discourse analysis. Narrative research provides rich, complex and nuanced data that is not necessarily easy to analyse. When thinking about the types of analysis that are most useful, we need to think about what we want to extract from the information that has been collected and how it will be utilised.

Identifying common elements shared by research participants and their reported events and actions, and using this to theorize across cases, is an established tradition in qualitative research (Riessman, 2008a). Other qualitative approaches, particularly grounded theory, are similar in a number of ways. Thematic narrative analysis is most often confused with grounded theory. However there are important methodological differences (Riessman, 2008a). Briefly, in grounded theory prior concepts have no place in the analytic process, segments of data are taken apart and named, little attention is given to sequencing, and the main "objective is to generalize inductively a set of stable concepts that can be used to theorize across cases" (Riessman, 2008a, p.74). Conversely, in thematic narrative analysis, prior theory and research guides the inquiry process. In this project, for example, the literature on women undertaking postgraduate research degrees has been examined for issues that influence a woman's experience. These include family support, supervisory relationships and career goals, among others. As one of my aims was to investigate decisions to undertake a degree, motivation was identified as a theme before analysis was undertaken. A key issue raised in the literature is the supervisory relationship and its importance; this too was identified as a theme before analysis began. However, in the process of analysing the data to understand what factors assisted the women to continue and successfully complete their degree, a further overarching theme of resilience was identified.

Most importantly, thematic narrative analysis preserves the sequencing, keeping the story intact while interpreting it. Riessman (2008a) notes that narrative analysis seeks to preserve the "wealth of detail contained in long sequences" (p. 74). In this research, thematic narrative analysis therefore helped me to preserve the sense of the "whole story" of the women, one of the reasons for undertaking the project. Two final and important points of difference with grounded theory are firstly, thematic analysis

attends to context by historicising a narrative account in time and place; and secondly, narrative analysis is case centred and does not seek to theorise across cases. One of the proposed outcomes of this project is to provide information that will be useful to women who are considering enrolling in PhDs in the future, as well as those who are currently enrolled as PhD students. This may require comparing, for example, the different strategies used by women to negotiate supervision and other forms of support. Riessman argues that thematic narrative analysis is fundamentally case centred, but there is scope to develop a typology of strategies used (Riessman, 2007). While the women's stories are examples set in specific contexts of space and time, we may get a sense that they are not idiosyncratic; rather, they may illustrate more general and widespread concerns (Hatchell & Aveling, 2008).

Riessman (2008a, 2008b) notes that research varies in the extent to which it attends to matters of context, audience, reflexivity and the researcher's role in constructing the narratives that are subsequently analysed. Attention is paid in the subsequent analyses to situating the narratives in the relevant context of time and place, both for the research (early 21st century, Western academic structures in Australia) and for the women in terms of their cultural background, age and the stage of the research degree at the time of interview. I also want to pay attention here to the idea of audience – to whom is the participant talking when she is telling her story? In some interviews, the women specifically refer to information that they want other women to know. The audience in these instances therefore is beyond me, as the researcher, to women research students more generally.

By asking these women to tell their stories we can get a better understanding of the nuances and complexities involved in their motivation to undertake the degree, the women's agency in the negotiation of supervision and support, and their persistence/resilience to complete the degree. In this research I define agency as the ability to act on one's own behalf. I have therefore looked for sequences within each narrative that refer to instances where the participant describes an experience in negotiating with their supervisor or another person to obtain support.

Ethics Approval

This research project received ethics clearance from the University's Human Research Ethics Committee before any participants were approached to be interviewed. An application was therefore submitted to the Committee and approval granted. The Ethics Approval process required that the researcher explain the methodology, and provide the plain language statement and consent form, and the questions to be asked to be outlined, before approval was granted.

Purposeful sampling

Qualitative research involves purposeful sampling to choose information rich cases for in-depth study to illuminate the questions being investigated (Patton, 1990). One method of purposeful sampling is snowball or chain sampling. This approach for locating information rich key informants involves asking well-situated people for recommendations about potential participants (Patton, 1990). By asking a number of people who else to talk to, the snowball gets bigger and bigger as more names of information rich informants are accumulated. This project involves case studies of eight women undertaking doctoral degrees. These women were recruited by asking well-situated people to identify information rich key participants. Diversity was sought in terms of age, cultural and linguistic background and discipline. However it must be acknowledged from the outset that as this is a case-focused project, it was impossible to

cover every possible permutation of cultural and linguistic background, sexuality, race, etc. within the scope of this study. Key informants in my research project included the Director of Graduate Studies at my university, Associate Deans (Research) and other students both inside and outside my institution. My role within the Office for Postgraduate Research placed me in an ideal position to identify both participants and other people who were able to suggest possible participants. One person distributed the plain language statement to a student peer support group in which she was involved. Through this group, one of the participants contacted me to volunteer to be interviewed. Another student external to my university was recruited through a casual discussion with a PhD candidate at my university regarding the need for another woman who was undertaking doctoral research in the sciences. Science and engineering are two disciplines where women are underrepresented at all levels (Ozkanli & White, 2008; White, 2004). My problem was not so much finding women to participate but finding too many of them. Almost every woman I spoke to about the project (and some men too) volunteered to be interviewed. They wanted to tell me their stories and wanted to be heard. The length of the interviews and the "dense" information contained within each transcript – and the focus in narrative inquiry on individuals rather than large segments of the population – led to a decision during data collection to limit this research project to eight cases (Riessman, 2007).

Conversational interviews

The primary narrative research method is the conversational interview (Mishler, 1986). Interviews are conducted between the researcher and participant, transcripts are prepared (from the tapes and with the help of field notes), and the transcripts are made available for further discussion developing an ongoing narrative record (Clandinin & Connelly, 1990; Conti, et al., 2001; Stivers, 1993). Mishler (1986) reconceptualises

research interviews as two active participants who collaboratively construct narrative and meaning. The goal of narrative interviewing is to generate a detailed account of events or experiences (Riessman, 2008a). Conversational interviews allow the woman's story to unfold in her own words, with little prompting from the researcher and most importantly with her own emphases, pauses and inflections as well as content. *How* the participant conveys information can be as important as what is said (Riessman, 2008a).

The interviews were arranged via email contact, and follow-up phone calls, so that I could forward the participants the consent form (see Appendix A) and plain language statement (see Appendix B). Five of the interviews took place at the participants' homes, one in my office, one in the participant's office and one at my home. All interviews were tape-recorded with the participants' permission and I also took notes. I began each interview with a very short statement explaining that I wanted their story of their experiences when undertaking their PhDs. At this time I also explained that the interview would be unstructured, as outlined in the plain language statement. The interviews varied in length from one hour to two and a half hours. At appropriate junctures I would ask questions to elicit elaboration on key points. I made notes during the interviews however these were usually prompts to remind me of a point that they made to which I wanted to return. I tried not to interrupt the flow of the story for a point made in passing, but would follow this up at a later point in the interview.

The eight women were asked one initial question – "Could you please tell me your story of your experience of undertaking a PhD?" The aim in asking one main question designed to elicit narratives of their journey is to allow the women to express their stories – the issues and events that they consider as most important – in their own words and with their own emphases and structure. While I was disciplined in asking minimal

questions – rarely adding my own comments – the non-verbal cues and the interviewee knowing that I was also undertaking a PhD established a particular context for the interview. For example, as elaborated below, there was a lot of laughter in a number of interviews. One interpretation is that much of this shared laughter comes from a place of mutual understanding and experience of issues and events between the interviewer and participant.

There are a number of points where I repeated what the participant was saying or rephrased it, in an attempt to elicit further information. Occasionally I asked a question to follow up an issue further or probe more deeply. I tried to do this unobtrusively – to elicit further information but not interrupt the flow of the story.

At the end of each interview I informed the women that I would return the verbatim transcript to them. I asked if they could read it and note any changes that they wanted to make, in particular to note any segments that they wanted removed. I also asked them to call or email me if they thought of further points in their stories that they would like to include.

Following Riessman's (2008a) criticism that the researcher's role in constructing the narratives which are subsequently analysed is often obscure, I detail below, and in Appendices C, D and E, the specific steps taken in the interview process, transcription and subsequent "cleaning up" of the transcripts. As noted earlier in this chapter, this is not a detailed discourse analysis and therefore some cleaning up of the text was undertaken. This attention to detail will help the reader to better understand both the data that is being analysed and my role in the construction of the narratives and following analyses.

Data management and analysis

Transcription process

The first transcription of the interview was verbatim, including all utterances by both the participant and myself as researcher. Most of these were non-lexical utterances such as "uh huh," "mmmm," "yeah," etc. to encourage the participant to continue with her story and indicate that the listener was following what she was saying (Glesne & Peshkin, 1992). Places where the interviewee sighed, laughed or paused were also noted. Narrative analysis involves immersion in the transcripts and I considered that this would be aided by undertaking the transcription myself; thus I undertook all transcription of the interviews. Although a lengthy process, this enabled me from the beginning to get a sense of the women's stories and how they were told. This method of verbatim transcription resulted in lengthy transcripts. One original transcript for example was 106 pages with single line spacing. The initial transcript was sent back to each participant for verification so that they could correct any spelling mistakes and names, add any information that they may have thought about following the interview, or note any sections that they wanted to be deleted. None of the eight participants asked for anything to be removed, or amended the content of the transcript. All participants indicated that the transcript was a true account of their story of their experiences. I made a point of also letting each of the women know that names (of themselves and their supervisors) would be removed in the final version of the transcript and no identifying information would be left in. Possible identifying information that was removed included the participants' and supervisors' names, the university with which they were affiliated, their specific research area, specific cultural background details and some specific family information.

A revised transcript was then developed from the first version which had been reviewed by the participants. In the second version, I removed many of my non-verbal or simple affirmative utterances such as "yeah", "uh huh", "mmm" etc. as these did not add anything to the story being told. Where I made a comment or statement or asked a question, this remained in the revised transcript, as it is part of the co-construction of the interview. Possible identifying information was also removed as promised. I asked the women initially to provide a pseudonym, to give them the choice of what they were called in the final thesis. Two women provided their own pseudonyms and I created pseudonyms for the other six participants. I ensured that the pseudonyms did not start with the same letter of the alphabet or have any resemblance to their original names. Where a supervisor was referred to by name, I removed the name and inserted [my supervisor] in its place. The text was left in blocks relating to the event or topic about which they were talking, unless there was a significant pause. The sequencing was preserved.

Thematic narrative analysis

When the second version of each transcript was completed, I read it closely. Some sections of the narratives relating to the three themes of motivation, supervisory relationship and resilience were apparent during the interview and/or during the transcription process. Inductive analysis was used which incorporated immersion in the details and specifics of the data to discover the important categories, dimensions and interrelationships (Patton, 1990). This first stage of analysis resulted in blocks of text from each case that related to the three themes.

The second stage of analysis involved deeper immersion in the excerpts or blocks of text relating to each theme (motivation, supervisory relationship and resilience).

Excerpts were shortened where necessary to exclude unnecessary discussion, repetition, digressions and examples shared by the participants. However the sequencing of events by the participants was preserved. This second stage also involved noting where the women returned to a theme within their story. The page numbers for each excerpt were included to show where within each story an excerpt was located and as further verification when a participant returned in her narrative to pick up an earlier point on a theme.

The third stage of analysis involved looking for commonalities and differences between the cases in relation to each theme. As Hatchell and Aveling (2008, p.14 quoting Denzin 1997, p. 266) note in this way the "text allows the reader to re-experience the events in question, coming to see the truth of the narratives that contain them." A table was constructed for each theme and each case study was listed and classified according to the way each women represented the theme in their story.

Participants

This section introduces the participants and provides an overview of their background and story. At the time they were interviewed all except one of the women – who had withdrawn – were reasonably advanced in their candidature or had completed their PhD.

Interview One — Eve

At the time that I interviewed Eve she had recently submitted her PhD thesis for examination. She was in her late forties, of Anglo-Australian background and undertook her research in Humanities. The Director of Graduate Studies at my university (a newer, dual sector metropolitan university) suggested Eve as a participant in this research. I chose Eve for the pilot interview because I didn't know her well and at the time thought

that the lack of familiarity with me would help her to be open and honest. At this stage of my research I had little experience and had not conducted research interviews recently, and I thought it would be easier to interview someone that I didn't know very well. I had administered her scholarship although she had already commenced her degree when I had started in this role. I contacted Eve by email and asked her if she would be interested in being interviewed. Once she had agreed to be interviewed the time and place for the interview were organised by telephone. During the phone call I provided a brief description of the interview and subsequently sent her the plain language statement and consent form. The interview was conducted at her home in an outer north-eastern suburb of Melbourne. Eve's interview, as the pilot in this series, was more structured than those that followed. I had some questions to use as prompts and I also had a list of the important themes that were highlighted in the literature. I began, as with all the interviews, by asking her to tell me her story of her PhD experience in her own words. Eve's story is one of a woman who, although she worked in university in an administrative capacity, had not completed any formal tertiary qualifications until she was in her late thirties. Eve told her story in a temporally linear way, meaning that she started her story where she thought it began in terms of her education and continued in a mainly chronological order. As with the other participants, once the main story is related, the participant does then mention some events out of chronological order when emphasising a particular point. Initially she enrolled at university in a BA in another state in 1979 but deferred her studies when her marriage broke up. She undertook a Graduate Diploma at a Group of Eight university and fast-tracked the course to finish a semester early. This was a fee-paying course and money was an issue. She was unsuccessful in gaining a scholarship at this institution to continue to her Masters but on applying to another university she was successful in gaining a scholarship to undertake her Masters by research. During the course of her Masters by research she upgraded to a PhD. The main issue that Eve raised was about her partner who was diagnosed with leukaemia just after the first six months of her candidature. Eve talked of taking her work to the hospital and staying at her partner's bedside so she could continue to do her research. It became even more difficult when her partner moved home from the hospital and Eve became the primary carer while trying to maintain some focus on her research. The only time she escaped these care responsibilities was for supervision or for a brief visit to a masseur. Eve noted that continuing with her research at this time was the only way that she could preserve her identity. In the middle of her data collection, her partner's health started to improve. Eve highlighted her partner as a strong role model. Her partner continued with an Honours degree while sick. In the final year of her thesis she referred to an increase in her confidence (rather than the crisis of confidence which she informed me she witnessed in a number of other women doing PhDs). She linked this to her prior work experience in preparing manuscripts for publication.

Following the pilot interview, I discussed with my supervisors the potential issues around using the interview protocol. I noted that Eve had told her story of her PhD experience, starting where it was logical for her at the beginnings of her tertiary education. She discussed, without prompting, her motivation for undertaking the degree, her supervisory relationships and within her story she mentioned what got her through the degree. The aim in using narrative inquiry and unstructured interviews was to enable the women to tell their stories of their own experiences in their own words and with their own structure and emphases. It was thought that imposing an interview protocol that insisted on certain topics being covered, might impact on the reliability of the data gathered. If one or more of the participants didn't mention role models, for example, or financial support, those issues could be said to be unimportant to their related experience. All subsequent interviews therefore were done without this interview

protocol and follow-up questions used by the interviewer were based on points raised by the participant within her story.

Interview Two — Elena

Elena was the only person that I interviewed who had chosen to withdraw from her PhD before completion. Her discipline area is Psychology and she was enrolled at a newer dual sector metropolitan university. She commenced her PhD at the age of 21 and at the time of interview was in her late twenties. The interview was conducted at Elena's home. She is of Southern European background but born in Australia. It was approximately three years from when she had withdrawn from the degree after a period of leave of absence. I chose to interview Elena because she had withdrawn. Although she and I were and continue to be friends, I had been overseas at the time she commenced her PhD and we previously had not discussed her reasons for withdrawing. Given the potential sensitive nature of the issues surrounding her withdrawal, being a friend could be considered to be an advantage as there was already a strong sense of trust, particularly around the issue of confidentiality. I thought that this would be useful in establishing rapport. Elena told her story in a temporally linear way but started much earlier than her PhD with events around her family (particularly her mother) and their push for her to succeed academically. She described the emphasis on education from primary school onwards. Although her mother supported her in going to university to become a teacher, the pressure was mainly on her finishing her degree and getting married. She did very well in her undergraduate and Honours degree, averaging first class Honours throughout, but she emphasised that she didn't feel as though this took much effort. She successfully applied for a scholarship to do her PhD, thinking that she would pursue an academic career. Elena commented on the amount of pressure she felt from the department because she was the first student to ever receive this prestigious

scholarship to do a PhD. Elena's narrative centred on the influence of her family and pressure from others to do well, as well as her relationships with her initial primary supervisor and her second supervisor. By the time she began negotiation with a second supervisor Elena seemed to be lost, unfocused and took a number of periods of leave. Elena's story is critical in terms of a woman's sense of agency in the negotiation of supervision and other forms of support and has therefore formed a separate chapter of the thesis. Elena's story is discussed in Chapter Seven, following the first three analysis chapters.

Interview Three — Andrea

Andrea is of Western European background and was in her late twenties when I interviewed her. A student at my university had distributed the plain language statement for my research project to a student support group that she attended and Andrea emailed me regarding her interest in the project. The interview was conducted at her home and Andrea also told her story in a temporally linear way. She was in the final year of her PhD at another metropolitan university in Melbourne. She did her undergraduate degree in Australia and returned to her home country to do her Masters degree. Andrea's PhD was supported by an industry-funded scholarship so it was a set project that had already been conceptualised by her supervisors in the social sciences. She had sought out a funded scholarship opportunity as her primary motivation for undertaking a PhD was for the learning experience. However the funded project came with pre-arranged supervisors and Andrea's story focused in part on her need for additional support outside the initial supervisory arrangement. Andrea's narrative shows a strong sense of agency in her ability to negotiate the additional support she needed. She located an additional (male) supervisor when she was not getting the support she needed from her two female supervisors who were chief investigators on this grant. She also joined two

peer-support networks for other social science students within Victoria and undertook an internship on a journal. Andrea briefly discussed her family background as both her mother and father had undertaken PhDs. She was married and had her first child while doing her PhD. Part of her interview centred on the utilisation of childcare and family support to enable her to make time for her research. Interestingly Andrea commented that she had planned to have her second child by the time that I was interviewing her late in her PhD. When I caught up with her at a narrative workshop a few years later, she had recently completed her PhD and had her second child while it was being examined.

Interview Four — Jane

Jane is of Anglo-Australian background and was in her late twenties when I interviewed her. The interview was conducted in my office within the university. The Director of Graduate Studies suggested Jane as a participant when I discussed the need for a woman in a science-based discipline. She was enrolled in a physical sciences PhD at a newer dual sector metropolitan university and her two older brothers both have successfully completed similar PhDs. She did her undergraduate degree at the same university as her doctoral study. Jane gained a prestigious University scholarship to undertake her research degree (the first time this scholarship had been offered). Jane told her story in a temporally linear format, starting with her high school careers advisor's negative comments on the likelihood of her becoming a doctor. She also spoke of her undergraduate degree and the support she received from academic staff, in particular the woman who was to become her PhD supervisor. She reported feeling that the PhD was taking too long and this was mainly due to her supervisor wanting her to do further experimental work. There were some important points to be made here with agency and negotiation of supervision. Jane specifically pointed out learning from other students'

experiences with the same supervisor, particularly over deciding which "battles" to pick and which to concede. There was also a strong sense of struggle with the power differential in the supervisory relationship. Jane's narrative centred on the need to move forward and finalise her thesis, and there were long segments where she discussed in detail the difficulties she had with her supervisor around writing and publication of aspects of the thesis. She also reported difficulties with other staff, mainly in technical support, due to her supervisor not being liked. This caused delays when her supervisor was absent from the university and Jane needed technical assistance with equipment repairs. During her PhD, Jane got married and at the time I interviewed her she was approximately six months pregnant. She also reported an illness within her family that increased pressure on the time available for her research. She juggled care responsibilities during the day with studying at night. Towards the end of her interview, Jane noted that she still wanted to finish her degree but she was also focused on her family and considering a year off from the PhD in order to gain a Diploma in Secondary Teaching from another university. She believed this would broaden her options for the future.

Interview Five — Karen

Karen is of Anglo-Australian background and was in her mid-thirties at time of interview. The interview was conducted in her home. Karen was in the final six months of completing her PhD in the sciences at a multi-campus metropolitan university. A PhD candidate at my university who was her neighbour suggested Karen as a potential participant in this research project. Karen received the plain language statement and contact details and she emailed me shortly after to indicate her interest in participating in the project. Karen told her story in a temporally linear way, starting with her undergraduate studies at the same institution where she was now enrolled in her PhD. In

Australia, a standard Bachelor degree in most disciplines is three years. Students wanting to follow a research path will undertake a fourth year (Honours) that normally comprises coursework and a minor research thesis. A High Distinction or Distinction grade is required in Honours for proceeding to a research higher degree. Following her Honours year, Karen worked for a mining company but eventually decided to pursue a different career. She completed a Diploma of Secondary Education and become a secondary school science teacher. After two years of teaching she again considered her options and applied for a PhD scholarship. Her Honours supervisor was very supportive of her application and she was successful in gaining a scholarship. Her supervisor, with whom she had a close relationship detailed in her narrative, passed away during PhD candidature and Karen outlined the difficulties she experienced in dealing with her grief. Karen found an alternative principal supervisor in one of her co-supervisors. Karen discussed several issues she had with her new supervisor, mainly pertaining to having to start building a relationship with her new supervisor who had a different style of supervision. Karen commenced her PhD thinking that she would like an academic career but when interviewed was looking at working outside a university. She discussed issues relating to the theme of agency and negotiation of supervision and other professional relationships, and also in relation to the "boys club" in the sciences. In addition, she had other family issues to contend with at the same time that she was grieving for her principal supervisor. She reported her brother's addiction to drugs and his custody dispute that affected her family. She reported needing to unplug the phone at home so that she could escape these other pressures and continue to work. Her need to be supportive of her family affected her progress during her PhD.

Interview Six — Laura

Laura was of Southern European background and in her late twenties at the time of interview. Laura was suggested as a potential participant after discussion with the Director of Graduate Studies regarding woman students in the business discipline. The interview was conducted in my home. I knew Laura before the interview through my role at the university, as she was a scholarship recipient. Laura had successfully completed her PhD in management at the time of interview at a newer dual sector metropolitan university. Her undergraduate and Masters by coursework qualifications were undertaken at the same institution. She had recently been appointed to an academic role at a Group of Eight university within Melbourne. Laura told her story in a temporally linear way, although at one point she related an incident from her childhood regarding her parents' way of developing her confidence in finding out information for herself. Laura had initially commenced her undergraduate studies in science and was studying full-time and working full-time concurrently. Through taking a business subject as an elective, she discovered her interest in management and marketing. She wound up her studies in science with a diploma and commenced a Bachelor of Business degree while continuing to work. During her undergraduate studies she discovered an interest in research and how it related to the business world. She continued on to do a Masters of Business by coursework with a minor thesis. At this time she started a new role with another university teaching some undergraduate business students. Her Masters minor thesis supervisor pointed out the potential for her thesis topic to be expanded into a PhD but at that stage in her studies Laura had not considered this as an option. She had encouragement from her Masters supervisor to undertake a PhD and when her parents organised her re-enrolment by proxy, as Laura was overseas, he spoke to them about the possibility of her undertaking a PhD. Key points in her narrative were the good supervisory team relationship and how her sense of agency was developed

through her family upbringing. Laura worked as a sessional academic while undertaking her PhD and also had a scholarship. She was encouraged to work as a sessional academic and research assistant, as well as publish articles and to attend conferences, by her supervisory team during her candidature. Laura reported that this encouragement and the resultant CV were crucial to her success in gaining an academic position so soon after her thesis was examined.

Interview Seven — Ebony

Ebony had completed her PhD in Health Sciences approximately three years before the interview was conducted. She is of Anglo-Australian background and was in her midthirties at the time of interview. The PhD was undertaken at a dual-sector newer metropolitan university where she worked at the time. The interview was carried out in her office at the university. Ebony told her story in a temporally linear way, starting with the first time the possibility of doing a PhD was mentioned by a family member. Ebony had previously completed a Masters degree by research at the same institution. She undertook her degrees part-time while working as an academic (sometimes working a reduced load) but still managed to complete her PhD in 2 years full-time equivalent. Ebony had one child while completing her Masters degree and her second child while completing her PhD. Her mother also passed away prior to her enrolment in the PhD. Ebony's story centres on the difficulties she faced when one experimental component of her research project collapsed. She wrote a journal article about the experience of research going wrong. She also talked about her personal commitment to her PhD as it was related to the disease that affected her mother. Another key part of her story is the negotiation and re-negotiation that took place with both her work and family responsibilities as the research progressed. Ebony had a very strong sense of agency in the negotiation of her workload and home responsibilities, as well as a good relationship with her supervisor. She continues to work as an academic and is now an Associate Professor.

Interview Eight — Tasha

Tasha is of Anglo-Australian background and was in her late thirties at the time of interview. This interview was conducted in Tasha's home interstate. At the time of interview, Tasha was in the final three months of writing up her PhD. She was undertaking a PhD in Humanities at an interstate newer dual sector metropolitan university. I met Tasha at a narrative methods conference and she expressed an interest in participating in my project. Although she was enrolled in the School of Humanities, her research is in ethics and nursing. Tasha is a registered nurse and midwife. She told her story in a temporally linear way, starting at the end of her Honours degree. She undertook an Honours degree but reporting thinking that this would not be recognised in her field. She talked to another student who suggested applying for a PhD scholarship, and she was successful in her application. At the time of interview her scholarship had expired. She referred to her PhD as an "odyssey" rather than a journey. She had endured severe physical illness, which triggered bouts of depression and post-traumatic stress, and she spent varying lengths of time in hospital. Tasha had a good sense of agency in the negotiating of supervision (she had a good supervisory relationship and worked through her supervisor to sort out other issues). She has strong support from her family and friends. Tasha worked part-time when she could and then spent several hours on campus working (often until the early hours of the morning).

The analysis of these eight women's narratives is explored in the four chapters that follow. Each chapter examines in detail a theme that was strongly evident in the data and relates back to the aims of the research. The chapters are sequentially ordered to

firstly discuss the women's motivation for undertaking, and continuing with the degree; and secondly to examine the importance of the supervisory relationship and its negotiation. The sixth chapter is on resilience and the factors that helped the women to remain focused on their PhD despite a range of personal and professional challenges; and the seventh chapter explores in detail the narrative of the one woman, Elena, who did not complete her research degree.

Chapter Four — Motivation

What motivates someone to undertake a doctoral degree? And does this motivation change during their candidature? Previous literature highlights that there are diverse reasons why students undertake and complete PhDs. These include expanding knowledge of a specific subject; improving career prospects (including the potential for an increase in salary); personal interest in the subject for its own sake; a stalling tactic (that is, postgraduate study is a way of postponing a decision about career planning); being flattered and encouraged into it; and contributing to knowledge (Dux, 2006; Leonard, 2001; Phillips & Pugh, 2005). A UK study by the National Postgraduate Committee found that nearly half of the students surveyed named improved career prospects as their primary reason for enrolling in graduate study. Aside from career advancement, two of the most popular reasons were an interest in the subject matter or wishing to continue to study (NPC, 2002). The Cambridge Dictionary defines motivation as the need or reason for doing something (Cambridge Advanced Learner's Dictionary, 2009). Motivation is clearly a major factor in applying to do a PhD, progress of candidature and success or failure of the project (Kiley, 2009). However, as Leonard, Becker and Coate (2005) point out, while undertaking doctoral study is a major commitment, relatively little is known about students' motivation to enrol.

As motivation has been identified as a key issue, this chapter looks at how motivation is woven throughout these eight students' stories. The reasons for undertaking a PhD were also inextricably intertwined with factors discussed in Chapter Six on the theme of resilience/persistence. If a PhD student has a sufficiently strong motivation, does this support successful completion? Some participants in this research project mention how identifying gaps in the literature or issues in professional practice was a primary motivator. Others had a personal interest in their topic; they enjoyed research in general;

wanted an academic career; or, in several instances, were encouraged to enrol. As will be explored below, in every story motivation was not a singular factor. Each woman identified more than one motivation for undertaking the degree and on occasion this motivation could be seen to be contradictory.

Motivation in this chapter refers to both the motivation for commencing the degree and motivation to continue and complete. As Phillips and Pugh (2005) assert, motivation can change during candidature. I analysed these stories for both the women's motivation to undertake the degree, and also their motivation for continuing with the degree. As will be shown below, some women were less clear about, or did not discuss, motivation to continue with their degree. However all the women discussed their motivation for undertaking their doctoral degrees.

Motivation can be intrinsic or extrinsic, although at times the distinction between these two categories is blurred. In discussing motivation for undertaking and completing a research degree, intrinsic motivation includes an interest in the subject and personal development, and an interest in research generally (Leonard, 2001; Leonard et al., 2005; Phillips & Pugh, 2005). Extrinsic motivation encompasses improving career prospects, parental and staff influences, and availability of financial assistance such as scholarships (Leonard, 2001; Leonard et al., 2005; Phillips & Pugh, 2005). Motivation can also be positive or negative.

Powles (1984) examined a range of surveys which looked at influences on the decision to undertake higher degrees by research; influences such as interest in the pursuit of learning, personal fulfillment, the higher degree as a necessary precursor to a chosen occupation, enhancement of employability, perception of the labour market in general,

parental and academic staff influences, and the extent and availability of financial assistance. These surveys overwhelmingly showed that intrinsic interest and personal fulfillment were the main reasons for proceeding to higher degree study. Research on Honours students at the University of Melbourne (Reilly, 1985) also indicated that academic interest was the most important motivating factor for the majority of students, but especially for women.

Interestingly Phillips and Pugh (2005), in their important reference book for PhD students and supervisors, do not specifically refer to students' motivation for enrolling in a PhD. However they do clearly refer to the "reasons why people decide to work towards a PhD" (Phillips & Pugh, 2005, p. 25). The common "aims" that they identify include: making a significant contribution to the current state of knowledge in their field, improving career opportunities and increasing future earning capacity, gaining the title Dr, and interest in the work for its own sake (Phillips & Pugh, 2005). It is also important to note that the motivation for doing the degree may change during candidature. Towards the end of the degree, the aim often becomes simply to finish the PhD (Phillips & Pugh, 2005). Although self-evident, Phillips and Pugh (2005) emphasise that a student must *want* to get a PhD.

Similarly, Leonard (2001) does not specifically refer to motivation in her book, *A Woman's Guide to Doctoral Studies*, but she discusses several reasons for doing a doctorate that align with those noted by Phillips and Pugh (2005) including: vocational improvement and contribution to knowledge. Two other reasons put forward by Leonard (2001) are personal development and helping society or the student's community. Leonard (2001) also notes some problematic reasons for wanting a doctorate including: drift (being unsure what else to do); enjoying the experience of

being a student; being unable to get a job but receiving a grant or scholarship; convenience; other people's expectations; and specifically for women, to get the title of Dr rather than continue to be Miss, Mrs or Ms. It should be noted that Phillips and Pugh (2005) also listed gaining the title of Dr as a reason for gaining a PhD but without labeling this as a "problematic" reason. Leonard (2001) goes on to explain that patterns can be seen in these choices:

Various types of doctorates are undertaken for rather different reasons and at different points in life in different disciplines. They are done more for vocational reasons and by younger and full-time students in the sciences, and more for personal development and part-time by those who return to study after a period of employment, and in the social sciences and humanities (p. 52).

A recent study in Australia by the University of Queensland Social Research Centre noted that female PhD graduates were significantly more likely than their male counterparts to report that they undertook a PhD for intrinsic motivations such as personal satisfaction, intellectual and academic development, and interest in the discipline area and thesis topic (Dever et al., 2008). An earlier study by Gill (1999) in South Australia noted that both men and women offered a mix of reasons for enrolling in terms of career advancement and personal fulfillment. However men were more likely than women to nominate an interest in following on from earlier studies as a motivation for enrolment.

Leonard et al. (2005) undertook research on graduates who completed doctoral theses in Education in 1992, 1997 and 2002. They argue that although the doctorate "plays a key role in continuing professional development in this field, the benefits of the doctorate are perceived *post facto* as equally, and for some more, in terms of intrinsic interest and personal development" (Leonard et al., 2005 p.135). Their study was undertaken to better understand what motivates people to start, and persevere through, a doctorate and

how it affected their lives subsequently. Leonard et al. (2005) note that there were multiple initial motives for undertaking a doctorate and respondents mostly gave more than one reason. The majority mentioned a vocational element and/or interest in a particular field of research; but personal development and general intellectual interest were almost equally noted. Taken together, these latter two categories outnumbered vocational concerns as a motivating factor (Leonard et al., 2005). One in ten of the respondents mentioned getting the PhD itself; and three in ten noted this as one reason, alongside other factors.

Motivation was a key issue in this project. The table below summarises the motivation factors, intrinsic and extrinsic, discussed by the eight women participants. It includes both the motivations for undertaking the degree and motivation for continuing. The women discussed their motivations to varying degrees in their stories. For example, as reported later in this chapter, Eve mentioned at several points throughout her story that financial support was essential but also that she was proving herself academically. In contrast, Laura's story mentioned her supervisor's explicit encouragement to undertake her PhD, but little is discussed about her own intrinsic motivation.

On the next page is a table summarizing the motivation of all eight women in this research project.

Table Five: Summary table of participants' motivation factors

	Motivation	Issues	Classification
Eve	Prove herself academically;	Upgraded her degree and scholarship	Both intrinsic
	financial (scholarship); to	to a PhD to give her more time when	and extrinsic
	consolidate career and improve job	partner became ill. Wanting to return	factors
	prospects; encouragement from	to study. Strong relationship with	
	supervisors; sister as role model	supervisors and encouragement from	
		them	
Elena	Encouragement from the	Awarded a scholarship and reported	All extrinsic
(see	Department to continue; academic	pressure from academic staff to enrol	factors
chapter	career; family influence; financial	in a PhD directly after completing	
six)	(scholarship)	her Honours degree. Wanted to teach	
		at university and needed a PhD to do	
		so, but this motivation changed as	
		she experienced departmental politics	
Andrea	Learning for its own sake; financial	Both parents commenced PhDs and	Both intrinsic
	(scholarship); family influence	her mother finished (no specific	and extrinsic
		mention of active encouragement).	factors
		Main motivation was learning for its	
		own sake and she actively sought a	
Υ.		scholarship to enable her to do this	36:1
Jane	Support and encouragement from	Sees lengthy duration of PhD as	Mainly
	academic staff; wanting recognition	stalling her career. Female supervisor	extrinsic
	and proving herself academically;	in male dominated field as role	factors
	wants the title Dr; two older	model, but then had issues with	
	brothers as role models	supervisor. Influenced by the career	
		advisor at school who said she would	
Karen	Always considered it on ontion.	never be a "doctor"	All extrinsic
Karen	Always considered it an option; possibility of an academic career;	Support from husband and supervisor. PhD could be considered	factors
	financial (scholarship);	a way of stalling while she works out	Tactors
	encouragement from her first	what she wants to do. Mentioned of	
	supervisor	going into an academic role but	
	super visor	changed mind during candidature	
Laura	Academic career; encouragement	Had a scholarship but didn't discuss	Both intrinsic
Luuru	from supervisor; interest in the	this as a factor in motivation. Interest	and extrinsic
	topic and in research generally	in research for its own sake,	factors
	copie and in research generally	encouragement from her supervisor	1400015
		and support from her family.	
Ebony	Furthering her academic career	Encouragement from her supervisor.	Both intrinsic
, and the second	(implicit); encouragement from her	Developed own topic and then	and extrinsic
	family and supervisor; personal	approached him. She was recently	factors
	interest in area of research;	promoted to Associate Professor	
	completion scholarship provided by	within six years of completing her	
	her department.	PhD and may provide a model of a	
		strategic academic career	
Tasha	Academic career; gain the	Discussed that she should have	Both intrinsic
	qualification; interest in topic; to	undertaken a Masters instead of	and extrinsic
	help the profession; financial	Honours – the only progression with	factors
	(scholarship)	an Honours degree in her field was to	
		go on to a PhD	

Case Study One: Eve

Eve's motivation for undertaking a PhD was both intrinsic and extrinsic. It centred on financial support through the scholarship; consolidating her career and improving job prospects; and proving to herself (and her family) that she could achieve academically. Interestingly, Eve enrolled initially in a Masters degree and upgraded to a PhD, mainly because she needed to continue the scholarship for as long as permissible as her partner was seriously ill and Eve couldn't work at this time. She also talks about consolidating her career by enrolling in a Graduate Diploma from which she applied to do a Masters by research and then upgraded to a PhD. In terms of motivation to continue the degree, Eve referred to both her sister and partner as role models; and the continuity of the scholarship when she needed financial support.

Motivation to commence

Eve's first discussion around the topic of motivation related to being at a point in her life where she was ready to consolidate financially and she saw a return to study as a way of improving her career/job prospects. This point was raised early in her narrative (page 2):

I had a great passion for working basically in the [employment] sector ... great love of language, prolific reader, all of those things, but I, I think I hit a bit of a wall. At that stage I was, "God I've got to go back now", I must have been in my early forties, and I was feeling like, I was feeling a bit burnt out, I needed to ... and I also felt like I needed to continue my education ... or I could see myself sort of just rolling along ... and I wanted to consolidate something like, fifteen years of working within the [employment sector interstate]. I wanted to somehow consolidate that and I wanted to consolidate my, what was left of my working life and, in inverted commas, "professional career" I think so I, at that point in time, I took up an offer of a position in the Graduate Diploma in [field] at [Group of Eight] University in 96

In the process of doing the Graduate Diploma and excelling in her subjects, Eve decided to continue her studies. She was encouraged to apply by a friend who introduced her to a potential supervisor. Their active interest in her topic and encouragement motivated her to apply for a scholarship, initially to undertake a Masters by research (page 3):

I made my way to [dual sector metropolitan university] mostly through a peer and a friend who ended up becoming my co-supervisor, who believed in what I was doing, who when I talked with her about possible subjects for doing a thesis she became very excited and she spoke with [the postgraduate coordinator and potential supervisor]. And she said, "Oh I'd really like to, to take this student on board." And so I was actively encouraged to apply and felt all the way from the beginning with that application that I was, it wasn't a given, it wasn't a guarantee that I was going to get it, but I felt that [co-supervisor] and [supervisor], and I think the University through them, were really engaged with and interested in the work that I was doing. So I felt very welcome. I was delighted when I heard that I had won the scholarship.

This scholarship was an important part of Eve's motivation to undertake the degree. She discussed the importance of the financial support as a motivation to commence her studies, prompted by a question from me (page 17):

I had to win a scholarship or some sort of financial support to be able to take me forward ... I didn't want to do it part-time. My experience way back in 1979 as a part-time student, was goodness knows what it would have been like if I had been off-campus, and having to at the end of a working day like so many students do, then drive to a night class and then try and stay awake ... and get through your part-time study that way. I was fortunate because I was on campus but I could still see the pitfalls of part-time study. And the lack of continuity and not getting a big enough bite at it. And I was more, and I think you know that now that I'm older I was also more ready to, to step in and fully embrace full-time study. I really wanted to do that. I think they were the advantages of not doing it that way. I mean I've been very grateful to the university for offering me a scholarship.

The scholarship allowed her to study full-time, as she had studied part-time previously and had seen the pitfalls of part-time study. Being granted a scholarship enabled her to become immersed in research on a full-time basis.

A strong component of Eve's motivation was proving to herself and others that she could "achieve academically," and this appears in several places in the narrative. It was

a factor motivating her to start her postgraduate journey, and also a motivation tied to persistence (page 13):

I was determined I think to finish something, I think there was something at the back of my brain that was pushing me all the time, which was "you never finished. This was part of a chapter in your life that is unfinished, its unfinished business. You never finished your B.A." ... and there are times when I've had messages in my life which weren't necessarily spoken but about, you know, "you never achieved academically, you never got past the post," and I wanted to prove that I could do that.

While she had been given negative messages of not being academically strong, Eve turned this around to help motivate her.

She referred to her sister as a positive role model (page 15):

Role models I think are important, and I must, I mean I mustn't leave my sister out of this ... my older sister. I saw her return to study, after she had raised three small children ... [five lines deleted] but her kids and her partner could not see, they were all dumbfounded and they could not understand why she wanted to return to study. And in fact the lot of them were not very supportive actually except for my niece ... [two lines deleted] ... and I think I watched all of that unfold too, and that made me even more determined. I thought, "If she can do it, I can do it."... [four lines deleted] ... So I think that she was a role model, and she still is a role model in, you know, in terms of acceptance of life, of my choice of lifestyle, my wanting to return to study.

Eve's sister was identified as a positive role model both to motivate Eve to return to study and to continue studying. In addition, Eve also mentioned an intrinsic motivation of doing the degree for herself (page 18):

I sometimes think I'm only kidding myself, but I think that my reasons for returning to study were for myself as well as for development of what I call the next stage of my career.

Eve reported in her narrative that she had received messages of not being academically strong from her family. Her motivation to return to study clearly show that she had an intrinsic desire to do this for herself as well as the extrinsic factor of consolidating her working life to improve her career prospects. Her sister was also a positive role model.

Motivation to continue

As discussed above, Eve saw her sister as a positive role model who motivated her to both commence and continue with her degree. She also noted that her partner was a role model, motivating her to continue her candidature. Watching her partner recover from a life-threatening illness and pull their life together was mentioned as a motivation to continue (pages 19-20):

Seeing someone go through what [partner] has gone through and also manage to put [their] life back together again, has been you know, if you had a choice about going through an experience like that you'd probably say "no" but if ... if you have to go through it ... I mean it's a strange thing to say but I feel I have been very privileged ... to watch someone do that, because it's motivated me when I've been feeling a bit pathetic and down about myself, I've looked at [my partner] and thought "God, why are you feeling down?"

She used the strength she saw in her partner as a positive motivation to continue her degree.

Eve specifically emphasised that financial support was a motivating factor in both starting her research degree and in continuing it. She made it clear that it would have been "impossible" to continue without it (page 16):

And I might add, without it, it would have been impossible, it just would have been impossible with what actually happened. The scholarship was a huge motivation for me to keep going so I'm glad you've mentioned that ... laughter I might also add that it was extremely hard when my scholarship ran out.

Eve and her partner were reliant on the income from the scholarship for financial support, particularly while her partner was ill and Eve couldn't undertake any additional paid work.

She returned to this theme of financial support as an ongoing motivation enabling her focus on the task of the research later in her narrative (page 19):

Before I took up the offer of the place at [previous university], I was suffering from burnout. And that had actually happened twice, that's happened twice for me in my working life. Why it didn't happen this time is an interesting one, I think perhaps it was because through the scholarship I was able on a very basic wage or living allowance, with the top-up from the carer's pension, I was actually able just to focus on the job at hand which was to research and write my thesis, and for a long time ... [a few words inaudible] ... so financially as long as I was careful, I didn't have to go out and look for more work, on top of being a full-time carer as well ... so that probably made the difference, and I was working from home, there were times when I had to, when that was the last thing I wanted to do, but in many ways it was, it also was convenient and that helped me get through.

Holding a scholarship allowed Eve to continue her studies without seeking external employment, particularly during the difficult time when she also had a role as a full-time carer.

Eve again returned to financial consolidation as motivation (page 15)

... it's not the logical step to take at this time in your life when you should be consolidating and is what in fact I was trying to do with my study. But I believe I'm into the next step or stages of, still, as a single independent woman, trying to consolidate financial security in my life.

Eve saw the PhD as a way of consolidating her industry career so far. This consolidation was also linked to career development (page 16):

Well, I suppose I thought that that message was still there, that you're not smart enough and trying to get full-time jobs, full-time work in [another state] in the area that I wanted to be in, they are actually few and far between...and so I thought that if I come through my university study and that's what I want to do, then I'm, it's a logical step.

Here we can see how the external message of not being "smart enough" for study was intertwined with Eve's desire to consolidate 15 years work in the industry and build her career.

Eve's story demonstrates the multiple nature of motivation, and how it can be both intrinsic and extrinsic. Her intrinsic motivation was centred on proving to herself, and her family, that she could achieve academically. She also saw her sister and partner as

strong role models. This motivation was central to not only commencing the degree, but also to continuing on and completing her PhD. Her extrinsic motivation was twofold. Eve noted that one motivation for enrolling in her research degree was to improve her career prospects. However once she secured a scholarship, the financial support was a strong motivating factor in continuing during difficult times.

Case Study Three: Andrea

Andrea's motivation for enrolling in a PhD was both intrinsic and extrinsic. Like Eve, financial considerations were important in her motivation to undertake a PhD and what she referred to as being "an opportunist" when the chance presented itself. A further influence was that both of her parents started – and her mother completed – PhDs. Although she didn't refer to them as role models, the precedent they set in terms of cultural capital could be seen as a facilitating factor in Andrea's consideration of a research degree as an option. She discussed two main motivating factors – a scholarship opportunity that she discovered and the challenge of learning. Andrea also explored the idea that the scholarship was a double-edged sword in terms of motivation. She did not choose her topic and her discussions with other PhD students caused her to contemplate the advantages and disadvantages of enrolling in a research degree topic that was not her choice.

Motivation to commence

Andrea was clearly aware that the interpretation of aspects of her story would depend on how it was portrayed. This is evident in the first sentence in the excerpt below, early in her narrative, where she discussed the scholarship opportunity that she found through a friend (page 1):

I was thinking it's really a matter of just how you want to portray the whole story because on the one hand you could say I'm an opportunist because I simply found out about a scholarship on offer ... through a friend ... and she said "Look, they're looking for someone, I don't know the details but you maybe you want to find out," and I did and applied and basically got the scholarship ... so it wasn't that much of hard thinking once the opportunity presented itself. On the other hand I had a look around before, just sort of scoping at a couple of universities ... Just to see what PhDs were on offer, like what would be involved in terms of HECS [university fees] and all the rest ... so yeah you could say I just took an opportunity...

Like Eve, financial considerations were important, but Andrea clearly identifies that she took an opportunity that presented itself to apply for a scholarship. She had done some investigation of what was involved, and was ready when the opportunity arose.

Andrea's exploration of the options available for further study was influenced by her family background. Both her parents had commenced PhDs, and her mother completed the degree (page 1):

You could also say that somewhat it was planned in the fact that I had done my research before ... on what it would mean to do it, and also in terms of my family background. My mother did a PhD and my father did a PhD except he didn't finish it because they had two children at the time and they decided that there would be an artificial cut-off line in which one person that's further will go ahead and so ... I wasn't unfamiliar with ... academics and all the rest of it ... so in that sense I didn't think it would be out of the question to do it.

Although Andrea mentioned her family background she does not, as several other women did, refer to her parents specifically as role models. Instead her statement that she "didn't think it would be out of the question to do it" appears to indicate that she saw PhD candidature as a viable option and not beyond the reach of her capabilities.

Andrea also explained in this part of her narrative that for her, knowing what you want from the degree is important. This demonstrated her understanding that her experience of motivation would vary from that of other people. She clearly stated that "it doesn't

hurt if you have a good qualification" but acknowledged the impact that taking the time to gain the degree can have on income (page 1):

Of course you've got to have a sense of what you want from the degree itself first and that obviously varies enormously ... obviously it doesn't hurt if you have a good qualification. Well actually sometimes people say to me it can hurt because once you consider the loss of income that you have, even when you're on a scholarship ... let alone if you're not ... they can kind of counter balance how long a highly educated person takes to catch up in terms of income with someone that hasn't got as many qualifications ... but of course I'm not after income but you know if that was a consideration then you would possibly have a disadvantage for a while ... but I guess for me it was always more a matter of having the learning experience associated with it.

Andrea mentioned here that she is not doing this for financial gain – even holding a scholarship does not compensate for the lost earning potential. She concluded that for her the "learning experience" was a key intrinsic motivation.

She continued to expand on wanting a "learning experience" and acknowledged that this is different for each person who undertakes postgraduate research. In this excerpt she extrapolated on her experience (page 1):

Even though you don't really know what you're in for until you are in that situation so you know people might tell you what you have to expect or what trials and tribulations there will be but ... in the end you don't know what your experience is going to be exactly like. My experience actually doing it ... is varied from kind of complete success in terms of learning and challenging one's own ideas, understandings, reading so broadly, that is very enriching and I think that's very fulfilling ... from being lost in terms of ... taking ownership of the scholarship issue ... or topic that was given to me ... so to familiarise yourself with a topic that you don't actually know that much about.

Andrea claimed that her motivation to commence – wanting a "learning experience" – was a complete success. However, she tempered this by mentioning that in accepting a scholarship on an already designed project, she had to familiarise herself with a topic that was not of her choosing.

A further intrinsic motivation for Andrea was also the timing of this project with starting a family. She repeated from earlier in her narrative that she saw the PhD as an option (page 9):

In terms of my own motivation as I said I didn't think it would be out of the question to do it at some stage in my life and I knew that a lot of women successfully do combine the motherhood and study period.

This appeared to have been a pragmatic motivation for Andrea in that she considered that she could realistically combine the study period with starting a family.

Motivation to continue

Andrea reflected later on about the financial motivation of having a scholarship with the restriction of a topic which wasn't of her own choosing. She discussed meeting other PhD students who had an intrinsic interest in their subject and the effect that that had on their ongoing motivation (page 4):

And that's the other thing I've found ... sometimes you think, "okay you're being paid you can do something full-time, surely that's the easier option?" Then I've met other people who didn't have a pre-given topic and were really passionate about their topic and did it part-time which was harder because obviously they had to work the other half, but they still ... were so much more enthusiastic and actually motivated at the time when they did have the time to do things. So I guess it's just a matter of working out what actually your working style is and what you need and then getting that in place if you can.

Andrea here touched on the idea that "passion" for one's topic can be an ongoing motivation. Although she does not explicitly state this, I interpreted this point in her narrative to mean that the financial benefit of the scholarship was not an ongoing motivation for her. She referred to other people being more "motivated at the time when they did have the time to do things." When I later brought Andrea's attention back to the topic of motivation for doing the PhD she again emphasised that it might have been different if she had chosen her own topic, but that one can gain a learning experience regardless of the topic (pages 9-10):

I would say that for me it was primarily a matter of taking time to learn, because I don't think you can be that obsessed about something for such a long time unless you do a research degree. Because again I was after challenging my own assumptions, challenging other people's assumptions ... just seeing how they kind of make sense of the world and ... applying that skill ... so to get my mind around critical thinking was really what I was after, here in a sense it didn't matter that much on which subject ... I would exercise it ... [I: you can get that from almost any topic...the learning experience] ... yeah even though it probably would have been easier, probably, but that's purely hypothetical, if I had been given the opportunity to just say, "okay, whatever's closest to your heart, you go ahead and study that."

Andrea's intrinsic motivation was to develop her research skills, such as critical thinking, but she acknowledged here that she was not passionate about the topic. Her motivation was about "taking time to learn", creating space for a strong research focus, and developing her critical thinking skills. In her case, she stated that the topic didn't matter in terms of what she wished to gain from undertaking the degree.

She acknowledged that having the financial support of the scholarship was a "privileged position." The ongoing financial support of the scholarship and additional funding associated with the type of scholarship enabled her to undertake field work and attend conferences (page 10):

But of course it's a big consideration, a big help to be paid to do it and to have additional research funding to do it. You've got to acknowledge that it's a privileged position ... every photocopy, all of these things that you have to spend money on ... so again so it's a very privileged position to be in when you've got the scholarship and additional research funding to go on field trips and to conferences and so forth ... I think it all boils down to what you're trying to gain from it.

I interpreted this section of Andrea's narrative to be an acknowledgement of the ongoing extrinsic motivation that the financial support of the scholarship provided for a student who was undertaking her research degree for the "learning experience" and not because of a passionate interest in her topic.

Andrea's motivation is presented as multiple and her narrative indicates a strong understanding that it depends on "what you are trying to gain from it." The intrinsic motivation of learning for its own sake was key for her not only thinking about undertaking a PhD, but also for her decision to accept a set project with a topic not of her choosing. Her extrinsic motivation to commence was twofold: firstly, financial stability of a scholarship enabled her to focus on the task of doing a PhD (which she considered was a "privileged position"); and secondly, as a learning experience.

Andrea's parents had both undertaken PhD studies and this family precedent could be considered to have positively influenced her motivation to commence the degree, although she doesn't explicitly use the term "role model".

Case Study Four: Jane

Jane's motivation to do a PhD was strongly extrinsic in nature. She focused this part of her narrative on role models (including her two elder brothers – who had both completed PhDs – and her supervisor), encouragement from academic staff within the institution (particularly from the woman who became her supervisor) and the negative motivation of being told at high school by a careers advisor that she would not become a doctor. This latter motivation led Jane to focus on achieving the title Dr as an end in itself.

Motivation to commence

Jane started her narrative talking about her motivation to do a PhD. Initially, like

Andrea, she referred to the precedent of family members – in this instance her brothers

– having already done PhDs and the understanding this gave her of the PhD experience

(page 1):

I was lucky in that I had the experience of two older brothers ... who'd already ... one was almost finished, like submitting his thesis and one was kind of half way through I knew a little bit about what I was in for ... I guess that's probably different than a lot of other people ... especially women in [the sciences]. That it's hard enough to understand what a PhD is, let alone when you're the minority.

She explained that both her older brothers undertook PhDs and this helped her to understand what the experience might be like. Her first mention of her brothers here was in line with describing her family background. There was no mention of role models; it was more a way of explaining that they understood what they were going to encounter. Later in her narrative Jane did specifically refer to her brothers as "role models" – with a twist. She explained that it was helpful to her not only to have people she could talk to who understood her experience, but that she could see from the start what not to do (page 14):

So I guess I went into it with my eyes open a little bit more ... it's good too because it does give me somebody to talk to who understands what it is I'm feeling ... and what I'm going through ... but mostly it's good because I've been able to observe the way they've handled conflict or ... problems and thought it's not necessarily the right way to do it. Yeah they were certainly role models for me ... but as much as anything it was ... equally about ... what not to do as it was about what to do. But they're ... especially my oldest brother ... his advice before I started was "Don't do it." Which I ignored, obviously ... but I understand why he said that, and I guess the fact that he said it made me at least contemplate it and think about it so that I, right from the start, was planning for it to take longer.

In the excerpt above Jane's role models could be interpreted as acting less as a motivating factor than a "warning" of the pitfalls both brothers encountered. Something appeared to have motivated Jane to enrol in her own PhD despite the experiences she encountered at close range within her family. She also learned from their stories to develop alternative strategies for dealing with conflict or problems, and planned for the degree to take longer than the normal duration. It is important to note here that Jane was supervised by one of the same supervisors that both her brothers had.

The central motivation that Jane identified for commencing the degree was for "recognition". Similarly to Eve, she wanted to "show the world that she could do more" (pages 1-2):

I guess the main reason why I wanted to do it was because I wanted recognition ... I enjoyed my undergraduate experience. I did well at it. I wanted to show the world, whoever that is, that I could do more even though a lot of the advice that I was given at the time was that as far as my career was concerned it would probably hold me back.

My interpretation of this is that she is "proving a point" particularly, but not exclusively, to the careers advisor whom she discussed later. This was a strong extrinsic motivation to commence, and Jane went on to explain that proving to the world that she could do it also incorporated wanting the title "Dr" (page 2):

I guess it was just because I was driven to prove myself, to prove that I could do it and to, as stupid as it sounds, to get those two letters in front of my name saying that I was Dr [name] and that was ... really important to me.

Jane was the only one of the eight women in this research project who emphasised wanting the title "Dr" as a motivation for enrolling in their PhD. Leonard (2001) highlighted that wanting to get a PhD for the title "Dr" could be a problematic motivation. However, in Jane's narrative excerpt above, she emphasised that the desire for the title is intertwined with the intrinsic motivation of proving herself. She continued her narrative by explaining from where this desire to be a "doctor" originated (page 2):

Especially because I was once told by a careers advisor I would never be a doctor which I always resented her for but now ... now that I think about it maybe that drove me [laughing]. Maybe her negative influence actually turned into a positive. [5 lines deleted] And she looked at me and she said, "Nobody from this school will ever be a doctor." [4 lines deleted] ... consequently I never went back and saw her again. But I guess that kind of drove me to prove that she was wrong.

Jane's report of her meeting with the careers advisor when she was in her early high school years was detailed. She repeated the words "prove" and "drove" which

emphasised the impact that this single meeting appears to have had on her motivation to become a "Dr". Jane re-emphasised this as she continued, and also reflected that these negative comments made her more determined (page 2):

So I was determined to prove that somebody from my school could be a doctor. [Five lines deleted] It's interesting to me that it actually had the opposite effect of what you'd think it would have because I always, I really was angry at her for being so negative about that [six lines deleted] Maybe it was some weird reverse psychology technique she was using on me. I don't know ... but it worked ... [laughs]

In these excerpts Jane clearly stated that this motivation to "prove" that she could become a doctor originated in her negative experience years earlier with a careers advisor. In terms of a motivation to commence a PhD, Jane's "negative" experience was turned into a positive. The extrinsic motivation of wanting the title was intertwined with an intrinsic motivation to prove herself. This intertwining highlights the difficulty of categorising some motivating factors as solely intrinsic or extrinsic. Jane's motivation to prove herself was intrinsic and she chose to do this through getting the title "Dr", which could be interpreted as an extrinsic motivation. In this instance, the line between intrinsic and extrinsic motivation becomes blurred.

Jane then went on to discuss the support and encouragement from academic staff at university and their suggestion that she might go on to further study (page 3):

And that I guess then the lecturing staff picked up on the fact that I was doing well and then started to suggest to me that I might think about going on and doing further research. And like I said because I already knew what they were talking about ... it was obvious to me.

Her reporting of the encouragement from academic staff was positive, in contrast to Elena's reported experience (see Chapter Seven). Coupled with her understanding of what a PhD would entail, these factors combined to give Jane a realistic picture of what she could expect during her PhD candidature.

Jane talked about her supervisor as a role model although she didn't use that specific term (page 3):

I guess I struck up a good friendship with my supervisor. Even as an undergraduate, well even before I came here. I came and saw her before I transferred ... because I wanted to talk to somebody about whether or not I was doing the right thing ... and the fact that she's female and doing so well ... in the industry I guess is a really positive influence I think. So that made my decision easier ... that I wasn't so scared of it. Not that I've ever really been scared of being the only girl in the group.

As a woman studying in a predominantly male discipline, Jane was clearly influenced by her supervisor's success. She could see that it was possible to succeed in that field, and I interpreted her description of her supervisor as being a role model which positively influenced Jane's motivation to commence the degree.

At the end of the interview Jane again mentioned motivation but explained that it was not necessarily a single reason, reflecting the literature which suggests motivation is nuanced and multiple (page 37):

They're not issues you can tick a box for and say I did my research because I wanted this or I wanted that. You can't tick a box for those things, and even if you could it might not necessarily be the truth, you know, that you might leave it and think "oh yeah I chose it because I wanted to advance my career" but ... that might have been the case but there's more influences, so yeah definitely it's not a tick a box type.

As with Andrea, Jane was aware of the multiple nature of motivation. Jane's intrinsic motivation was to show the world that she could do more. Like Eve, she was proving herself academically through the research degree. More clearly reported in her narrative though, were the positive and negative extrinsic motivating factors. The positive extrinsic motivation for Jane was twofold: her role models and encouragement from academic staff. Jane's reporting of the encouragement is positive, while Elena, who also reported strong encouragement, referred to it more negatively as "pressure". However, it

is acknowledged that one of Jane's strongest reported motivation was clearly negative — the careers advisor who told Jane that she would never be a doctor strongly influenced her to continue onto postgraduate research to get the title of Dr. A point that Jane made early in her narrative is that people had explained that a PhD meant stalling her career or life. Andrea also made this observation specifically in terms of income. With hindsight, Jane noted that this was probably the case, given how long her PhD was taking to be completed. Jane's narrative focused on the motivation to commence and there was no discernable discussion of motivation to continue with the degree.

Case Study Five: Karen

Karen's motivation for undertaking the PhD was extrinsic and multiple. Primarily she was looking for a change from her career as a secondary teacher and saw a PhD as one of a number of options. She was also aware of the scholarship opportunities that would enable her to be paid to study. She talked later in her narrative about considering an academic career. All the motivating factors that she discussed were extrinsic and referred to her commencing the degree. Karen's only discussion on how her motivation changed was around the idea of wanting an academic career.

Motivation to commence

Karen explained that she always had a PhD in mind as one of a number of options, but did not discuss what the other options were. She wanted a change from her secondary teaching career and was carefully exploring other options (page 5):

And then the bad side of that, I mean every job has that, but I just sort of found that I thought: "Oh God, I've gotta go." So we talked about me sort of going off and doing a PhD. It's just one of those things that I always had in my head, "well, it's something that's there for me if I want to do it". And so I wanna (sic) do it. It's like ... all the things that you wanna (sic) do in a hat and you sort of pick one out ... And we sort of thought it was ... as good as any time for it.

After discussing several possible options with her husband, Karen opted to pursue a doctoral degree. Analysing this excerpt of her narrative there is no indication of a deep interest in or passion for a specific topic or area of research. I am not convinced that this clearly fits with Leonard's (2001) highlighted problematic motivation of "drift", i.e. where a person is unsure what else to do. It could be seen to be a way of expanding her future options. As will be discussed below, she did consider academia as a potential career.

Karen went on in this excerpt to mention that she wanted to go back to study in a way that meant that was cost neutral. She was successful in gaining a scholarship, so there was a clear financial motivation (page 5):

I've wanted to go back into sort of an area of study that meant that I didn't have to pay anything and I would be paid [laughs] ... so I applied for a scholarship, and I was very lucky that at the time, my supervisor, [name], had involved this other lady who, I think she was like the coordinator within the school [nine lines deleted]...she sort of stood up for me and [I] managed to get in and get a scholarship. And I started sort of around the same time that school would have started.

Karen was aware that the support from her supervisor and the postgraduate coordinator in the School helped her to gain a scholarship. She clearly states above that she wanted to undertake study in an area that meant no costs to her and that she would be paid to do the degree. The scholarship was a strong extrinsic motivation for her commencing her doctoral degree.

Karen did not have an intrinsic interest in her topic area. This excerpt highlighted the predetermination of her area of research by others (page 6):

I mean [principal supervisor] and I had had quite a few discussions. I'd gone after school, like the previous year ... on several occasions to discuss the sorts of things that I might do. It was sort of almost chosen for me that I should focus

on [particular geographical area] because ... as in the location [name of area], because ... the school already had a number of students who were sort of working with [a government agency] at [that area]. [Nine lines deleted] ... and then it was just sort of for me to ... start off and start some reading and try to resolve exactly what it was I wanted to do. So right from the start I really had very little idea as to what my project would be, exactly what I would be doing, where I would be spending my time.

While she was considering undertaking the degree and making her decision, Karen spent some time in discussion with her principal supervisor who had also been her Honours supervisor. It is clear in this excerpt that the initial area of focus of her research was determined by her supervisor and she then had to spend her initial months in resolving what her topic would be.

At the end of the interview Karen came back to the topic of motivation, indicating that although she initially thought about going into academia, she had now changed her mind because of the workloads involved (page 37):

I've enjoyed it. I've enjoyed the teaching that's gone along with it. Having been a teacher that's been easy ... one thing it's done is put me off academia. I really thought when I left teaching that a PhD and going back to uni would be the key to my next career. Nope ... no thank you very much at all ... [six lines deleted] I just thought for the amount of money you get paid ... and you know the classes you have to teach, the repetition of the classes you know the way a lot of the pracs (sic) are set up now ... all the corrections [10 lines deleted] ... I've liked sort of doing that sort of thing but it has got to the stage where I've just gone ... "nuh"(sic) ... the reality ... some sort of realities of that job are nice ... like that you can kind of ... not come and go as you please but there is a little bit of that ... even if the university does wanna know that you're in from nine to five each day or you know there's a little bit of sort of leeway there.

In this excerpt Karen clearly noted that she enjoyed the teaching that she undertook while doing her PhD. However she had changed her mind about the marking. She was also not impressed with the salary. Karen stated that an academic career had been on her agenda when she went back to university to undertake her PhD, but her experience of the work involved had led her to change her mind. This is in contrast to Elena's desire to become an academic that was changed by workplace politics (discussed further in

Chapter Seven). Nevertheless, there is a strong theme in both these narratives about academia being a stressful and not professionally fulfilling career. To what extent this was a gendered experience is not clear for Andrea, but certainly for Elena the male supervisor, as discussed in Chapter Seven, had a reputation – she learnt later – for bullying his female PhD students, and this negativity may also have had an impact on her academic teaching.

Karen's motivation was extrinsic and, as with all of the women, multiple. One clear extrinsic motivation was her consideration of an academic career. However, the excerpt above suggests that as her understanding of the workload became clearer, she decided that she didn't want an academic career. Less clearly, she talked about wanting a change from her job as a secondary school teacher and she saw the PhD as an option. As one option among others, could undertaking a PhD be considered in Karen's case as a stalling tactic while she worked out what she wanted to do? Financial support through the scholarship was also clearly discussed as a positive extrinsic motivation, as was the support from her initial principal supervisor in encouraging her to apply for the scholarship.

Case Study Six: Laura

Laura talked about encouragement from her supervisor and support from her family as motivating factors. Moreover she talked about liking research, having an interest in the topic, and aiming for an academic career from the time she commenced her Masters by coursework degree. She had a mix of intrinsic and extrinsic motivating factors.

Motivation to commence

Laura had what she called a "twisted journey", starting with an applied science degree and then taking a marketing subject as an elective. Her interest in the topic was already present through the undergraduate studies (page 2):

And I suppose that was the first time as I was completing my undergraduate studies where I started to really gain an interest in postgraduate ... and postgraduate masters in the sense of some type of research component within the training and change area. So, that was my initial drive, in as to say I'm really interested in this ... so as I was completing the last couple of units, I did some investigating of my own and found that [dual sector metropolitan university] had the Master of Business ... back then it was called "in training and change management" discipline, and as a component you could actually do some research and that was my interest. I wanted to explore ... certainly coursework was important; you know you grow on your foundational understanding. But that was the ultimate sort of thing ... I was always interested in research right through, you know as long as I could remember my head was in a book ... or I was exploring something so ... it's a natural progression... and applied ... had no problem in being accepted for that.

Laura chose the coursework Masters with a research component. She highlighted that she saw the coursework as important for "foundational understanding" but that she has always had an interest in research. Two of her intrinsic motivations are clearly elucidated here – an interest in the research topic and an interest in research in general.

Laura was curious about the course she was teaching and how some students did well in "difficult subjects" and not so well in "easier" subjects. Her Masters supervisor pointed out that this was a potential PhD topic, so she had both motivation to do research generally and in her topic, as outlined above and here. She also had the extrinsic motivation through encouragement from her supervisor (page 5):

And that's when I actually started talking about my, flagging my interest. I had flagged that early on that I wanted to do a minor thesis and I'd actually spoken with [principal supervisor] who was the course co-ordinator. He was the person I spoke to prior to my application coming forward, and I explained to him you know what my interests were. We sat down and had a good chat and he said, "Yes, he was happy to supervise in the minor thesis," and I was telling him about all these interests and I had done the relevant reading on ... so I was quite

clear on what my topic was going to be because it evolved over time. And we had a good chat and he said "Yes, [Laura] what you're looking at is not only a minor thesis, certainly it's a good starting point for this, but alternatively too, a lot of things you're talking about can also be moved on into a PhD." And I was sort of looking at him just going "well, I don't really know if I want to do a PhD," ... in my mind, starting a Masters was very much I was going to get the research component that I wanted, you know that was what I was looking to fulfil. Get the coursework ... but also get this research niggle that has always sort of been following me about for quite a while so that sort of started my postgraduate ... formal qualifications and my little interest into research further ... doing further research that had come through.

Extrinsic motivation came from the strong encouragement from her principal supervisor even when she was discussing starting the minor thesis in her Masters degree. Laura explained that until he pointed this out, she had not considering doing a doctoral degree. She had a lot of support and encouragement from her Masters supervisor to think about her career path and a possible career as an academic (pages 6-7):

So all of a sudden all of these key things sort of fell together and I thought "wow." So as we're going through this process, you know [my supervisor] had encouraged me along the way, "You know, you're strong at what you do," [he] wanted me sort of from a career perspective...a career path, "what is it that you're looking at wanting to do now that ... you've had your industry experience, you've had science industry experience, you've had ... business industry experience ... you've come into academia as well in the sense of working with a very unique kind of scenario with [regional university's] thing." And I thought well, what I'm really liking is being able to have that interaction and sharing results with students and encouraging them with that motivational side of thing and being able to share in that sense, but I'm also really keen on this whole thing of research ... sitting down, being able to go out and investigate what appears to be a very important topic.

Laura reflected here that her supervisor's questions made her think about what she liked in her career so far. The combination of teaching and research appealed to her and her focus gradually became an academic career. She returned to this theme slightly further in her story (page 8):

At that time I was ... not so broad-minded, didn't really know ... too much about a PhD, didn't really know, didn't give it too much thought. Sort of thought, "well, this will suffice, this will meet my needs that I'm looking for, and that's what I'm looking to do, from a pragmatic output." [10 lines deleted] So I progressed into that particular scenario at that time as well, was focusing now

on an academic career at the conclusion of it, as opposed to being a little bit unsure as to, "What is it that I truly wanted to do?" And that's what really ... set the scene.

Laura talked about being motivated from a pragmatic viewpoint – that she reached a stage by the time she enrolled of knowing that a PhD would meet her future career needs as an academic.

While Laura did have an Australian Postgraduate Award scholarship to undertake her PhD full-time, she only referred to it once in her narrative, and not in relation to it being a motivating factor (page 8):

So I remember actually taking away those applications and sitting down and drafting and working towards getting that forward and also thinking about the broader context, what I had done in the minor ... what I was working towards in the minor thesis was only small, scratching the small surface, so there was greater potential from that sort of foundation base to then really talk a lot more complex, more broadly. So that's when ... all of a sudden this PhD that [principal supervisor] thought about ... Day One when he enrolled me [laughs] ... and mentioned to my parents you know at the end of semester one of the thing when they were there to enrol for me, whilst I was overseas ... he envisaged this as a natural progression.

In this excerpt above she discussed developing a research proposal to include in her scholarship application and her interest in expanding on the research she had done in her minor thesis. Again her intrinsic interest in the topic is clear and she referred again to the encouragement of her principal supervisor who had "envisaged this" as an option for Laura.

Laura later in her narrative re-emphasised that a PhD was not something she had contemplated prior to her supervisor's suggestion. She explained further his encouragement (page 27):

He told me that before I even started doing the Masters ... the minor thesis. He says, "You know, what you're talking about is really a PhD." I said: "I'm not

sure if I'm really wanting to do that." "Don't close it off. Keep it as an option. You don't have to say yes to it, just keep it as an option." And that was discussion that we had ... four years ago, five years ago now looking back at the time. And you know ... it worked out.

While her supervisor certainly encouraged her to consider a PhD as an option, there was no pressure on her to take it on, as there was in Elena's story. He suggested it as a possible option for her, as opposed to the strong pressure Elena felt from the School to continue with her studies. Laura went on to explain that in reflection she could identify that her supervisor saw her potential (page 27):

It became clear to me that that's what I ... wanted to do. So clearly, in his eyes he could see the potential and could see the opportunities of doing it and being there. To...to myself at that time or even earlier, I couldn't see it. Looking back though ... I could pick out, like you've also said: "Oh, you know, you're passionate. You can start seeing gaps that you could work towards." In hindsight, there's probably those flag-points that said, "Well it's really not too different an endpoint which is where she's ended up now as to where she was when she was a lot younger as an undergrad moving into postgrad studies." So it's ... hindsight's very powerful.

With hindsight, Laura identified that she had potential and passion for her topic, which had motivated her from undergraduate through to postgraduate studies and onto the PhD.

Laura clearly expressed both intrinsic and extrinsic motivation in undertaking and completing her PhD. Intrinsically she liked research and she also had a topic that she had a strong interest in investigating. Her minor thesis in her Masters degree barely "scratched the surface" and she wanted to investigate further. However equally strong in Laura's narrative were the extrinsic motivation factors: wanting an academic career and the encouragement from her supervisor. The encouragement from her principal supervisor also influenced her motivation for an academic career, as he asked her to think about her career path when she was doing her Masters degree. He also encouraged her to think beyond a minor thesis, and clearly believed in her potential to complete a

PhD. The motivation for an academic career impacted not only her decision to enrol in the PhD but also on her experience during the degree, as her supervisor encouraged her to undertake activities that would help with her academic career aspirations (this is explored further in the next chapter). Laura discussed motivation in terms of commencing the degree. However it could be possible to extrapolate from this that her strong desire for an academic career was also a continuing motivation throughout her doctoral studies. Although Laura was on a scholarship and discussed it in passing in her narrative, she did not mention this in terms of a motivating factor for either starting the PhD or continuing with the degree.

Case Study Seven: Ebony

Ebony's motivation was both intrinsic and extrinsic. She had an intrinsic interest in research itself and in the topic she developed through discussion with her supervisor. She was building an academic career as a lecturer and researcher, for which a PhD is a requirement. Having previously completed a Masters by research, she developed a research topic and was encouraged by her supervisor. Importantly, Ebony had family encouragement to gain a PhD, as noted in the first excerpt. As well, she had financial motivation in terms of time release from her job to complete her PhD.

Motivation to commence

Ebony started her story at the first mention of her doing a PhD, which came from her father (page 2):

Well the first mention ever that I might ... do a PhD ... I never, ever doubted that I would go to university, but the first mention ever ... of a doctorate was when I graduated from my bachelor's degree and my father, who had been for some part of his life a professional photographer, forgot to bring his camera and this was the first university graduation of his children, because I'm the eldest ... I'm the one who had the reputation of being the brain, much to my sisters' chagrin and they still tease me mercilessly ... and I had a go at Dad

about forgetting his camera and he said "Don't worry, I'll remember my camera the day you graduate with your big floppy hat." And ... so that was the first mention of it. And I kind of disregarded it and clearly went out to work.

Although her father clearly believed that she was capable of undertaking a PhD, and the excerpt shows an understanding of academia in the "graduate with your big, floppy hat" comment, Ebony disregarded this and went out to work in her chosen health field. She continued in this excerpt to explain that she later undertook a part-time academic job and enrolled in a research Masters degree (page 2):

Then after eighteen months or so ... took a job in academia part-time and enrolled in a Masters degree and thoroughly enjoyed getting my teeth into some research. I'd done a research project as part of my undergraduate degree and I'd ... chosen that when a whole lot of my colleagues chose other coursework units. [Sighs] [I: Was it a research Masters?] Yeah, my Masters degree was a research masters and my undergrad research project was ... just a project. It just replaced one subject ... I did a nice little study with twenty-two participants and it got published in a professional journal so I was quite ... delighted with all of that.

Ebony's undergraduate project was of a sufficiently high academic standard to be published in a professional journal and this intrinsic interest in research contributed to her motivation to undertake a Masters by research. As she completed her Masters, her intrinsic interest in research itself was also facilitated by her choice of supervisor (page 2):

And by the end of my Masters had decided that I was going to go on and do a doctorate and had chosen my supervisor ... [Laughter] ... I hadn't chose my topic at that stage. I'd found that working with my Masters supervisor was fabulous and that I wanted to keep working with him. And ... then I took a period of [paid study leave] and while I was on [paid study leave] I kept in touch with [principal supervisor] and we bounced ideas backwards and forwards ... and the project that I did for my [paid study leave] informed some of my thinking about my doctorate.

She had developed a good working relationship with her supervisor and decided that she wanted to go on to a doctoral degree and continue with the same supervisor. Her continued interaction with him, while she was on study leave undertaking a different

project from her Masters, led to the development of her topic for her doctoral thesis (page 2):

And so while I was away we hit on an idea, you know? I emailed him something and he wrote back saying, "I love this idea, let's run with it." And then ... when I came home I enrolled and away I went. So I enrolled part-time. At that stage then I was a full-time academic, sort of drifting between being full-time and being about 0.6 when I had babies.

Ebony was already in an academic career when she enrolled in her PhD, working full-time and enrolled part-time. Her intrinsic interest in research and her developing interest in the topic are clear motivating factors in her undertaking the doctoral degree.

Although she did not explicitly state it in her narrative, as an academic, Ebony would have been aware of the importance of gaining a PhD to climb the academic ladder.

Motivation to continue

Ebony also talked about the Faculty scholarship that gave her time release to complete her PhD (page 3):

The last six months was full-time. I got a Faculty scholarship to write-up. And that was really good ... it was a brave step, I think on the part of the Faculty because I'm not sure that everybody that they gave them to ... finished ... but I finished and I'm not sure that I would have finished without it, or it would have taken me a ... lot longer.

She clearly identified here that this paid time-release scholarship from the university was central to her ability to complete her thesis.

Ebony's narrative clearly shows both intrinsic and extrinsic factors in her motivation.

Intrinsic motivation came from her interest in the research topic and in the research process itself. Extrinsic factors to commence the degree included encouragement from her family and supervisor and building her academic career. Financial support from the

university in the form of paid time release was an extrinsic motivation to complete the degree.

Case Study Eight: Tasha

Tasha talked about her motivation for doing the PhD stemming from a good result for her Honours degree. However she considered that the Honours degree would not have a practical application in her field. Her motivation was both intrinsic and extrinsic. She also had an interest in the topic from talking to midwives about ethics but one motivation seems quite opportunistic as she found out about a scholarship by chance.

Motivation to commence

Tasha talked first about the Honours degree she completed and how she didn't see its usefulness in her current work environment. Her failing health during her undergraduate studies was not conducive to working in a hospital environment, so she decided to continue to an Honours year (pages 3-4):

I guess the real reason I did a PhD is because I did an Honours degree. Did you do an Honours degree? [I: yes] [Laughter] It's only when you do an Honours degree that you realise that it was a waste of time [Laughter] When I did my undergraduate degree ... I kind of worked out that ...[5 second pause] ... my health was not very good. When I did my undergraduate degree my health was not very conducive to working in a hospital, being a nurse, not so great. Got a high grade point average and was suggested by Faculty that it would be a good idea to go and do Honours research and they suggested doing an Honours degree. So I went "oh yeah, okay, fine." I just sort of followed my nose.

Tasha's health concerns and her chosen career were not complementary. Her high academic scores meant that Faculty staff suggested she continue her studies to Honours level. However, Tasha later realised that following a more academic path in her discipline only set her up for further study (page 4):

Not realising that doing an Honours degree really only sets you up for going into academia and it probably would have been a lot smarter doing a Masters

degree. [I: Would it be more practical?] Well because at least it's recognised in the outside world. And having finished the Honours degree I discovered it was not ... [I: recognised?] Recognised? Nobody really cares if you have an Honours degree except the University and so the only way to get recognition for the Honours degree was to go on and do a PhD and in fact the day I handed in my Honours thesis the postgrad coordinator said "Oh, so when are you starting your PhD?" And I just went [Laughter] "you just have these twenty five thousand words, I'll worry about the rest later." [Laughs] "No, thank you."

When she submitted her Honours thesis there was clear encouragement from academic staff that she continue to do a PhD. Tasha herself had realised however that the Honours degree was a path into academia. With her continuing health concerns, and after further contemplation, she realised that an academic career would be a good option for her (page 4):

You can imagine after a year of ... hard slog and even then my health wasn't good but at the time ... when I got over writing the Honours thesis ... I thought, actually that's probably a pretty good option for me to get into academia because it gets me out of the hospital setting which there's illness going around all the time and where I'm exposed to infection and so forth. So I thought doing a PhD and getting into academia would be quite a good move for me.

Tasha now had two extrinsic factors motivating her to undertake a PhD: a career in academia would be better for her from a health perspective and encouragement from academic staff. She continued in this part of her narrative to talk also about the intrinsic motivation of her interest in her topic (page 4):

I had a very strong interest in ethics and ... between when I finished my Honours thesis I had an opportunity to participate in the in-service program at the hospital where I worked and to talk to a lot of the [nurses] where I worked about ethics ... so the combination of what I'd had from the university and the in-service program got me thinking about a PhD. Because when I was talking to [nurses] about ethics, I realised that there was (a) not much research about ethics, and (b) not a lot of understanding about ethics within the profession. And that made me think it would be really good to do further research in that area so that's where the sort of impetus for my study came and ... that's kind of how I got myself into it.

Tasha was contemplating the possibility of a PhD due to extrinsic factors and then identified an area that she was interested in investigating, thus had an intrinsic motivation with interest in her topic.

Tasha continued her narrative to discuss finding out about scholarship opportunities. She applied and was successful in gaining a scholarship as well as a university top-up scholarship (pages 4-5):

And then another girl that had done her Honours degree with me said, "Oh, I've applied for a scholarship to do my PhD." I went "Oh, scholarship, there's an idea." Getting a scholarship, that would actually make it feasible to do. And so I ... applied for a scholarship and lo and behold I got not one, but two... I got the ... a university scholarship and on certain criteria that they paid to the ten highest applicants ... and it's just a top-up scholarship. It was three thousand dollars extra a year, and ... I just happened to be ... I think I was probably ninth or tenth but just got there, but I got it. And three thousand dollars a year is pretty significant [Laughter] And ... got the two scholarships. That enabled me to study full-time and work very part-time so just continued to work part-time because I thought it was important to stay in touch with [nursing], with the real world. Because I've always been critical of academics who've lost touch with the real world and, so there I went. Waded in ... to the academic world ... [five second pause] ... [nursing] and ethics. And there I was – a PhD student.

Although Tasha had both extrinsic and intrinsic motivation already, the tipping point was finding out about the scholarships. She explained above that this made it "feasible to do" thus the extrinsic financial motivation of a scholarship was a strong contributing motivation to her commencing her degree.

Motivation to continue

Later in her narrative, Tasha returned to why she undertook the degree. She referred here to two reasons why she did her doctoral degree – for the knowledge of the profession and for the qualification (page 20):

It's like there's two meanings of the thesis. One is ... what the project is about and one is what ... the ... whole point of the project is about as well as what the

actual content is about. And one is what the degree is about, I guess, and why you did it or ... do you know what I mean, the differentiation? One is ... why you did it for the [nurses] and one is about why you did it for yourself to get the degree. Why you did it for the people, for the profession ... for the learning, for the edification, for the knowledge that is going to be developed and the other one is getting the piece of paper and the achievement of actually getting to the end of the degree.

Tasha's motivation to undertake the degree was also extrinsic in her mention here of the knowledge gap she identified – she did it for the profession. She also discussed the motivation to continue in terms of actually getting to the end of the degree. Phillips and Pugh (2005) highlight that motivation changes during the degree and one major motivation can be to finish the PhD as Tasha noted above.

Although Tasha talked about motivation in only two sections of her narrative, she discussed multiple intrinsic and extrinsic motivation factors that influenced why she began and continue with the degree. Her primary motivation factors for beginning the degree were both intrinsic and extrinsic. Tasha saw a gap in the knowledge base surrounding her topic and was personally interested in the topic. She was considering a career in academia to make use of her Honours degree; and she was successful in being granted two scholarships. The financial motivation was strong in Tasha's case, as her health issues meant that she wanted to spend less time working in a hospital environment. Ongoing motivation included both intrinsic and extrinsic factors. For Tasha, she wanted the qualification and to finish the degree. These intrinsic factors helped with her continuing motivation. She briefly noted in the excerpt above, the extrinsic motivation of helping the profession.

Summary

It is evident in this chapter that there are some commonalities between cases in terms of motivation. All the women had multiple motivating factors for undertaking a PhD, but

there were variations in whether these were solely extrinsic or a mix of intrinsic and extrinsic factors. Not all of the women discussed motivation for continuing and completing the degree, but in some cases the motivating factors were the same for commencing the degree as for completion. However some women in their narratives did discuss reasons for completion that were different from those mentioned as relevant to their reasons for enrolment.

Intrinsic motivation factors for enrolling in the degree included: having a specific interest in the topic; having an interest in research in general; wanting a learning experience; and proving oneself academically. So does having intrinsic motivation link to completion of the degree? This is a complex question, as most of the women interviewed for this thesis had other experiences during their degrees which impacted on their completion. These included: their own health concerns or those of a partner, family member or supervisor; pregnancies and having children during their degree; other family issues, including serious health problems of family members, which impacted on progress; and issues within the Department in which they were enrolled. A number of the women at the time of interview had not yet completed their theses. Eve, Laura, and Ebony had completed their degrees and all three reported strong intrinsic motivation through interest in the topic and research in general or in proving oneself academically. All three women completed their degrees within standard duration; that is, three years full time. In Ebony's case, although she enrolled part-time and had a child during her degree, she completed her PhD in two years when the candidature is converted to fulltime equivalent. Andrea, Karen and Tasha were within three to six months of completing their doctoral degrees as reported by them at the time of interview. Jane was pregnant with her first child and did not indicate how close she was to completion.

Strong intrinsic motivation appears to assist in helping women to complete, but ameliorating and negative factors also need to be considered.

Extrinsic motivation factors for enrolling in the degree encompassed: pursuing an academic career; financial motivation in receiving a scholarship; consolidating one's career; encouragement from others (including academics, supervisors and family); and role models. Laura reported encouragement from her potential supervisor helped her to consider a PhD as a step towards an academic career. This tied in with her intrinsic interest in research and the topic. In Jane's case, the high school careers advisor was someone she wanted to prove wrong and she acknowledged this as a negative motivation. As mentioned previously, Leonard (2001) pointed out that undertaking a PhD for the title "Dr" can be a problematic motivation. However what needs to be taken into account are the other motivation factors. These could have either an ameliorating or debilitating impact on each other. If gaining the title "Dr" had been Jane's only motivation for commencing a PhD, it is unlikely to have been strong enough to also be motivation to continue during difficult parts of the candidature. Jane wanting the title "Dr" to prove her careers advisor wrong is connected to her intrinsic motivation to prove that she could "do more." Thus in this case, another motivation, in particular an intrinsic one, supported her to move beyond simply gaining the title.

Motivation for continuing the degree was less easily identified in the narratives.

Intrinsic motivation factors for continuing the degree included: proving to oneself that you could achieve academically, continuing interest in research in general, and interest in the topic. Extrinsic motivating factors for continuing centred on financial motivation in a number of cases (needing the scholarship) and wanting an academic career.

Conversely this latter factor became a negative motivating factor for Karen who changed her mind about wanting to be an academic.

Previous studies, particularly the research of Dever et al (2008), have been survey based. Even if a survey allows a respondent to select more than one option in terms of motivation, it does not allow for unpacking the ways in which motivation can be multiple and complex. Jane in her narrative commented that "they're not issues you can tick a box for and say I did my research because I wanted this or I wanted that." As has become clear through analysis of the eight narratives here, motivation is multi-layered and is affected by other factors. These factors include experiences of illness (of self or others); departmental politics; and encouragement or lack of it from people such as supervisors and family.

Chapter Five continues the analysis of these eight women's experiences by looking more closely at their supervisory relationships, and how these relationships helped or hindered their PhD journeys.

Chapter Five — **Supervision and its negotiation**

The supervisory relationship is central to every PhD student's experience. Students and supervisors enter into supervision with varying expectations of their roles and, if these are not clearly discussed at the outset, problems can arise which may not be easy to discuss or resolve (Phillips & Pugh, 2005). This relationship has been described as "the most important channel of intellectual inheritance between one generation and the next" (Federation of Australian University Staff Associations, 1979). However, despite its importance, it is a pedagogy that is poorly understood. The success of the Australian PhD system is heavily reliant on the supervisor(s) (Heath, 2002); yet the student-supervisor relationship is described as probably the most variable factor affecting PhD students, "because it depends so much upon individual personalities, styles and expectation" (Smeby, 2000, p. 54). Gurr (2001) argues that supervision requires "a dynamic awareness of the state of the relationship and flexibility in responding to inevitable changes" (p. 81). Other research has indicated that while strong academic guidance is important, the personality of the student and supervisor and how they interact needs equal consideration (Gill, 1999; Vale, 2004).

Leonard et al. (2005) noted in their study of doctoral graduates in education at one UK institution that less than one in twenty of their participants mentioned a poor relationship with their supervisor. Several participants in their research noted that they were unsure about whether they would do a doctorate again, but they certainly would not undertake it with the same supervisor. Leonard et al. (2005) reported that even the few people who had multiple changes of supervisor, overall had few regrets. Many studies focusing on supervision and its discontents have, according to Leonard et al. (2005), had restricted or biased samples while their paper had a systematic sample with a reasonably large response rate. Nevertheless, the critical role of supervision in the

PhD candidature and its successful outcome is not well understood in much of this literature. It is important to note though that Leonard et al. (2005) did not see the supervisory relationship as a critical factor in timely completion.

This chapter will explore the literature on gender and choosing a supervisor, frequency of supervision meetings, and single versus team supervision before analysing in detail the importance of supervision in the narratives of the eight women.

Choosing a supervisor

Surveys of student satisfaction and completion rates indicate that problems in the student – supervisor relationship are common (Gurr, 2001). Research with Australian postgraduate students found that twenty-five percent of students in one particular survey reported being "dissatisfied" or "very dissatisfied" with their experience (Powles, 1989). Of this group, Powles (1989) found that thirty-one percent cited problems with their supervisory relationship as an issue. Another study with University of Melbourne postgraduates also reflected this concern, with the most commonly reported problem relating to meetings with supervisors (Powles, 1989). Gurr (2001) adds that postgraduate supervision literature has often adopted a teacher-centred, rather than student-centred, approach. Consequently the collaborative nature of the student and supervisor involved in this relationship is not adequately emphasised (Gurr, 2001).

Phillips and Pugh (2005) stress that the supervisory relationship is crucial to successful PhD completion; both sides must understand and discuss their respective expectations throughout the candidature (Phillips & Pugh, 2005). They outline a number of supervisor expectations: students should be independent; produce work that is more than a first draft; have regular meetings; be honest when reporting on their progress;

follow the advice that is given; and be excited about their research (Phillips & Pugh, 2005). Phillips and Pugh (2005) detail several strategies for students to ensure that they take responsibility for managing the relationship with their supervisor. These include: work on educating their supervisors on the topic; try to fulfill supervisors' expectations and discuss differences of opinion; and reduce the communication barriers.

Prospective PhD students need to be selective in choosing their supervisor/s. Leonard (2001) advises that good students, regardless of gender, citizenship status and age, can afford to be selective. She emphasises that "women in particular may lack self-confidence and feel flattered by, and accept too readily, early offers" for supervision (Leonard, 2001, p. 85). While a good supervisor is pivotal in the PhD experience from both the training and educational perspectives, this can vary according to the discipline (Leonard, 2001). Humanities and social science students stress this as an essential element. However science students often have access to other forms of support within a team environment (Leonard, 2001).

According to Leonard (2001), the key element in the student-supervisor relationship for students is availability, both the physical availability and the emotional level of the relationship. Students need to consider what they want and/or expect in terms of supervisory interaction (Leonard, 2001). Specifically, will the supervisor be physically available? Academic research staff may be off-campus, interstate or overseas for extensive fieldwork, study leave or conferences. They may also have heavy administrative responsibilities that will impinge on their available time. As well, it is important to consider the number of other students being supervised (Leonard, 2001). Another important element of this "availability" is how much a student considers they can be open and honest in their communication with their supervisor. A supervisor must

be both supportive and constructively critical of a student's work, which can often be a fine line (Leonard, 2001). Leonard (2001), like Phillips & Pugh (2005) and Salmon (1992), emphasises the need for both the student and supervisor to discuss the process of supervision at the very beginning of the relationship. Students develop their problem solving and negotiation skills through making visible and explicit the accountability, protocols and process of doing a doctorate with their supervisor/s. This enables negotiation and, if necessary, for either party to contest their differences of opinion (Leonard, 2001).

Gender and choosing a supervisor

Students are advised to choose a supervisor who is knowledgeable about the specific subject areas, compatible with their politics and epistemology, good at communicating ideas and committed to women (Leonard, 2001; Salmon, 1992). In general, Leonard (2001) suggests that women supervisors, or other women staff, can be helpful to women students. She points out, for example, that men and women often have different conversational styles (Leonard, 2001). Male supervisors may misunderstand women student's use of narrative and personal experience, and their silences; and see them as inappropriate in academic settings (Leonard, 2001). The choice of supervisor cannot solely be based on gender, as Leonard (2001, p. 95) points out that "not all women have empathy with women students and some are downright hostile."

Smeby (2000) found that many studies report that where female students have female supervisors there are higher levels of satisfaction than those with male supervisors. This survey of the literature on same-gender relationships also noted findings that both support and contradict the assumption that female supervisors are important to the success of female research students. Smeby's (2000) study on Norwegian graduate

supervision found a tendency towards same-gender relationships, which was stronger among female than male students and supervisors. However it must be noted that the difference may be due to male supervisors having more students than their female counterparts. This result corresponds with findings in the literature that female students generally prefer, and are more satisfied with, same-gender supervisors (Smeby, 2000). Importantly, discipline differences are noted here. For female students, same-gender supervision is strongest in the natural sciences and weakest in the "soft" fields; for male students this tendency is stronger among men in the social sciences and weaker in the natural sciences (Smeby, 2000). Smeby (2000) argues that the need of female students for female role models, and female supervisors' willingness to support female students in more male-dominated fields, may be more evident in "hard sciences" than in what may be considered "softer" disciplines.

Other researchers argue that women, particularly in the sciences, may be less likely to support other women (Ellemers, van den Heuvel, de Gilder, Maass & Bonvini, 2004). The term *queen bee syndrome* has been used to describe the way that women who are successful in male-dominated environments may be opposed to measures that increase women's equality (Ellemers et al., 2004). Ellemers (1993, as cited in Ellemers et al., 2004) argues that female academics often need to have a particularly masculine self-perception in order to be successful in male dominated work environments, such as science based disciplines. Since this involved emphasising difference from other women, rather than similarities, it could be considered as an explanation for the bias of female academics against female doctoral students (Ellemers et al., 2004).

Developing the relationship — **gender perspectives**

The literature on research students often talks about the need for students to "handle their supervisor/s", but the significance of gender is seldom discussed (Leonard, 2001). Research has shown that the gender of the supervisor is a particularly important factor for women (Moses, 1990). In a national study Moses (1990) found that Australian women appear to be denied the support they need, due to the informal nature of the supervisory relationship. Moses (1990) reported that while most women said they were satisfied with their supervisor, they were less satisfied than men. She also reported that women, particularly older women, had less access to, or help from, their supervisors compared to men. Leonard (2001) argues that in general it can be helpful for women to have a female supervisor where possible. In particular, men and women have different conversational styles, which may lead to misunderstandings.

Frequency of supervision meetings

Phillips and Pugh (2005) recommend regular meetings between student and supervisor/s, whether daily, weekly, monthly or less often. An advantage of frequent meetings is that often they are more casual and therefore are more likely to help with ease of discussion (Phillips & Pugh, 2005). Heath (2002) reported on a quantitative analysis at the University of Queensland of 355 PhD students regarding supervision. Eighty-five percent of students expressed satisfaction with the expertise of their supervisor(s). For those who expressed dissatisfaction it was not possible to determine if this was a result of factors in relation to the candidate or supervisor. However, one factor that affected satisfaction was the frequency of supervision meetings: 70 per cent to 85 per cent of students expressed satisfaction with a range of aspects of supervision when meetings were held at least fortnightly. Students who met their supervisors monthly or less frequently were overall less satisfied with the various aspects of

supervision that were tested (Heath, 2002). It has been recommended that the expected frequency of meetings is negotiated between student and supervisor/s at the beginning of the relationship (Phillips & Pugh, 2005).

Heath (2002) points out that we need to be cautious in interpreting results on the importance of frequency of supervision meetings and its relationship to student satisfaction. For example, the quality and effectiveness of the meetings while important were not measured by this survey; and the amount of informal interaction was not specified. Discipline, gender, enrolment status and nationality were all variables that may impact on the results. Similarly, supervisor variables such as age, gender, background and personality differences were variables that affect the supervisory relationship (Heath, 2002). A clearer understanding of the composition of both the student and supervisor populations involved is required before firm conclusions can be drawn (Heath, 2002). The results of Heath's (2002) study, however, provide some evidence to support the view that regular formal meetings between a student and supervisor(s) increase the likelihood of completion and also increase the satisfaction that PhD candidates report with their supervision.

Single versus group or team supervision

There are various models of supervision. A single principal supervisor can be appointed, or a principal and co- or associate supervisor. A third model is a team approach where the principal supervisor will bring in other experts as and when required.

Interestingly Heath (2002) noted that no differences were found with levels of satisfaction between students who had a single supervisor and those who had two or

more supervisors, when tested for differences within discipline groups, such as the sciences or the social sciences and humanities. Recommended guidelines at UK universities are that each PhD student should have a team of two supervisors (Phillips & Pugh, 2005). This helps overcome some of the issues that can arise with a single supervisor including: the supervisor being absent from the university or having a heavy teaching load, the supervisor not being an expert in the whole range of the research topic, and lack of supervisory experience. These issues are less likely to hinder a student's progress if there is a second supervisor available to provide support (Phillips & Pugh, 2005).

The table on the following page outlines the supervisory arrangements of each of the eight women, including any issues that they reported and how these were resolved.

Table Six: Supervision

	Number and	How did it work	Issues	Resolutions
	gender of			
	supervisors			
Eve	Two (both female) – one encouraged her to enrol in a Masters initially and suggested the second supervisor	Worked well – had a hand-over every six months (one supervisor for six months then swapped)	None reported	Very supportive, personal aspect to the relationship
Elena	One (male) – she knew him from undergraduate classes (he was not her Honours supervisor). She changed supervisors (to another male)	Disastrous, even when she changed to new supervisor	No personal interaction, felt unsupported; reported bullying behaviour from the first supervisor	Changed to another supervisor but damage was already done
Andrea	Two (female), then added a third (male)	Sought an additional supervisor to provide critical feedback	Was not getting what she needed academically from her initial supervisor	Found a third supervisor to "fill the gaps" in her supervisory arrangements
Jane	One (female), her supervisor took two six-month sabbaticals during which time Jane had to continue without supervision.	She had prior knowledge of the supervisor from other students, but was not aware of office politics and how this would impact on her students	Need to negotiate was ongoing (learned from other student's experiences with this supervisor but was finding her own way forward)	Supervisor was role model. Jane has learned to "pick her battles" about what needs to be negotiated and what she chooses to let go
Karen	One principal (male) and two or three co-supervisors (mainly male, one female). When her principal supervisor died, one of the associates (male) became principal supervisor	Difficulties dealing with the death of her principal supervisor and adjusting to the different style of a less experienced supervisor	Inexperienced new supervisor	Learning to negotiate as she progresses with her candidature
Laura	Two (male and female) – associate brought in to read draft chapters	Strong relationship with principal supervisor. Worked well as a team.	No negative issues mentioned	Supervisors seem to have a structure in place which had worked in previous PhD supervision
Ebony	Two (male and female) – very little said about co- supervisor (female)	Mainly worked with principal supervisor; second supervisor utilised when principal on leave	Knew principal supervisor from Masters research degree	Prior knowledge of working with supervisor. Provided encouragement
Tasha	Two (male and female) – associate brought in when she had drafted chapters	Excellent relationship with principal supervisor	Supervisor acts as a strong advocate	Principal supervisor was supportive and advocated for Tasha's rights as a student

While the literature highlights several issues in student-supervisor relationships that may affect the student's experience – same-gender relationship, availability, communication – the women's narratives are analysed to explore the important issues that impacted on their experience. This analysis looked at how the supervision was initiated and negotiated, where discussed by the participants. Supervisory arrangements differed markedly between the participants and there were varying amount of negotiation that had to be undertaken.

Case Study One: Eve

Eve had two female supervisors with whom she had a good relationship. She mentioned early in her narrative that she already knew her co-supervisor, as a peer and a friend, before she enrolled. She discussed both supervisors in terms of encouragement, engagement, time arrangements, friendship and support.

Beginning of supervisory relationship

Eve's supervision started when she discussed possible thesis topics with her cosupervisor who then contacted another female academic at the university at which she would subsequently enrol (page 3):

I made my way to [dual sector metropolitan university] mostly through a peer and a friend who ended up becoming my co-supervisor, who believed in what I was doing, who when I talked with her about possible subjects for doing a thesis, she became very excited and she spoke with [the postgraduate coordinator and potential supervisor]. And she said, "Oh I'd really like to, to take this student on board."

Her co-supervisor was enthusiastic about Eve's topic and sought out a colleague who was willing to be principal supervisor. Eve then talked about being "actively encouraged" to apply and stated that her supervisors were engaged and interested in her work, and she felt welcomed and supported (page 3):

I was actively encouraged to apply and felt all the way from the beginning with that application that I was ... it wasn't a given, it wasn't a guarantee that I was going to get it, but I felt that [co-supervisor] and [supervisor], and I think the University through them, were really engaged with and interested in the work that I was doing. So I felt very welcome. I was delighted when I heard that I had won the scholarship ... [I: So it was very supportive?] Very supportive, right from the beginning. I mean it was the individuals involved, but it was certainly the university that was saying "welcome".

Eve was actively encouraged by both supervisors to apply for a scholarship as well as to enrol. From the outset of her supervisory relationship, she reported that her supervisors were supportive, engaged and interested in what she was doing.

Regular meetings and balancing co-supervision

Eve's supervision arrangement was split between the two supervisors on a six-month on, six-month off basis. Eve noted in the excerpt below that this worked very well for her (page 6):

I must add that the supervision arrangement with my supervisors that everyone agreed from the beginning it would be a six-month on, six month off arrangement. So I wasn't being co-supervised at the same time. And that really worked very well. I was free and able to talk to, if I was being supervised by [principal supervisor] for that six months I was still able to talk with [co-supervisor], and vice versa, but I was primarily just with one, it was a one-on-one with one supervisor and I think that worked very well. Because [principal supervisor] is grounded in academia, and [co-supervisor] is also an academic, but she's also has that knowledge of the [relevant] industry. So that ... combination of supervisors worked very well in that on-off, six months on, six months off ... worked actually extremely well.

This arrangement could potentially be risky if the supervisors had different viewpoints on the direction of the project – six months is quite a long period of time to take a research project in one direction, based for example on the industry-based supervisor's advice. However for Eve this worked well and she was free to contact her alternate supervisor at any time. At the end of each six-month period there was a handover meeting held usually over dinner (page 6):

And at the end of each six-month period, we had a handover, which was usually over dinner. And those dinner meetings were lovely, where we would get together and talk about what was to come, where I had been, what needed to be done and for everyone to be brought up to speed. And I would then just transfer over the other supervisor. And that worked very well.

These regularly scheduled handover meetings were a chance for Eve to connect with both supervisors and reassess progress. Eve later discussed that in the last six months of the degree her supervisory arrangement changed and now both supervisors were working together with her. She noted that this could have proved difficult; but they worked well together and thus were able to sort out any difficulties (page 12):

I was writing up and in the last six months, the arrangement of six months on and off with my supervisors changed. The last six months we agreed that all three would be on board. That we would all work together to pull it together, and that worked very well as well. And it could have fallen apart in some ways because I think we were so used to working the way we had where I was taking directions just from one or the other, so now we were really getting into that, that system of having to agree and disagree ... I think that by that stage we were working well enough as a group to sort out, to sort out any difficulties there.

Eve showed awareness of the fact that there could have been problems in changing a supervision strategy that was working well at this final stage of her research. However the change was a collaborative and consultative one. Eve, in the excerpt above, noted that "we agreed" and referred to the three people involved as a "group" indicating that it was to some extent an equal relationship by this time.

Personal relationships

One of the issues noted in the literature is that supervisors can vary in their personal relationship with their students. Some supervisors believe that any sort of personal relationship with the student is to be avoided, while others encourage a more friendly form of interaction. One of the reasons identified for the success of same-gender relationships between student and supervisor is that many, but not all, women can be more open to some level of personal interaction with their students (Leonard, 2001;

Smeby, 2000). Eve explained that her supervisory relationships were enhanced by friendship, but also that she understood why sometimes supervisors keep their students at a distance (page 6):

Constructive, and also, I think that sometimes working with supervisors they don't believe that they should have any sort of personal relationship with the student, that it should be sort of arm's length. And I understand the reasons for that and there was certainly, this was a professional arrangement. However you know the hand of friendship was extended and possibly that was exacerbated by the personal circumstances as well, but I think that that would have been there anyway. And it certainly enhanced the professional relationship.

Eve acknowledged that this was a professional arrangement and that her circumstances may have augmented the friendship component of the relationship. Eve's personal life was very difficult throughout most of her degree with her partner undergoing treatment for a life-threatening illness. Her relationship with her supervisors was strong and she noted that the "hand of friendship", mentioned above, was reciprocal (page 20):

Plus one of my supervisors went through her own personal crisis with her own partner and it was to do with cancer, and that was ... that often when you are just talking about yourself a lot and then all of a sudden, oh, the other person you know the other person is dealing with something too ... that kind of shakes you out of dwelling on yourself. And so I was able to give a little bit of support back the other way. And that was good.

The relationship Eve developed with her supervisors then included an element of friendship and, as indicated above, was reciprocal.

Mentoring, support and encouragement

Eve also discussed the active mentoring and encouragement from her supervisors (page 12):

My supervisors, all the way through were not passive, they were very active mentors encouraging me to go for things, [principal supervisor] in particular would send me conferences that she'd heard about and opportunities electronically. Which was just fantastic ... she would be looking through them for herself or checking them and she would see something, she'd think "Oh

[Eve] might be able to do that, or might be interested." She tried to help from a distance ... which was just great.

Her supervisors encouraged her from the beginning of her PhD, before she enrolled, and this continued throughout her candidature.

Eve's reported supervisory experience demonstrated many of the factors that have been highlighted in the literature as important to successful supervision. She had support and encouragement to enrol in the degree, and felt that her supervisors were interested and engaged with her research topic. Split supervision on a six month basis was negotiated and Eve knew she could approach either supervisor at any time. The supervision arrangement changed in the final six months and this was also negotiated between the student and the supervisors. There was a strong reciprocal interaction between Eve and her supervisors which was in part due to Eve's personal circumstances. This was reported as enhancing the professional relationship.

Case Study Three: Andrea

Andrea was successful in gaining an industry-funded scholarship, which meant she had little if any choice in her supervisors or the research topic. Both of her supervisors were female. She was aware of the difficulties that can occur when a student doesn't get to choose their own supervisor and discussed this at an early point in her narrative. She also discussed not getting what she needed from her supervisors and seeking support elsewhere through peer networks and a third supervisor.

Beginning of supervisory relationship

Early in her narrative Andrea discussed the issues of the lack of choice in supervisors and the time that she took to work out their strengths and weaknesses. She also

indicated at an early point in her story that she was prepared to look elsewhere for support if her supervisors could not provide it. This foreshadowed her later discussion about an additional supervisor (page 2):

And then of course I had also given supervisors and that can bring its own problems because you don't know how much they know about the topic. You only can find out much later what their kind of expectings [sic] is and obviously you haven't actually sought them out yourself and so ... even with people that know the supervisors they can have trouble ... and then recognising what the strengths and weaknesses are of the supervisors because not only between the two supervisors you have but also in terms of what they expect you to do and what you expect from them and ... sometimes it's off one person you might, she might be very reliable in terms of administration, letting you know of deadlines within the university and forms to hand in and all the rest of it. And the other person might be more like a guidance academically and so forth, so it's a matter of finding out the different personalities and what they can offer you ... and then if you can't find what you're looking for to look outside.

Andrea didn't discuss whether she had any contact with either supervisor prior to applying for the industry scholarship. Her decision to undertake a project where she did not choose the topic and with supervisors allocated brought with it different issues to those of students who had initial discussions with a supervisor/s that had an interest in the same topic or area of research. The excerpt above indicates that Andrea was aware that there could be added difficulty in accepting set supervisors: their depth of knowledge in the research area and their expectations of her as a student were unknown before she began working with them.

Negotiating supervision

Andrea talked about working out the respective roles for student and supervisor, but referred to it as "figuring out" rather than negotiation when I probed further about any difficulties with supervisors. She mentioned that she wanted "guidance" from her supervisors but she wasn't getting the sort of guidance that she wanted (pages 3-4):

Not so much negotiation, more ... just trying to figure out what you're supposed to do and what they're supposed to do ... as I said learning about their strengths

and their weaknesses and I was initially someone who looked for a lot of guidance and couldn't find it. Until you kind of start to realise that you can have all the guidance in the world, you still need to do it. And so it's a matter of ... presuming that you are confident enough to write the damn thing.

As she had not selected her own supervisors, Andrea reported that it took some time to work out their respective roles. She indicated that she wanted guidance and appears to have expected this from her supervisors, particularly in the early stages of her candidature. A number of researchers have found that this is common. Gradually as a doctoral student continues they will become more independent, or can be encouraged to do so (Delamont, Atkinson & Parry, 2004; Leonard, 2001; Phillips & Pugh, 2005). Andrea was clear on what, to her, was good supervision or "guidance" (page 4):

And proper guidance, I don't mean that someone puts you on a pedestal and tells you all the compliments but more critical feedback, that someone is actually competent to read the text and give you on the text detailed feedback of how you haven't thought it through properly or what you're kind of assuming the reader to already know or any of those things so ... it's not necessarily a matter of the supervisor having the expertise in your very area but just to be recognised as a person who's trying to do a job decently. And one of the things that used to annoy me is that ... each supervision session started with "What was your topic again?" so I just felt like... [sighs] ... in a production line ... where you're just not counting as an individual, you're just there being processed.

Andrea wanted supervisors who gave critical feedback on her work, particularly her written work. She reported feeling like she was "in a production line" and that her supervisor wasn't paying attention to her as an individual research student. She continued in this excerpt to explain that she had to find a way to compensate (page 4):

Look they are busy people and I don't blame them but it's still not fair. And I've heard worse stories so I guess mine isn't really bad in comparison but again it's a matter of ... where you're at and what you can source otherwise. If you've got excellent books or if you've got excellent people to run ideas by then you very quickly compensate for the ... weaknesses of your supervisors.

Andrea understood that there were worse supervisors than the ones she had. She had not selected them herself due to the type of project she was working on and she started looking elsewhere for the support and guidance that she needed. She mentioned seeking

out reference books and other people to "compensate" for her supervisors' weaknesses. She continued her narrative to explain why the supervision she was experiencing wasn't working for her (page 4):

But if you're still kind of figuring out what you're trying to achieve and where you're heading and like, they did things like let me write the introduction like five times, ten times, more over and that just is not helpful when you haven't got a main plan yet ... so it's also a matter of actually having the experience how such a thing as a thesis comes about. And ... I guess they had a more positivistic understanding ... that you make yourself a plan and you apply a cookie cutter to the data and you generate hypotheses and all the rest of it and then you've got your thesis, but that's not how most learning occurs. It occurs much more organic and ... but as I said you find that out just by doing it, so there's nothing like experience.

Andrea expressed frustration here at the repeated suggestions from her supervisors to continually rewrite her introduction. What she wanted was a better understanding of how to plan out the research project, but reported that her supervisors were very positivistic while she was in search of a more "organic" learning experience. She concluded this segment with her understanding that this happens through doing the research.

When Andrea talked about the time that it has taken to complete (she stated she was within 6 months of finishing when I interviewed her) she referred back to her supervisors and the issues she had (page 7):

Again on one hand you can say it's because of the child, because it's exactly that timeframe that I've added on. On the other hand you could say it's because of various struggles with supervisors. I actually changed one supervisor because ... well he's just so much better ... and he provides me with the critical feedback that I need. He's the right kind of mixture between being confident that you can do it and being critical on how you're doing it ... so whether that's a struggle or whether it's a child, I don't know ... it's hard to say.

She was clear about the type of supervision she needed (critical feedback and support) consistent with that suggested in the literature (Delamont et al., 2004; Leonard, 2001; Phillips & Pugh, 2005).

Gender and supervision

Andrea acknowledged here that having a child was impacting on her time to complete her degree. However she also emphasised that she had struggles with her supervisors and sought out an additional supervisor who provided her with the supervision that she needed – including both support and critical feedback. Her new co-supervisor who was male but Andrea was of the opinion that her supervisory difficulties were not gender related (page 7):

There were first two females and now the new one is male ... that's a hard thing to judge because first of all it might depend on the discipline, just in terms of how many males or females are working ... [I: especially when you get into sciences...] Yeah, social sciences is usually pretty good in terms of females but ... I wouldn't say that necessarily it was related to gender that I had difficulties, yet you could say there was, there's a certain presumption how things will go. And because they've been both mothers, you know how you will mother or any of those kind of things but in terms of the supervisory relationship I think it's more dependent on personalities than on gender.

Andrea thought that a good fit between student and supervisor was more personality dependent than gender-related, although she does comment that there were presumptions about how she would "mother." I interpret this to mean that her two female supervisors' had commented or made assumptions to Andrea about how having a child would impact on her research degree. However Andrea did not elaborate further on this topic.

Finding alternative support/supervision

Andrea sought an additional co-supervisor to provide the guidance and support that she felt she wasn't receiving from her original supervisors. This new supervisor gave her

critical feedback and was confident in her ability to undertake and write up the research (page 8):

One of the things that I appreciate most about my new supervisor is that he simply hasn't stopped learning ... he doesn't think he's eaten wisdom by the spoonful ... and I think that's very important because you need to keep that curiosity. Otherwise ... you just don't feel you really need to finish the PhD in a way because if you already know it well then, what [sic] are you bothering? That's one of the things of real ... as I said critical feedback and I guess a willingness to learn ... and I guess as I said before that confidence in you being able to write it as well as still working on the text and ... wanting to go on the journey with you. Because that, he always says that's what methodology's all about, it's the way you come to learn about something and that's a simple yet striking way of just thinking about methodology. So he doesn't have necessarily more years, not many more years than my first supervisor, both my supervisors of which I've kept the principal one but he just sees ... so many PhDs through as an external supervisor that he knows the tricks of the trade.

Andrea used some very evocative phrases (for example, "he hasn't eaten wisdom by the spoonful") and in the end it sounded as though Andrea had come to terms with adjusting to her new co-supervisor's style. Fundamentally, she was prepared to be flexible in the supervisory relationship because she respected his track record and willingness to "go on the journey with her."

It is interesting to contrast this supervision style with that of Elena's first supervisor, who was only interested in output, not sharing the student's journey. Andrea described having trouble with her principal supervisor not providing consistent guidance (page 8):

So because my one supervisor, the one I kept, she keeps on changing the ... the guidance let's say... [I: how?] ... If you come one day and you say you are going to write it like that she says "oh yes that's fantastic" and the next day you could, next supervision you can put it completely on its feet and she'll say "oh that's great, that's wonderful, that's the way you should do it." So in other words it's not even a sounding board, it's just ... she doesn't think much, she just ... anti-thinking sort of thing, she's very good at admin and that's good because quite often ... that's what you need to have at the end of the PhD you need to give the proper updates ... do all your defence and ... progress reports, all of these things and you need to have someone that's actually capable of getting all these forms in on time, informing you that they have to be filled out in

the first place and all the rest of it. So I wouldn't underestimate that, but I just know that I can't get the [word missing] theoretical or thinking.

Andrea reflected that her principal supervisor's strength was the administrative side of the doctoral process, but that Andrea had trouble with getting consistent feedback. If in two separate supervision sessions Andrea could present two completely different versions of something and not receive critical feedback, how engaged was her supervisor with the project? An alternative explanation is that the principal supervisor was trying to get Andrea to decide which version was the best one to move the research forward. However Andrea's specific criticism here was that she couldn't even use her supervisor as a sounding board, indicating that her supervisor was not engaging in critical discussion and feedback. She continued to explain that it took her a while to work out that her supervisor was more data-focused than theory-focused (pages 8-9):

Because as she just makes maybe one or two sentences of comment on a 10 page draft and that's just not enough ... that's fine as long as I know that she's not ... at first I was confused, I didn't know whether it was just me and now I'm think well maybe it's me but also her. That we just don't have that relationship. And I'm not sure whether she ... can give that guidance to anyone ... because it's ... not that she's incompetent, by no means but she has a way of not relating to theory as much. She is much more kind of a data cruncher, positivist, kind of, quantitative person, and if you say life was difficult, she just goes, "Yes, but what about my typology." So that's the kind of frame that she comes from and that's fine, as long as you recognise that ... and you just say, "yes of course" and move on and you're not that disappointed anymore.

The final sentence in this excerpt was very interesting – "and you're not that disappointed anymore" – because the "anymore" could indicate that she was initially disappointed but accepted she couldn't get what she needed from her principal supervisor, and looked elsewhere for guidance.

Later in the interview I asked Andrea about advice or strategies she would give to someone else who was thinking of doing a PhD. She emphasised finding an appropriate supervisor (page 17):

You should try and find a supervisor that's in your area who's got that attitude of wanting to learn with you ... and still being able to give you critical feedback ... you should maybe look at what they've published, and whether there are any similarities in approaches or thinking that would suit you.

Andrea's advice reflects the literature which suggests that students should research and interview potential supervisors to determine their theoretical and methodological approaches; find someone who can give critical feedback and who wants to "learn with you" (Delamont et al., 2004; Leonard, 2001; Phillips & Pugh, 2005). Not every supervisor and student will be able to develop a compatible supervisory relationship. In some cases, as for Andrea, this can be overcome by seeking additional supervisory support.

Andrea's supervision experience highlighted the need for students to be able to negotiate and get the support that they need, either from an additional co-supervisor or from other sources such as peer networks. Andrea's self-awareness of what she needed, in terms of critical feedback and encouragement that she was capable of writing the thesis, enabled her to seek out a suitable co-supervisor. It also highlighted the difficulty in undertaking a predetermined project that has set supervisors attached if the student later finds that they are not able to get the supervision they require.

Case Study Four: Jane

Jane's principal supervisor was a woman at professorial level in a hard science discipline. Jane talked about respect for her supervisor early in her narrative, but was aware that she could be difficult to work with as her brothers had been co-supervised by the same person. The delays that Jane described with her thesis related back to issues with the supervisor wanting further experimental work. She talked in detail about her negotiation with her supervisor.

Beginning of supervisory relationship

Jane's principal supervisor helped her to transfer as an undergraduate from a different university (page 5):

First of all I came and met with her and spent a couple of hours talking to her and then she arranged for me to actually spend a day here attending lectures and things which was good ... [12 lines deleted] ... but definitely that was a big influence and I held such respect for her ... because I knew that people ... even for my age ... people were still surprised when I told them I was doing [discipline] and often there was "oh not many girls do that." So I was impressed and happy that she was older than me and she was so advanced, and had so much respect from the people around her for what she did ... that I gained respect for her.

Taking the time to help her as an undergraduate influenced Jane, who was also impressed with her supervisor as a successful woman in a male-dominated research field.

Negotiating supervision

At the time of interview Jane was in the latter stages of her research degree and wanted to finish, but her supervisor wanted to re-do experiments in order to answer questions raised in response to journal articles (page 8):

Is it worth another twelve to eighteen months of trying to get this finished when maybe it won't be finished? Maybe ... there's things that come up and you think well ... to answer to that researcher's question who's criticised the last paper I wrote I'm going to have to do another six months worth of experiments. As much as my supervisor would love that I would do that, realistically that's not an option for me. I'm not willing to do another six months of experiments and then however long it takes after that, because the truth of it is, once you've done that ... another question might come up and then another one and then another one and you're there forever. I guess that's a source of conflict between candidates and their supervisors because the supervisor has got, as far as they're concerned, all the time in the world because once this student goes, another one will come along and keep going.

Nearing the end of her doctoral degree, Jane was struggling with what she identified as a source of conflict between some students and supervisors. In some disciplines, particularly the science-based ones, chapters are written as articles and submitted for

journals in order to receive feedback. What Jane was finding was that with her supervisor, this could become a never-ending cycle of further experiments in order to answer more questions. She appeared in this excerpt to be struggling to convey to her supervisor that for Jane, this constant re-experimentation was not a realistic option.

Supervision and departmental politics

Jane discovered that some staff, including technical staff, did not get along with her supervisor. By default, when Jane had problems with her equipment, she found it almost impossible to get fixed. The dislike of her supervisor was transferred to the student.

This continued even when her supervisor was on leave (page 9):

That [equipment concerns] put me in limbo and also that [sighs] created a lot of tension ... within the working environment that as much as when I was an undergraduate I thought that everything would be wonderful because I know all the staff, after that happened it turned out that a lot of the staff didn't get along with my supervisor which ... then apparently transferred to me so they no longer got along with me either. [I: office politics...] Office politics, which you know, is all it was but it ... that honestly slowed me down as well. Because when you can't ... like if you're doing experiments and something breaks, if you can't turn around and walk into the workshop and say, "This broke, can you please fix it for me?" then you're stuck and you know you have to find another way. Which, sure there always is another way but it can be a time-consuming way, not to mention stressful way. And my supervisor has taken two six-month sabbaticals while I've done my research ... which means then that when those things do happen then I'm all alone to deal with it which makes it even harder so ... that's probably eighty percent of why it's taken me longer than it should.

This issue of departmental politics severely affected Jane's progress in a highly experimental research project. While it could be said that no supervisor will be universally liked by all staff in their department, a strongly entrenched dislike as reported here by Jane is most likely to negatively impact on any student associated with that supervisor.

Jane continued in her narrative to discuss issues she had with her supervisor not wanting to submit articles to journals for feedback. As mentioned above, this is a common

practice in science disciplines. While Jane here accepted some responsibility for the time that the research was taking, she specifically stated that this reluctance to submit work was a cause for concern (page 9):

Probably my supervisor is the reason why it's taken ... she's responsible for the rest of that. I'm sure I'm responsible for some of it [laughing] I'll put my hand up for that. I'm sure I'm responsible for some of it. I mean things happen, but I guess that at times she seemed reluctant to submit my work. And that I've spent a long time writing and preparing a paper and then at the last minute she'll say "oh no, we won't submit it" or "let's do something else before we submit it" and before you know it, that paper's been put on the shelf and forgotten about. Well, I spent three months writing that paper and now it's sitting on the shelf.

Jane outlined that she would put months of work into a paper intended for publication and review, only have it shelved. She continued to explain that, for her, even a bad review would have provided her with critical feedback (page 9):

I think I've only had really two publications that count ... and I personally feel that ... not putting it out there is ... just as much of waste because if you're not putting it out there and you're not ... even a bad review is still a review so ... but for her a bad review carried with it so much more because it's people she has to face forever more and it's people that she knows and it's her reputation on the line. But for me it's my only source of feedback of how I'm going in my research and if I'm not getting any indication of how I'm going then it's hard to remain committed and focused. I guess that you start to fear that what you're doing's not good enough ... but I guess a whole stack of rejection letters wouldn't be too good either.

While Jane reflected in this excerpt that she understood that a bad review might affect her supervisor's reputation in the discipline, it was an essential source of feedback. Her supervisor's reluctance to put out the work for critique, and subsequent lack of feedback, was affecting Jane's focus and commitment. I prompted Jane at this point to talk about how she negotiated with her supervisor. She outlined that she had learned from other people's experience and decided not to make an enemy of her supervisor. She recognised that her supervisor's need for respect is compounded by the difficulties that she had as a woman in her field (page 10):

I try to negotiate, but I have learnt from other people's experience that if you go up too hard, you make an enemy, and if you make an enemy, life's difficult. So as much as it's not necessarily my personal style or personal opinion, there's times when I know that I have to just say "Okay, that's the way it is. If that's the way you want to do it, that's the way I'm going to do it." Even if I disagree with it, even if I would rather be standing up for myself and saying "No, this is the way it's got to be done" I know that if you insult somebody's ego then you've got to have the pain ...[laughs] so you have to be careful to not stand on toes and also I think that you've got to know your place as a PhD candidate because I think that that's where a lot of difficulties have arisen for other people in that everything's fine when your supervisor knows more than you do and they tell you what to do and ... they're god-like and they know everything, but you reach a point in your research where you know more than they do about it and you're on the brink of becoming ... of applying for jobs and being their equal ... and I think that they have difficulty in that transition. So, especially for supervisors because ... I dare say it even more so for a female supervisor who's had to struggle up against it ... to get where she is in the first place ... so she demands a certain level of respect and she deserves it ... but she also gets very quickly and very easily insulted if people don't give her the respect. That she gets upset if people disrespect her ... and once she's upset with someone for disrespecting her, it's very hard to get back in the good books because you know once you've upset her ... then that's kind of it.

She discussed how she tried to negotiate about writing up and how she used other people's experiences with the same supervisor to her advantage (pages 10-11):

Also I think a lot of conflict arises especially in [discipline] because of writing styles ... [nine lines deleted] ... but when you give it to someone like my supervisor who's been properly trained in the correct form of the English language, then when she reads what I've written it grates on her and ... she needs it to be technically correct, which for me I can stand back and say "okay if that's the way it has to be, even though that sentence no longer makes any sense to me. Even though what I wrote sounded fine and what you've changed it to sounds ridiculous – fine!" I can let it go, I try to be [word inaudible] but I know a lot of other people can't because it's so personal that they feel like, "Hang on, this is the way I want it to be, that's all there is to it." I don't think it's worth spending three months of your life arguing about whether you should have a comma before or a comma after.

Jane had learned what is worth arguing about and what it is easier to let go of, particularly when it came to the mechanics of writing. She had observed other students who would not compromise and therefore had more difficulty with their supervisor/s (page 11):

Even though I think I'm right, oh well, if that has to be, that has to be ... I'll do it your way and I'll put my name on it and I'll get it done. Whereas for some

people it's been a cause of major fighting and once you start fighting, then you know things don't work properly ... if you're stressed and your supervisor's stressed and everyone's unhappy ... things don't move. And when things stop moving it becomes much more challenging in all those other aspects that you're dealing with ... with your motivation ... should you continue with it? Is it worth it? All those questions become more intense when there's conflict. My policy at the moment is just try and avoid conflict.

At the time of interview Jane had come to an understanding of how to work with her supervisor on some issues and not others. She realised that arguing over grammar would lead to conflict, which in turn raised stress levels. Jane's observation here was that if both parties in the relationship are stressed and unhappy, "things don't move." This can intensify other aspects of the degree and affect motivation, thus Jane had adopted a policy of avoiding conflict.

Jane continued her narrative to explain that she could see that the supervisor's view of the thesis is often different to that of the student. For Jane, the thesis was a step in her career, but for her supervisor it carried more weight (page 11):

I guess I acknowledge the fact that for me, my thesis will be written, will be submitted, whether it passes or fails once we get to that stage, it will be bound, it will be put on a shelf and as far as I'm concerned probably no-one will ever look at it, whereas for my supervisor I understand that ... when it comes to comparing herself with other people, it's about how many there are on the shelf and how good they are and how often they're referred to. So for her it carries lingering weight, whereas for me all it does is get me my first job. And once I've got my first job, it doesn't matter anymore ... [eight lines deleted] but I do also acknowledge that my supervisor, it means more to her so I have to respect the fact that if means more to her and respect that if she wants a comma there, then I'll put a comma there ... [laughs]...or if she wants an extra experiment done, I'll do an extra experiment...up to a point... [laughs]...it can't go on forever.

Jane's ability to see the situation from her supervisor's point of view helped her to understand what she was being asked to do. However at the end of the excerpt she notes that she will change the grammar and punctuation, and do some additional experiments, but that there also needs to be an end point. At the time of interview, as can be seen in

this and earlier excerpts, Jane was reaching a point at which she wanted to stop the additional experiments and finish her thesis.

Jane's narrative continued to centre on the negotiation that was ongoing in her supervisory relationship. She talked again about the difficulties in [her discipline] of ensuring that the papers get sent to the right people for review (page 13):

Well I've had disagreements with my supervisor about, when we have had a choice ... about who it should go to ... earlier on in my research, I guess I wasn't listened to in that regard. But after some bad experience now I am listened to ... [Laughter] ... Listened to a little bit more or she agrees with me anyway that certain people are ... not going to like our research no matter what we do, so ... at least we've come to an agreement on that [laughs]

Jane's relationship with her supervisor had developed to a point where Jane's opinion on some issues was listened to. Earlier disagreements had ended with Jane being proven correct. Jane went on to emphasise that personal attitude was important in smoothing the way forward in the supervisory relationship (page 15):

Because there's so much personal attitude comes into it that ... if you're of the attitude that, you write something and you want it to be submitted the way you've written it and you can't bend on that, then your experience is going to be difficult and painful. If you're of the attitude that "I'll write it but if you don't like it you can change it" ... it ... makes it more enjoyable for you [laughs] and... you hopefully get through it easier.

Jane's emphasis in her narrative is on the negotiation that had taken place in her supervisory relationship. Although the excerpt above relates to her own flexibility to make it easier, the previous one emphasised that her supervisor too had learned to compromise, or at least listen to her student on some issues. Later in the narrative, Jane mentioned other students who had had trouble in negotiating supervision (page 24):

I mean even apart from my brothers' experiences, that other ... students who've gone before me ... they've had the same issue ... in my opinion what's been their biggest barrier is their relationship with their supervisor ... and two of them ended up taking their thesis and going to a different supervisor. At first they

thought, "Yeah that's the best thing to do because it was taking too long with this supervisor", but ... then the process of changing supervisors takes a long time too so they might have been better to just stick it out.

The implication here is that she is talking about students who have been supervised by *her* current supervisor. Although changing supervisor/s can be an option, it can also take time to organise and then establish a good working relationship with the new supervisors. Jane reflected that staying with the same supervisor and moving forward may have been a better option. It is highly likely though that the students she referred to had reached a point where they were unable to negotiate any further within their supervisory relationship and, for those students, a change of supervisor was required in order to complete their degree.

Towards the end of her narrative, Jane questioned her supervisor's inability to learn from her prior students' experiences and her persistent need to always be right (page 25):

I'm surprised a little bit that ... it seems as if maybe my supervisor hasn't learnt from those experiences because seems to be making the same mistakes or having the same attitude with subsequent people, that hasn't realised ... I personally don't think she's realised that ... there's an element of her involved in that situation. It's not just these PhD candidates that lose their mind, that there's some responsibility of hers involved in that ... I don't think she quite appreciates that ... so I just thought [laughs] the same problems keep coming up.

Jane here shows that she understood that there were issues on both sides of the supervisory relationship. She was aware that this had been an ongoing dilemma for a number of previous PhD candidates, but that her supervisor did not seem to have learned from prior experience.

Gender and the supervisory relationship

According to Jane, the negotiation and reflection that she had referred to earlier, in terms of being listened to regarding potential journal article reviewers, did not extend to

her supervisor reflecting on her own role in ongoing difficult student-supervisor relationships. Jane reflected that this could be psychological, but she also recognised that her getting to professorial level as a woman in a male-dominated field would have been a "battle" (page 25):

I think that's part of her psyche of ... being very dominant and being very out to prove herself and always being right ... and not being comfortable with ever being wrong ... [I: and that's maybe why she's got to where she is as well ... maybe she's had to be that way ... to get to where she is...] Which is what I think ... like I said even now kind of look at me and say what are you doing that for, so I can only imagine what the response to her was when she went through you know, thirty years before me. I'm sure she's had to battle.

It can be seen that this observation of Jane's was prompted to some extent by my comment that perhaps her supervisor's personality or way of working helped her to get to the level she is now. Jane picked up on this and agreed, adding her observation that people commented even in the present day on her choice of discipline. She continued on the theme of gender in the supervisory relationship, and noted a difference in the way male and female students interacted with this supervisor (page 25):

I'm surprised that the ... I shouldn't say surprise ... I've observed that there's a difference between the way [that] female ... candidates of hers deal with the situation compared to the way the males do. That the males seem to be ... very much ... quicker to get annoyed with it and quicker to either dismiss it or to get really angrily defensive of what it is they are doing or trying to do whereas the females will tend to be more submissive and say, "Okay, alright, do it your way." And defer to her judgement and defer to ... her opinion to try and get through.

Jane noted that female students tended to defer more to the supervisor's opinion or judgement, whereas male students would more rapidly become defensive. Interestingly, the compromise and submissiveness of the female students was not necessarily making the situation better in the long run according to Jane (pages 25-26):

Even though that is the case I don't think that it necessarily makes it much easier for them ... because ... if anything sometimes it means that they get bullied a little bit more and it takes them a little bit longer because she ... the

supervisor, is able to say "Oh, go and do another experiment" that will take three ... knowing that you'll say [sighing] "okay" whereas ... some of the other, not, not all of the other males but majority will take it up to a point but then will say "No that's it. I'm not doing any more, this is ridiculous" and they'll end up being quite hostile and outwardly hostile. Whereas I think the females tend to go sighing "Oh, alright" and just kind of take it away.

Jane's reflection of the way male and female students interact differently was perceptive. In particular, her note that by accepting the supervisor's judgement and continuing the work, rather than reaching a point of putting one's foot down, female students may in fact be leaving themselves open to being further "bullied."

Jane's story highlighted the difficulties that students can have in the negotiation of supervision. A student can be advised of possible difficulties with a potential supervisor but decide that they will be able to handle them better. Jane has been flexible in negotiating her supervision, apparently compromising much more often than her supervisor. However her frustration with how long the thesis is taking is clear.

Case Study Five: Karen

A large part of Karen's narrative is focused on supervisory issues as her principal supervisor (who had also been her Honours supervisor) died during her candidature. One of her co-supervisors then became her principal supervisor who, she reported, was quite inexperienced. Both of these principal supervisors were male but there seemed to be no difficulties with gender issues. Karen did not discuss the beginning of the supervisory relationship with her initial principal supervisor. She mentioned that he had been her Honours supervisor and she had approached him when she considered undertaking the PhD.

Beginning the supervisory relationship

Karen's principal supervisor, whom she had known for about 12 years, died when she was in the third year of her PhD. Initially Karen had started with her principal supervisor and three co-supervisors. Her new principal supervisor had been "second in charge." She explained that the only female co-supervisor had left after an argument with her first principal supervisor, and her other co-supervisor's contract had ended so he had left the university. The co-supervisor who remained then became her principal supervisor (page 14):

So then [new supervisor] came on board and so he was the sort of only useful one that I've been left with and for a little while, like I really didn't want to discuss with him ...the whole issue of him being my supervisor, it was just too ... [I: too close?] Yeah, it was ... [principal supervisor] had only just died and I just, I couldn't talk about it too without crying ...I felt terrible.

Karen's supervisory arrangement at the time of interview occurred almost by default following her initial supervisor's death. She explained briefly that she didn't want to discuss the change in supervision with him as she was still grieving. She continued to say that she started by rewriting some work that had already been done and presenting it to her new principal supervisor (page 15):

I rewrote a lot of the stuff that I had already done for [principal supervisor]. Like just the kind of you know historical sort of review and review of the area and I'd written up ... like the location type things. This is sort of chapters you know two and three and gave them to [new supervisor]. And he was "Oh that's all kind of stuff for starters, that's fine." And he really didn't read it, I don't think he read it properly anyway because he knew [original principal supervisor] read it.

Her new supervisor's response could be interpreted as encouraging or reassuring Karen that she was on the right track. However Karen's interpretation seems to be that he didn't bother to read these chapters but just assumed they were okay because they had been read by her original supervisor.

Negotiating the supervisory relationship

Karen had to learn to negotiate this new supervisory relationship and found that she had to chase her new supervisor to read things. By the time he read a chapter, three months after she gave it to him, she had changed it and had to give him the new version (page 16):

Then I ... moved on to chapter six which took me a long time. Probably towards the end of last year ... I actually gave him a copy of that in October. He sat on it for three months. I was really ... getting so annoyed ... the start of this year, January ... and I'd been teaching for him all that last semester as well so we were in fairly constant sort of contact and he kept saying to me "Oh I haven't read it yet, I haven't read it yet." And in the end I said, "Don't bother reading that because I've changed it a bit now anyway." Because you'd carry on with the next bit and then realise that you need to go back and do other things.

Karen got frustrated with his lack of action and contacted the coordinator for advice but in the end she dealt with it herself. Although the coordinator offered to speak to her supervisor, Karen declined (page 16):

I ... ended up ringing this coordinator lady in [other campus] and just said "Look, [new supervisor's] been sitting on my stuff for three months. I'm a bit concerned about that." And really I just wanted to lodge with someone my sort of disapproval at this having happened. Just to protect my own ass really ... she said, "Well I could speak with [new supervisor]." I said "No, no." She made excuses for him, which I was really annoyed about when I consider everything that I thought I'd dealt with myself. I've always been very professional with him ... I just emailed him and said, "Look, when will you have read that by. I'd like to come and see you in two weeks."

Karen decided to take matters into her own hands and set a meeting up with her supervisor. She acknowledged that she was the one initiating contact and pushing for him to read her work but that she accepted this was a way to get him to act (page 16-17):

And he did. He's one of these people if you really do sit on him, he'll do it. It's just that at the end of last year I really thought he was just ... [a] very stressed out person. I have been told he suffers from depression. And sometimes it seems like he's so approachable, and this is rare. He actually rang me the other day. I just about fell off the [laughs] side of the bench, because he never ... approaches me, he never rings me ... I chase him. And ... that's fine. If that's the way it is,

that's the way it is. There's plenty of other supervisors operate that way I'm sure.

Karen had worked out a way of working with her supervisor that meant she made most of the contact. She reported above being surprised that he actually contacted her. She appeared to have accepted this as "the way it is" and acknowledged that other supervisors behave in a similar way.

Karen talked later in her narrative about her new supervisor's requirement for her chapters to be grammatically correct and well-written (page 19):

I've had this circular argument with [new supervisor] trying to ... he says, "oh but it has to make sense, if you give something to me to read you want to make sure that it's as well written as possible so that I'm not correcting your grammar and I'm just correcting the science of it." And I'm like "Yeah, but [supervisor], sometimes my grammar gets pretty ratty because I just ... my brain is just clogged. It's like constipation. I'm trying to do my best to get the ideas down so I apologise for poor sentence construction but it's ... if you want me to sit on it forever, we can just wait, but I'm handing it to you because I'm stuck now. Like I've had it, I'm done with it and I'm giving it to you. I want to know what you think."

Karen wanted to give him chapters as she was working on them to get critical feedback instead of waiting until they were well-polished. She continued to explain that she was aware that she compared her new supervisor with her previous supervisor (pages 19-20):

See I'm his first PhD student who will complete 'cos he's a ... oh, how old would he be? He's in his forties so he's sort of a young researcher. I find that kind of you know amusing, that he just doesn't get that, like you know [original supervisor] would have said ... this is what I do a lot now, I go "At this stage [original supervisor] would have ... [original supervisor] would have..." [Laughter] [I: comparing them] It's too easy ... because that was the part that [original supervisor] was good at ... [removed seven lines descriptive] ... He didn't mind fixing things up for you. And he didn't sort of begrudge doing that ... he enjoyed it. It was something a bit fun, something he could do, something he could help you out with.

What is clear here is that her first principal supervisor was experienced and the second one was inexperienced. Karen seemed impatient with this inexperience particularly when she started comparing her original supervisor with her current one. This may be mainly due to the fact that she wants a supervisor who will help polishing draft chapters. Phillips and Pugh (2005) and Leonard (2001) both advise students to work towards presenting their supervisors with polished work where possible and not rely on the supervisors for polishing and editing. In Karen's case, she appeared to expect this from her new supervisor as her initial principal supervisor had always helped her to rework rough drafts.

Support and encouragement

Karen noted that – like Andrea and her principal supervisor – her supervisor could be contradictory in his advice but didn't elaborate on how she dealt with it (page 20):

[New supervisor] is a difficult person anyway, he's a bit of a difficult character ... he's just ... he's a man of contradictions. He'll say to me ... on a good day he'll say, "Look no-one else is gonna [sic] do work like this at all. No-one else is going to do this really detailed work, so you might as well ... whatever you think, put it out there because no-one else is gonna [sic] do this." And then other times he's like "Oh, well you don't want to be controversial. I think that you really ... you ought to be more circumspect ... than this." [Laughs] I get one or the other.

This support and encouragement could be helpful when it occurs, however when Karen gets the contradictory advice, she may have experienced doubts. It is difficult to accurately tell as she did not elaborate on how she responded to these contradictory responses. Karen reflected later in her narrative that there were issues on both sides (pages 31-32):

I can complain about [new supervisor] and our relationship and whatever and he is difficult but maybe I'm difficult with him too, because he just pushed my buttons [laughs] but ... he's positive generally [laughs] ... he'd send an email to someone ... who he was asked by another professor to get in contact with about some overseas examiners for me and he cc'd it to me, just so that I knew that

he'd actually got off his bum, and written "[Karen] is a good student." And I thought, "Oh that's nice." [Laughs] If that's what he actually thinks of me then that's good. And I'd say I'm a good student too because I've done all this with just nothing from no-one just ... really there's not been a lot of actual sort of help from the university from the department ... basically it's all been done in my back room.

Karen stated here towards the end of her narrative that "he is difficult" but acknowledged that she may have been difficult with him too. However in general he had been positive and supportive.

Karen experienced difficulty in her supervision after the death of her first principal supervisor, with whom she had a good working relationship. Her story highlights two points emphasised by Phillips and Pugh (2005): firstly, the need for a second supervisor who can ensure continuity of supervision if there are problems with the principal supervisor; secondly, the need for students to set a good example by organising regular supervision sessions. The main difficulties Karen experienced related to her second principal supervisor's lack of experience, his contradictory advice and little support from the postgraduate coordinator within the Department.

Case Study Six: Laura

Laura had a strong relationship with her two supervisors and referred to them in her narrative as a team. Her principal supervisor was male and her co-supervisor was a female professor. She focussed on the encouragement she received from her principal supervisor before she began the PhD, as he supervised the minor thesis in her Masters degree.

Beginning the supervisory relationship

Laura had a lot of support from her principal supervisor before she commenced her PhD. He encouraged her to apply for a PhD when she was thinking of doing her Masters degree minor thesis as discussed in the motivation chapter. Laura noted that she was fortunate to be able to continue her supervisor relationship with him (page 8):

I think I was one of the most fortunate PhD candidates in the University. I was fortunate in the sense that I was able to continue my supervisory relationship um with [principal supervisor] and at the same time ... [I: so you already knew him before you started the PhD...] Exactly ... and we worked well together from a supervisory perspective.

Throughout her narrative, Laura was positive in her discussions of both her supervisors. She had already been supervised by her principal supervisor in a minor Masters thesis and knew she would be able to continue to work well with him.

Laura's principal supervisor also spoke to her parents when they were organising her proxy enrolment into the Masters degree for a semester. He specifically told them that she was PhD material (page 6):

Well the first thing [my principal supervisor] said to them was "Oh, do you realise that [Laura's] PhD material?" [Laughter] And my parents were quite beside themselves "Oh well thank you." and "She'd never considered..." And this is something that was spoken about quite early in the piece, just before I started my minor thesis. We hadn't even really started supervision with regards to minor thesis and this was a comment that was ... aired.

Given Laura's European background, and strong links with her family, her supervisor appeared to understand that family support was important. Even before he became her principal supervisor, Laura's supervisor was focused on encouraging her to seriously consider the PhD as an option.

Supervisory team

Laura was emphatic about the quality of supervisory experience with two supervisors.

They encouraged not only her PhD research but also her conference papers, teaching and research assistant work to develop her academic career and she referred to them as a supervisory team or more like a research team (page 9):

I also had [co-supervisor name] as well, so I ... had the Director of the [Centre]. She was also very keen in my research area so here was I, having instead of a primary supervisor and a secondary supervisor, I had a supervisory team that worked together and we progressed through this journey together collectively, as a group of three as opposed to ... research student over here, supervisor one over there, co-supervisor over there and then good luck in trying to integrate the three together. So that was really ... that's why I'm saying that I think I was really fortunate.

Laura's case is a good example of how well a supervisory panel or team can work. She referred to them as a group that worked collectively. She continued to explain further about the student-supervisor (page 9):

[I: It was more like a research team] Absolutely, and you'd come to your meetings and you'd say look, "These are my thoughts. This is what I've done, this is where I'm at and this is where I'm going." And ... you ask for advice ... that's all part of the process. You're not saying, "Here, please make the decisions for me." But "this is my thinking process." And then of course they would also give from their ... vast experience and insight "Well have you thought about this? That's really great what you're thinking of there, but ... which pathway are you going to take? You realise ... as you've flagged there are these options, but have you also considered this option that you could follow?" And that was just really, really helpful.

Laura's narrative was of an independent student who relied on her supervisors for advice and guidance but not to make decisions for her. She used them more as a sounding board.

She provided a good example of how the supervisory team relationship worked effectively towards the end of her thesis. Laura mainly worked with one supervisor until she had a full draft (pages 12-13):

And it was great the way my supervisory team worked as well. So I worked closely with one member, and he was actually looking at the different drafts that was [sic] coming through and then he got to a stage where he says "Yep, I think it's great, now for our second supervisor on my supervisory team." So intentionally for a period of time, we didn't have that person look at any of my work, not to get too close to it. [3 lines deleted] She hasn't seen that final sort of draft that was coming through. Until it was final draft and we'd got it to what I considered to be penultimate and also what my other supervisory member said "Okay, its penultimate, get it across. It's ready, let ... that person, the other supervisor now, have a read through it." And if there's any changes etcetera

that need to be done ... then those will need to be amended then it should be ... you're very close to its submittal time.

This strategy can be contrasted with Eve's supervisors who alternated in six month blocks and then worked together in the final six months. Both strategies worked well.

Laura did have input from both supervisors through most of her candidature. She went on to note that her second supervisor's feedback was provided in a timely manner (page 13):

To my other supervisor's credit, as I was continuing reading through, making sure there wasn't anything else that tends to creep up in the literature, when you're focusing on other things, she ... went through it in about two weeks. You know, close to a hundred thousand words in ... two weeks, came back to the table, came back to the meeting and just said, "Look I think it's great. Couple of little ... bits here that I want you to consider and ... in my judgement I think that they need to be slightly revisited. Won't take you very long to do. I don't want to see it again ... Do it, get the paperwork up, let's sign it off. Let's get it off to examiners."

Laura's supervisory team worked well together right until she submitted her thesis.

However Laura herself was the key component in this. Her independence in her work and ability to accept critical feedback was central to this success.

Later in her narrative, Laura returned to the topic of her supervisory team, noting that she did quite a bit of the organising to get the three of them together (page 36):

Yeah, they were great! They were a great combination. They worked well together. It was difficult getting the three of us together at the one point in time, what that meant was that I'd meet with one supervisor at certain times. I'd meet with another at other times and then get that joint meeting of everyone together. So there was a little bit of running around from my perspective.

Laura's supervisory team worked well together and separately. She went on in this excerpt to note their willingness to share their knowledge and experience (page 36):

But really their ... knowledge base was just ... huge and the fact that they weren't ... apprehensive in sharing that. And they weren't defensive ... as [to] what does that mean for them. I ... can't speak for other supervisors and how

they work 'cause I really have no idea but I, what I'm saying is ... there wasn't this defensiveness like I'm sharing too much of me and potentially feel insecure. There was ... no sign of that. It was like, "You've got a great topic and you're moving along the right way."

Laura's only experience with supervision prior to her doctoral candidature was with her principal supervisor on her minor thesis for her Masters. Therefore she had no point of comparison regarding other supervisors. I interpreted her statement above to be her inference from discussion with other doctoral students. Laura was able to discuss her work critically and accept their guidance and feedback. The hallmark of the supervisors was a willingness to share their knowledge and insights.

Guidance and critical feedback

Laura outlined her strategy of organisation and discipline to get through the PhD with the assistance of her supervisors (page 11):

Having the guidance of two very experienced ... supervisors made that journey, made that process so much ... from my perspective so much easier in the sense of being able to sit down, have a chat, as we are now over a coffee, and saying, "look, this is where I'm at. This is what I'm thinking about. This is how I'm thinking about tackling it. "Does that sound ... your opinion please? Have I missed something critical that I should be aware of?" And gaining their actual feedback and then neatly assess where I was through that winding path to get to that submittal ... [10 lines deleted] ... I was always ... not highly critical of myself, but I'd always look at my writing and my work critically and say "How would an examiner ... ?" especially towards the end, "How would an examiner view this? Is it clear?" Read through, "No I'm going to make these changes, going to make those changes." And then bringing in the supervisory team and saying, "Okay, could you have a look at this? Could you have a look at that?"

This excerpt demonstrates that Laura was quite an independent student. She looked to her supervisors for guidance, but she was always thorough and strategic in her approach. It should also be added that Laura had the maturity and self confidence to accept constructive criticism with good grace. Later in her narrative she discussed how she expected the supervisors to provide constructive and critical feedback if she wasn't working hard enough or to a sufficiently high standard (pages 36-37):

And you know certainly there were ... the reality points as well. Like ... for example if your writing wasn't up to standard they would tell me that. I'm sure they'd be the first ones to point it out. "Okay I'm sorry I don't know what this is or what you are trying to do here. Take it away and ... seriously think about what you're doing." I was never in that type of position where I had that kind of confrontation but I'd imagine that if I'd needed that they would have done that as well for me and said, "Well, listen here, what are you doing? It's not a holiday ... go and put some more real work and real effort into it." But I can honestly say I didn't have that type of experience but I hope to think that given the way that they've guided me through the process, if I needed that sort of kick up the backside that they would have been there to give it to me.

As noted earlier Laura did not in fact need either of her supervisors to tell her she was not working hard enough. She noted though that she would have accepted, and even expected, that they would have confronted her if she had not been performing to their expectations. Laura noted that she tended to use her supervisory team as a reference group to keep her on track (page 37):

They were a good reality focal point where I was ... the reality of how much was still left to be completed. Is it still on time? Is there anything that I need to do to make up some time? So in that sense they were a real focal point as well as being supportive in the sense of where I was facing.

In terms of the literature on effective supervision, Laura is an "ideal" student (Delamont et al, 2004; Leonard, 2001; Phillips & Pugh, 2005). She is open to critical feedback and guidance, but this is rarely required as she always presents her supervisors with work that was well-developed and well-written

Developing an academic career

Central to Laura's narrative of her doctoral experience is the fact that she is working towards an academic career. While Dever et al.'s (2008) findings demonstrate that female students were less likely to be encouraged to undertake activities that would assist in building their academic careers beyond the doctorate, several women in this research project reported a wide range of support from their supervisor/s. Eve's supervisors, for example, encouraged her to go to conferences.

Laura's supervisors encouraged her to gain a breadth of academic experience while she was a PhD student. As well as refereed conferences, she undertook sessional work (pages 8-9):

And that was sort of the relationship that happened over the ... three years that it took me ... to complete my PhD and through that, I was also doing the academic sessional work ... [14 lines deleted]. And I was also concurrently, and was being encouraged to do so, as I was going through certain parts of research, get it out there ... in the broader community. So that's what I was doing. Refereed conferences ... and the best way to do that, refereed conferences to begin with. They are at the forefront of what is happening within the research area.

Laura's supervisors encouraged her in a number of ways to undertake other related activities which would help to position her for an academic career beyond the PhD. (page 37):

I always felt and I always do say I had a great supervision. I probably wouldn't be where I am today if I didn't have those supervisors 'cause how was I to know that it'd be important to do ... some more sessional work as I'm going and not just withdraw all my energy from that and just said, "I'm on a scholarship," and just do the thesis. Or what that means from a conference perspective and international conferences and networking and actually presenting in an academic context as opposed to a student context and getting experience like that.

Because Laura's supervisors ensured that she developed broad academic skills beyond international conference presentations where she could gain publications and start networking, it is not surprising that she successfully applied for a job at a Group of 8 university in the same week that she graduated from her PhD. (page 37):

Who would have thought ... a supervisor doesn't sit down and say, "Look, these things are equally important on your journey as the thesis itself." I don't think I'd be in the position that I am today which is the position at [at a Group of 8 research intensive university] in an academic role in their Department of Marketing. I just don't think that the match would have been there.

She acknowledged here that the knowledge and encouragement of her supervisors had enabled her to build a solid base from which to launch her academic career and to be "a

step ahead" of other students who started developing these other skills after completing their PhDs (page 38):

I'm already a step ahead ... a step ahead of the average person that has gone through that same process and gotten similar results or identical results. At the end of the day, two weeks after the conferral ceremony, where are they? What are they doing as opposed to where I am now?

Laura's successful supervisory experience highlights many of the points made in the literature about good supervision. Her principal supervisor encouraged her to apply for the PhD; and both supervisors actively supported her development as an academic.

Laura was prepared for her supervisors to be critical of her work if it fell short of PhD standard and put in the effort required to ensure she presented them with work of a high standard. Laura's narrative highlighted an exemplary standard of supervision that built on her Masters experience and in turn positioned her well for an academic career.

Case Study Seven: Ebony

Ebony is an academic who had, like Laura, been supported by her supervisor earlier in her career, in this instance when she completed a Masters by research degree with him. She developed her own research topic but had already decided that she wanted to work with the same male supervisor. Ebony mentioned a female co-supervisor who stepped in when the principal supervisor was on study leave or very busy.

Beginning the supervisory relationship

Ebony had already completed one research degree with the same supervisor. They both worked at the same institution and she kept in contact with him while she was on study leave (page 2):

And by the end of my Masters had decided that I was going to go on and do a doctorate and had chosen my supervisor [Laughter] I hadn't chosen my topic at that stage. But I'd found that working with my Masters supervisor was fabulous and that I wanted to keep working with him. And then I took a period of [study leave] and while I was on [study leave] I kept in touch with [principal

supervisor] and we bounced ideas backwards and forwards ... and the project that I did for my [study leave] informed some of my thinking about my doctorate. And so while I was away we hit on an idea, you know? I emailed him something and he wrote back saying, "I love this idea, let's run with it." And then I ... when I came home I enrolled and away I went.

While Ebony had a pre-existing working relationship with her supervisor, she did not talk about this in as much detail as Laura. She had some initial discussions via email regarding potential research topics and then enrolled.

Guidance and feedback

Ebony also had a co-supervisor who stepped in when her principal supervisor was physically absent. However she rarely was out of contact with him (page 12):

I had fabulous, well two fabulous supervisors, but principally it was [name]. [Co-supervisor] would step in periodically when [principal supervisor] was away or when [he] was sort of over-worked with something ... [8 lines deleted] He spent a period of [study leave] in Scandinavia while I was doing my doctorate and I actually can't recall when it was because it didn't make any difference to the quality of the supervision that I got ... it just happened over email rather than anything else.

Ebony's main supervisory relationship worked well even at a distance, utilising email. While she had the co-supervisor in position, the need to use them was rare; as Ebony noted here, she couldn't remember when it specifically was that her supervisor was away as the feedback was consistent in his physical absence.

Support and encouragement

Ebony discussed her supervisor throughout her narrative in very positive terms. In this excerpt she was reading from an article that she had published about what happened when part of her research project going wrong (page 10):

"My partner and my supervisor were supportive and kind, nevertheless deep down I was afraid that their investments in me might be wasted if my PhD efforts failed along with this study. My supervisor's response, when I became brave enough to disclose this fear, was "That was never an issue, from your supervisor's point of view – more a concern of a neurotic, over-achieving student with good hair."

Ebony's supervisor could be relied on for support during a difficult stage in which one part of her research project looked likely to fall apart (this is discussed in greater detail in the chapter on resilience). She noted that he still required high standards in her work, even when things were difficult (page 12):

I mean [my supervisor] always ... the things that I ... that for me capture his supervision style were that his standards were always high. He would never let you get away with putting forward something that wasn't of high quality. So he would read everything and he would question everything. If anything you wrote was challengeable he would challenge it ... but he gave me plenty of room to be human ... so when my mother died, when the babies were born and when we moved house, all those other things that happened in the middle of the doctorate ... he just gave me space to let those things happen. It was never ... those things were never an excuse for producing sub-standard work but they were allowed to happen.

This support, through the birth of her second child and the loss of her mother and friend, validated her pain and grief and helped her build resilience (page 12):

And so about ... halfway through my PhD a ... another woman who reminded me very much of my mother also died and I fell apart and ... [my supervisor] just let me fall apart and his words were "Well you have every right to be a f[...]ing mess right now." [Laughter] Just be one ... but it was ... never a rationale for doing something that was less than ... high quality. I think that's a nice balance to hold, because its ... you can't stop those things happening to people and you can't expect them to produce good work at that time but in the long run you can expect them to ... get back on track and get back to doing high quality work.

Her supervisor's acknowledgement of the difficult times, allowing her to put the research project on hold, was finely balanced with asserting his supervisory authority and requiring her to produce work of a high standard.

Ebony emphasised the central importance of communication between supervisor and student and that each party needs to be open about those events or stresses that impact on supervision (pages 13-14):

I think ... you want students to be able to identify which are the really big things ... and most ... of us can identify that this particular death is one that is going to knock us around ... and this one's actually not such a big deal. I have to go to the funeral and do the family bit and show my respects but it's actually not going to really knock me ... [sighs ... 5 second pause] ... I guess that that requires ... that ... students and supervisors need to have relationships that are fairly open and allow communication of those things.

This sort of open communication is only possible on the basis of trust, particularly when both student and supervisor work at the same university. Ebony talked about the importance of confidentiality in the supervisory relationship (page 14):

The other thing that [my supervisor] always did was he always made it very clear to me right from the beginning that whatever I said to him was confidential. And that greatly increased my comfort in telling him when I was falling apart. And look I know that at some points he would have had to report my progress and so on, but ... I was confident that when I said to him "I'm a mess because ..." it would stay there.

Ebony's principal supervisor provided her with emotional support when it was required, and understood that it was not possible for her to work when in a crisis situation. However he also expected a high standard of work. In analysing Ebony's narrative, it appears clear that her supervisor's own standards were high. This meant that she was remained contact with him even when he was absent from the University and he provided feedback in a timely manner (page 12):

I hear horror stories of students who have given their supervisor a complete draft of their thesis and six months later it's still sitting on their supervisor's desk and ... my experience was quite different to that. [My supervisor] would say, "I'm flying to the US in a week. If you can give me a full draft before I get on the plane, I'll read it on the plane." And he would. And then he would get off the plane in LA and post it back to me express post with comments all over it and it didn't matter that he was half a world away I would still be getting good supervision.

Ebony's supervisor took his responsibilities to provide timely critical feedback seriously. Although she had a co-supervisor who was physically present, her principal supervisor always kept in touch.

Developing an academic career

Importantly, Ebony's positive experience of supervision has now flowed through to how she supervises her students (page 12):

My experience ... my own PhD and being the way that I was supervised through it shapes how I now supervise students. I had a very positive experience of supervision and ... I try and model some of that. I'm not sure I always hit the mark but ... and I've heard some horror stories about poor supervision but I have to say I didn't ... have those.

She was already working as an academic and now supervises students herself. She has integrated elements of her supervisor's style and models this in her own supervisory practice.

Ebony's supervisory experience of mostly one supervisor who kept in contact even when overseas, worked well. He encouraged her to develop the research topic she had chosen; was supportive when she had personal concerns; held her to high standards; and was an excellent communicator.

Case Study Eight: Tasha

Tasha had nothing but praise for her principal supervisor who was prepared to advocate strongly for her with the Department in which she was enrolled. She did not discuss how they began the supervisory relationship. Nevertheless, the strong relationship was crucial when Tasha underwent numerous periods of serious illness. She also had a cosupervisor who had a minor role in the thesis. Her principal supervisor was male and her co-supervisor was female. She didn't discuss having to negotiate within the main supervisory relationship, and her principal supervisor negotiated with her co-supervisor on her behalf. Within her narrative she focused on the support he gave her throughout her candidature.

Support and encouragement

Tasha's principal supervisor provided strong support and encouragement. After some time he came to understand that her work rhythm was complicated by frequent illness. And while he still pushed her to keep working on the thesis, he knew that she needed time off when she was sick (page 7):

My supervisor was really superb ... he never put pressure on me. My supervisor is what I'd call a supervisor from heaven. I'm so blessed ... so blessed. Not many people have the supervisor from heaven ... but I do. He knows just when to push me and just when to back off. When I'm sick he understands and he doesn't expect too much of me. When I'm well, he encourages me to work as hard as I possibly can because he knows I'll get behind when I'm sick ... but he also doesn't ... push me if I just say "I've just got to have a day off, I'm just too tired. I'm not sick, I'm just too tired." He goes: "Well you need to probably do that sometimes." When I'm working he knows ... he's not going to see me. I mean when I'm in employed work and he knows I've got to do that because I've got to survive. He's just ... fantastic. He really is the supervisor from heaven ... you could not want for a better supervisor.

Tasha appreciated her supervisor's support and understanding. He turn understood that her illness affected her research and also that she needed to undertake paid work to survive financially. She noted that he did push her for work when she was physically able, but this was tempered with an understanding of her health and work circumstances. Central to this understanding was Tasha's ability to communicate honestly with him.

Advocacy

Tasha's supervisor was a strong advocate for her. He spoke to the Head of School on several occasions when Tasha's part-time status meant that she was missing out on services available to full-time students (pages 7-8):

Just lovely ... if I could give him a University award myself, I'd give it to him, he's just the best and he's ... [a] really fantastic advocate for me as well with all those terrible, crappy things were happening to me like that thing with my office. He went straight up to the Head of School and said, "Why has this happened? It's not fair." Another time I got charged for a computer program that other

people had access to for free and nobody could tell me why I was being charged for it and nobody else was. 'Cause I paid for it because I needed the program but ... when he found out he just went up to the Head of School and said, "This is not fair. Why should she be charged for it because she's part-time? Every other PhD student gets it free just because they're full-time but because she's part-time she's got to pay. And they all need it for the same research. It's ridiculous." And I got reimbursed. The Head of School said, "That's ridiculous. We pay for it out of school funds if we have to." He was not impressed. So whenever anything that was vaguely unfair happened, my supervisor went into battle for me. He's pretty good.

The supervisor's strong advocacy to the Head of School demonstrates that when supervisors are prepared to fight for what is "fair", a student is not placed in the invidious position of going to the postgraduate coordinator – as Elena and Karen were – and advocating from a weak position. Later in her narrative, Tasha reported another example of her supervisor's advocacy for her, in this instance for office space (pages 33-34):

But I've always worked at uni. But I ... being part-time ... and theoretically only entitled to an office space two days a week and I negotiated with [name], with our Head of School, "Well, you can confine me to using an office two days a week but I want to finish this PhD. Because I'm only enrolled part-time but I'm here full-time. I'm here four or five days a week and on weekends. Because otherwise I won't get this finished." And a lot of the full-timers don't even come in to uni so, the admin staff that were there at the time said, "You can't get a full-time space, we don't have enough space." And after I had this little word in the Head of School's ear, they arranged it for me. Because that's another thing with [my principal supervisor], I told [him], [he] told [the Head of school]. [My principal supervisor] got [the HOS] to come down and we discussed it with [him]. So yes, that's the kind of thing that [my supervisor] does for me. He just got [the HOS] there and told him what the issue is ... and so I got my space to myself.

Tasha showed here that she was prepared to negotiate for herself, but she was not successful in discussions with the administrative staff. Her supervisor then arranged for the Head of School to discuss the situation with both Tasha and himself, successfully intervening to get her office space.

Role of the co-supervisor

Tasha returned to the theme of the support and encouragement of her supervisor and cosupervisor, but at the same time makes it clear that they have separate roles or functions. University policy stated that Tasha had to have her co-supervisor because her principal supervisor doesn't hold a PhD (page 25):

He's always been Humanities ... because the focus of my project is ethics I wanted to have a principal from Ethics, a principal supervisor. Because I was studying in Nursing ... because I'm a nurse, it seemed sensible to enrol in Nursing. Or it did at the time, turned out not be such a good idea. I thought it was sensible ... so I ... enrolled in Nursing but because I wanted a principal in another School, they were okay with that as long as I had my ... associate in Nursing. As it turns out ... my principal supervisor doesn't have a PhD. No one cares about that too as long as my associate had a PhD. He's actually ... [my supervisor] has supervised a lot of PhD students but he doesn't have a PhD himself. One of the University requirements is that at least one of your supervisors has a PhD so, I'm sure that's okay.

Tasha understood the need to have a principal supervisor in the key research area she was investigating. The University guidelines meant that she also had to have a cosupervisor. She is forthright in acknowledging that having her co-supervisor as a principal supervisor would have been unworkable (page 25):

'Cause my associate [Laughter] wouldn't have been able to be my principal. My associate supervisor is a nurse. She's not a [specialisation] and she has a small interest in ethics, and she's got a PhD. She is a lovely person. She's very openminded and willing to discuss things in an open and collegial environment. She has no understanding of narrative ethics, no understanding of narrative methodology and ... her views on [specialisation] are way different to mine [Laughter] But she's lovely and very open-minded and she's one of the few people in the School of Nursing that I have a good deal of respect for so ... I ... like her but as a supervisor ... [five second pause] not very helpful from the point of the view of getting feedback that's useful so when ... she wasn't involved in a couple of meetings ... she became confusing for me because the feedback she gave me was very different from the feedback I got from [my principal supervisor]. So it was almost impossible to incorporate both lots of feedback.

From what Tasha reported, there was little need to negotiate within the supervisory relationship. She noted here that when she was receiving conflicting advice, she spoke to her principal supervisor who then spoke to the co-supervisor (pages 25-26):

I ... discussed it with [my principal supervisor] and [he] discussed it with [my associate supervisor]. And it was decided that [she] wouldn't be involved any further ... this was early last year ... wouldn't be involved any further in the ongoing writing process but that she would be working with the examination process and she was happy with that. So we're hoping that when she sees the thesis as a whole and gets the methodology and all the chapters together that it will make more sense ... to her. But she has also been very encouraging and ... every time I've needed to have [indistinguishable] every time I drop her a line to say "Well, yeah, I'm still plodding along. Getting there." Because it's still best to keep her in touch, keep her informed. She always sends back very affirming ... emails. "That's really great. So glad that you're still keeping at it." So she's very affirming and [a] really, really nice person [five second pause] But ... hasn't been ... particularly helpful in terms of ... getting the work done but I would say that she has been supportive and been very encouraging.

Tasha's co-supervisor was useful in terms of encouragement and support, "affirming" and "lovely", but not particularly helpful in terms of constructive feedback. The strategy implemented by her principal supervisor to work closely with Tasha and then ask the co-supervisor to read the final draft was one way forward.

Tasha later mentioned that her co-supervisor was in effect a back-up in the event that her principal supervisor was unavailable. The excerpt above outlined why Tasha thought that her co-supervisor could not be an effective principal supervisor, which was a possibility when her main supervisor was seriously ill (page 26):

I think really at [my university] the role of the secondary or associate supervisor is mostly as a back-up person if your principal becomes unavailable. And all I can say is thankfulness that didn't happen ... because it wouldn't have worked. I don't think it would have worked. Maybe it would have if I'd had to [indistinguishable] ... it was a bit scary a couple of years ago. [My principal supervisor] had cancer and was going to an advanced stage and we didn't know if the surgery was going to work so ... [five second pause] I ... a) it was very scary for [him] of course. We were all really worried about him and he actually was off work for six months, so I was working on my own for six months, which was challenging for me. But b) what if he doesn't come back to work because he left not knowing if he would ever be back. So ... please get better ... this is very selfish but please get better for me too. [Laughter] I want you to get better for you but I want you to get better for me as well and thankfully he did and he's at the moment now quite well.

Tasha's university had a policy of requiring at least one supervisor to have a PhD, thus she needed a co-supervisor. One of the key reasons for having a co-supervisor is to "backfill" when the principal supervisor is absent. However when her principal supervisor became ill, Tasha reported that she worked on her own for six months. Given her earlier statement regarding the difficulty she had with her co-supervisor's feedback, Tasha preferred to continue working on her research without supervisory support.

Overall Tasha had only positive feedback about her principal supervisor. He was supportive during her numerous personal illnesses and advocated on her behalf with the department. While she had a supportive co-supervisor, Tasha recognised that she would lack the skills to be a good principal supervisor.

Summary

The seven women discussed in this chapter had varying supervisory experiences which elucidate a number of issues raised in the literature and contrast with other issues. While each woman's experience is unique, there are commonalities which highlight the negotiation and development of successful supervisory relationships.

How did the way in which the supervisory relationship was initiated affect the women's experiences? Does knowing your supervisor before enrolling make the experience easier in any way? Eve, Jane, Laura, Karen and Ebony all knew at least one of their supervisors before enrolling in their degrees. Laura, Karen and Ebony had all been supervised previously by their initial principal supervisor in some form of research — either Honours, Masters minor thesis or research Masters degrees. The development of a good working relationship led all three of them to approach this supervisor again when they were thinking about enrolling in a doctoral degree. In Karen's case, her

supervisor's death meant that she then had to negotiate a new supervisory relationship with one of her co-supervisors. Jane's prior knowledge of her supervisor was based on undergraduate teaching experience, not as a research supervisor. In addition, both of Jane's elder brothers were supervised by the same person. Andrea didn't know her supervisors; she applied to do her degree based on the industry scholarship that was offered. She reported that she had a steep learning curve as she tried to understand their expectations of her as a research student. When Andrea couldn't get the type of supervision she from her assigned supervisors, she looked elsewhere for additional supervisory support. Tasha did not discuss whether or not she knew either supervisor before she enrolled.

Not all women discussed the process of negotiating supervision. However, Karen talked about learning to work with her previous co-supervisor when her principal supervisor died. Jane also reported in detail ongoing negotiation with her supervisor over language, undertaking further experiments and publication. While Jane noted that she tried to put herself in her supervisor's position and understand her approach, the overall sense from her narrative was one of frustration.

Only two women in this project had a single supervisor throughout their entire PhD candidature. Jane's narrative highlighted some of the concerns associated with single supervision when she talked about her supervisor's absence from the university on sabbatical on two occasions. When Jane could not resolve problems with equipment, she reported having nobody who could advocate on her behalf with the technical staff. Clearly having a single supervisor puts more pressure on the student and the supervisor, especially when the supervisor is on sabbatical.

Contrary to some literature, the gender of the supervisor was not raised as a key concern for the women in this research. They had quite varied supervisory arrangements — a single supervisor, two supervisors who alternated each six months, a principal and cosupervisor with little interaction from the latter, and a team supervision arrangement. They also had different combinations of female and male supervisors. Andrea pointed out that supervisory style and experience was more important for her than gender when she added a male co-supervisor to her existing arrangement of two female supervisors. Ebony and Tasha both had male principal supervisors with little input from their female co-supervisors. Jane, in a male-dominated discipline, had a senior female academic as a supervisor and reported difficulties with supervision. Whether Jane's issues were due to the supervisor's personality or the working style that she had had to develop in order to succeed in a male dominated discipline, could not be readily determined from Jane's narrative.

It was clear in most cases in this chapter that support, encouragement and advocacy played an important role in a successful student-supervisor relationship. Six of the women reported personal difficulties such as illness and care responsibilities, and noted their supervisors' ability to understand and encourage them through difficult times. This support, as well as the advocacy role clearly demonstrated by Tasha's principal supervisor, was central to the women's sense that they had someone to turn to when things got difficult.

Another important aspect of supervisory support was the way in which these women were, or were not, supported to build skills which would position them well as early career academics. Laura's supervisory team demonstrated a best practice model in encouraging her to present conference papers and undertake sessional teaching. Laura's

candidature was utilised to its full extent, and the activities she undertook helped her to gain an academic appointment in the same week that she graduated. This level of support makes a huge difference in gaining academic jobs post-PhD. Dever et al. (2008) note that it can be highly gendered. However women in this study did not the encouragement of their supervisors to undertake these activities.

Based on these seven women's experiences, an optimal supervisory experience includes: finding a supervisor whose style complements that of the student – this is enhanced by having worked with the supervisor previously in some capacity (preferably on a smaller research project); understanding each other's needs and responsibilities and being able to discuss and negotiate these openly; support and encouragement on both personal and academic levels; having a co-supervisor or supervisory team with all parties kept regularly informed of progress; and encouragement towards building an academic career. The following chapter looks at how these factors, as well as others, work to build resilience which enables the women to successfully negotiate their PhD journeys to completion.

Chapter Six — Resilience

One of the strong themes in these case studies was the ability of most of the women to cope with multiple demands on their time and still keep focused on research even though some experienced quite life-changing challenges during their candidature. For one it was her partner being diagnosed with an aggressive and potentially life-threatening cancer, for another it was developing clinical depression as an aftermath of nearly dying from pneumonia and as a result becoming suicidal. For yet another, it was her mother dying just prior to her commencing the PhD, while a fourth woman had to contend with serious illness in her family and she – as the daughter – was expected to provide the physical and emotional support.

Then there were the usual challenges for younger women of trying to balance research with having babies and working out how to keep focused on the PhD. Isolation and the need to build peer support were also discussed as challenges by many of the women.

The need to share common experiences, build peer support and seek out role models are important strategies for women to combat isolation in their research degrees (Marshall, Kearns, Bayntis & Gardiner, 2006; Leonard, 2001; Phillips & Pugh, 2005)

What I was interested in understanding in the stories was from where does the strength develop to face the multitude of challenges and still keep going with the PhD? Why did some face death of a supervisor or a loved one and yet still go on? Why did another woman who seemed to have everything going for her – a brilliant Honours result, PhD scholarship, and no family commitments – fall apart and eventually withdraw from her PhD? I turned to the psychology literature on resilience for information on how people may respond differently to loss and potentially traumatic events.

Resilience is defined in psychology literature as the ability to face adversity with hope and not be crushed by the challenges and stresses of life (Deveson, 2003; Wicks, 2009). Resilience is about taking action to overcome problems, enduring and surviving (Vale, 2004). Each of us has a range of resilience formed by heredity, early life experiences, current knowledge and our level of motivation to meet life's challenges (Wicks, 2009). As will be evident in this chapter, the women faced numerous challenges during their candidature. These challenges were met with success in most cases. However the strategies they used to cope with these situations varied. Many people experience loss and potentially traumatic events at some stage in their lives, and yet they show only minor, transient disruptions in their ability to function (Bonanno, 2004). Resilience in the face of loss or potential trauma may be more common than previously believed by psychology theorists, and the pathways to resilience can be multiple and sometimes unexpected (Bonanno, 2004). Fosha (2002, p.2) highlights that "trauma awakens extraordinary capacities that otherwise would lie dormant, unknown and untapped."

Bonanno's (2004) concept of resilience to loss and trauma relates to the ability of adults, in otherwise normal circumstances, to maintain relatively stable, healthy levels of both physical and psychological functioning. Psychologists have highlighted a number of factors that impact on people's resilience. These include: finding or creating a supportive environment (including role models); the ability to create realistic plans and follow through; knowing your own strengths; communications skills (the ability to communicate with others, be assertive and problem solve); and emotional balance (Goldstein, 2009). Bonanno (2004) proposes four distinct dimensions which suggest the multiple, and sometimes unexpected, pathways to resilience. These include hardiness; self-enhancement; repressive coping; and positive emotion and laughter.

So what is the nature of resilience? Where does it come from, how is it nourished and how important is it in successfully completing a PhD? This chapter will carefully analyse the stories, focusing on the theme of resilience, to better understand its role in the process of undertaking postgraduate research and ensuring that the experience is both productive and rewarding.

Below is a summary table outlining factors which the eight women discussed regarding their resilience.

Table Seven: Resilience

	Factors in resilience	Issues	Strategies
Eve	Peer support, role models, mentors, self-confidence	Partner's illness, isolation, confidence in her ability	Support from supervisors helped her to focus on research
Elena	Self-confidence negative but became more positive when she began teaching	Self-confidence as transferable from teaching role, few friends and little family support	Support from second supervisor, peer support
Andrea	Self-confidence; peer support; family	Need "confidence in yourself to write it"; isolation; children	Peer support groups, utilizing childcare, family support, building research network
Jane	Family support, role models, choices	Father's illness; pregnancy, how long thesis is taking	Seeing her choices as valid; support from husband
Karen	Support from – but death of – supervisor, counsellor, choices, self-confidence, persistence to complete	Putting family first; grief over supervisor's death, lack of university support; lack of family support	Making herself a priority despite family; working from home
Laura	Family support; building an academic career; persistence	Intellectual concerns with thesis	Her family in her formative years taught her to be self-reliant
Ebony	Personal – PhD is about you; balancing home and work (especially with children)	Mother's death, time away from work	Support from supervisor and husband, time away from research when things are bad
Tasha	Peer support, determination to finish the degree	Multiple bouts of serious illness; difficulties at university	Friends who supported her when in hospital; taking days off

Case Study One: Eve

Eve's partner was diagnosed with a life-threatening illness early in her candidature. At the point of diagnosis the partner was given three months to live. She described quite graphically her nightmare of being confronted with the possibility of her partner dying, spending most of her days at the hospital and yet, needing to keep working on her thesis to provide "another focus." This extraordinary resilience is worth examining at length as it may provide clues about how to survive major trauma or setbacks while doing a PhD. Her partner's illness impacted severely on Eve who spent a great deal of time at the hospital and travelling between there and home, while still attempting to stay connected with her research (page 4):

Also there was the possibility, a very real possibility that [they were] not going to live. At the point of diagnosis [they] were given at the most three months ... and possibly less, so without getting too much into the medical side of things I was just on automatic pilot, I did what I had to do every day. There was a lot of travelling involved, back and forth between the hospital and in the meantime I was trying to keep some sense of continuity in my research and my studies.

Eve talked about being on "automatic pilot" and coped by focusing merely on one day at a time. She noted that while she was at the hospital every day she still wanted to keep connected with her research. The key to her being able to keep this connection was the support she received from her supervisors and other staff at the University.

Supervisor support

Although she spent most of her time at the hospital, Eve kept in touch with her supervisors through email and telephone contact. A central element in her story is her supervisor's compassion and support in building this resilience (pages 4-5):

Throughout that time, the worst time, which would have to be from June 98 to the end of that year ... until ... I mean near the end of the year, [partner] had a bone marrow transplant in September 98, [they] had intensive chemotherapy and [they] had full-body irradiation. So and that all happened over a period of eight to nine weeks but there was a lot going on ... before and during and after

that. So I basically juggled, or balanced two roles — one was immediate and I had very little choice about — the other I think I would have thrown the towel in on several occasions if it hadn't been for my supervisors. And if it also hadn't been for the support I think of [the research office] ... and [admin person]. They really were the people who I must say [previous scholarships officer] was also and I mean I can't thank her enough — she was there for me.

It is not only supervisors who provide support to students in difficult times. The contact that they have with administrative staff that can provide advice and support can also help during these extremely difficult times. Eve continued in this excerpt to state that she continued to work on her research (page 5):

And so I was mostly largely absent in many respects but I did continue to work and I think my supervisors stood by me because they knew that I wasn't about to, that if I really wasn't going to be able to hold it together I'd let them know ... and also they were asking for ... they were supporting me and asking me for proof of work and trying to give me small assignments to keep me ... to keep me going, to give me a focus and I remember a really important discussion with [supervisor] where we really both agreed that without the focus of the academic work ... that I would probably fall apart because I needed that in fact to just to help me maintain a sense of self and my own identity.

Eve reported a good supportive relationship with her supervisors. Eve talked about the research giving her something else to focus on, to keep a sense of her own identity, during such a stressful time.

Eve found the culture of the University, and many of the staff, to be supportive on the infrequent occasions when she managed to get to the campus. She made particular note here that the support came from women (page 10):

When I could get there and people ... people never gave up on me, I think that was important and I must say that these were all women.

These few words convey a great deal about the support that helped Eve build resilience. She felt that she had support through this extremely difficult time which was ongoing. The fact that "people never gave up" on her was an important factor in her continuing with the degree.

Coping mechanisms

I asked Eve to more specifically elaborate on how she coped during this difficult time (page 6):

It was one day at a time. The coping mechanisms were [sighs] coming home every few days and sleeping like a log and then getting up and starting all over again. But in terms of my academic work, I think that what I did there was I'd take reading to the hospital with me. So I was trying to do a bit of that, and in fact that was quite welcome at times because it gave me another focus which was ... not having to deal with the immediate stuff around me, and staying in contact with both of my supervisors.

Eve coped by using the research as another focus away from the traumatic situation with which she was dealing. One of the major problems for women dealing with issues such as family illness or work is finding time for the research and in doing so, staying connected with it. In the segment below, she said that although exhausted she would work through that fatigue and refocus (page 8):

I can imagine, and this is a strange comparison but I can imagine what it would be like for a woman returning to study with small children, and responsibilities and possibly a part-time job or whatever, but when you've got your kids with you that you just grab those times whenever you can grab them. I think one of the problems, and I'm sure this happens to young mothers too, is that you are fighting fatigue, and it's not only ... for me it was not only physical exhaustion but it was emotional. And so you pull up when you actually had a moment to refocus and study. As I call it in this house, going to my corner ... [gestures to desk set up in corner of lounge area] ... and I would just find that I was exhausted and I would just have to move through that because I could easily have just collapsed in a corner and fallen asleep. I think being able to leave the house was difficult but actually getting out and to supervision sessions face-to-face was like a holiday.

There was a sense in which a focus on her particular research interest provided another level of motivation that broke through the tiredness barrier. Eve talked about the strategies she used to cope with issues of time, comparing her situation to that of a woman with small children, and the need to grab time for the research when she could, regardless of physical and emotional exhaustion.

Maintaining wellbeing

Eve also discussed ways in which she tried to maintain her own wellbeing. This included having a weekly massage (page 9):

During that time I found a local masseuse and I saw her on a weekly basis. Particularly when the pressure was on when I was really feeling ... I mean the pressure was on all the time but there were times when I really felt ... when I felt like I was going to go under, I'd think, "She's not far away, I'll pop around and see her."

Eve understood the need to look after her own health and wellbeing during this time and made sure she found ways of coping with the stress. A further important facet to her resilience was the peer support she found and utilised.

Peer support

Eve used various peer support networks, including a group that operated as an electronic chat group (page 9):

I had some peer support through a group that actually set up ... there are about ten in the group. They're an electronic group, a chat group, and it's basically a group of PhD students who, there are a couple of Masters students in there, who are all in the same area ... all finishing off their theses, and they're all around Australia and at different universities. We found each other through conferences and word of mouth and knowledge of each other, and so that peer support group became very important to me, I think because I felt so isolated from my own university.

This group comprised students from a number of universities around the country and it helped Eve deal with the feeling of isolation from the university due primarily to her partner's illness. Eve also kept in contact with two students from her university although she was not able to get to campus very often (pages 9-10):

I got to very few University functions, though I was made to feel very welcome, but other than the sort of departmental seminars where I presented some work and the kind of social get-togethers that happened, annual get-togethers, I really felt ... I didn't feel like I was part of the University. It wasn't that my Faculty wasn't making me feel welcome, it was just that it was impossible to ... for the best part of two years, to really be able to fully become a bit more involved in those things. And I never think, and I don't think that I ever really did, and it's

been circumstances mostly. The things that I did get to were also very important, and they were important for me finding two other students at [name of university], [name 1] and [name 2] and those two students have been absolutely fantastic, just phoning each other up and occasionally seeing each other and turning up to the same things and just being able to talk through various aspects of related issues to do with study at my own university, because ... the process is different at every University, we were able to sort of guide each other a bit, and help each other. And that was ... really important.

It was critical to her strategy of keeping connected to research, despite the dire personal circumstances, that Eve also found two students at her own university with whom she could share her journey. This helped deal with the common issue facing many PhD students – isolation.

Isolation

Isolation is an issue that all of research students have to deal with to varying degrees throughout their candidature (Leonard, 2001; Marshall et al., 2006; Phillips & Pugh, 2005). This was particularly the case for Eve and she mentioned it more than once in her narrative. Her isolation was exacerbated by not being able to get to campus very often and interact with other research students (page 10):

It's a really common one. Just about every one of the peers that I, in the electronic group, and the people that I know, unless you are based within the department and they are actively engaged in doing either a bit of tutoring or they are actually involved in their Faculty's life, at whatever level that might be ... and I think a lot of students ... that are doing full-time research can have that feeling of being quite isolated.

Eve's strategies of the electronic peer network, and the two students from her own university with whom she was in regular contact, helped her to deal with this central issue of isolation. Given the growth in social networking sites over the last ten years, Eve's strategy of keeping in touch through electronic means when unable to attend campus, was an effective one that can provide a sense of connection for students in similar circumstances, and especially for those in geographically remote locations.

Role models

Role models and peer support were important facets in many of these women's stories. Eve particularly mentioned role models as an important factor several times in her narrative, with special reference to her sister and her partner. It is clear that these role models helped her build resilience (page 15):

Role models I think are important, and ... I mustn't leave my sister out of this, my older sister. I saw her return to study, after she had raised three small children, and she, and she returned to do her mature age entry into university and she actually dux-ed [sic] the class, she dux-ed [sic] the lot of them ... [seven lines deleted] ... but her kids and her partner could not see, they were all dumbfounded and they could not understand why she wanted to return to study. And in fact the lot of them were ... not very supportive actually, except perhaps for my niece. So she's got two boys and a girl, and the girl was supportive. The men could not understand why Mum was going back to study, and I think I watched all of that unfold too, and that made me even more determined. I thought "If she can do it, I can do it."

Eve's sister was an important role model and also, as she continued in this excerpt, we see she was a support as well (page 15):

[She] had acknowledged at the beginning the lack of support from her own family members, and she didn't want to see that happen to me. So I think that she was a role model, and she still is a role model, in terms of acceptance of my life, of my choice of lifestyle, my wanting to return to study, wanting to do a lot of different things.

Eve came back later in her narrative to mention again the importance of mentors, peer support and role models (page 19):

The electronic peer group from my own field and then the two students that I found at [my university] through the few events that I did actually attend, they've been very important ... yes, role models from my own family, mentors.

Given Eve's return to the theme of the support she both received and drew on from other people, this was clearly important to her. She included her partner as a role model in her narrative here and described the enormous resilience in the face of death and its impact (pages 19-20):

I should say another role model has been my partner who has had an interrupted academic career as well ... [five lines deleted] [They were] ... getting very badly burnt out and very badly paid, which is why [partner] returned to university but seeing ... someone go through what [partner] has gone through and also manage to put [their] life back together again, has been ... if you had a choice about going through an experience like that you'd probably say "no" but if you have to go through it, I mean it's a strange thing to say but I feel I have been very privileged ... to watch someone do that, because it's motivated me when I've been feeling a bit pathetic and down about myself, I've looked at [my partner] and thought "God, why are you feeling down?"

For Eve, watching her partner put their life back together after a life-threatening illness provided a wellspring of energy and determination to continue with her research. Later Eve briefly returned to the idea of role models and peer support as important ways to build your community.

Persistence

Towards the end of the narrative I asked Eve to discuss what gave her the staying power to keep going (page 21):

I mean somehow believing I was a rock on an island ... [Laughter] I think the determination to succeed, I mean I think that if you talked to other people who've known me for years they'd pretty much say the same thing. I think that there's always been great determination and great will, if I'm passionate about something and I want to do it. If I'm not interested I'm absolutely hopeless. I think if I got into a workplace and I wasn't interested in the work it would just be a disaster, so ... I think all of those things, critical awareness, I think, of the feminist, as a woman of not wanting to fail, not being seen to fail ... I think it's ... the double disadvantage sometimes of difference, being in various workplaces or different communities where you are seen as different, and you're determined to rise above that and not ... be the brunt of other people's jokes about failing or not being able to cut the mustard ... grit.

This extraordinary determination came from a self knowledge that there was a core of persistence, resilience and sheer "grit". It also came from bitter experience of not being considered tough enough or good enough, "not being able to cut the mustard". In addition she located this within a feminist discourse of the "double disadvantage" women often experience in the workplace. The theme of being passionate about your

research, combined with persistence and determination to finish was present in the narratives of a number of women, including Karen and Tasha.

Self confidence

Eve discussed maintaining self confidence as a key factor to succeeding in her PhD. She noted that she had a crisis of confidence at a couple of points in her candidature. She emphasised the moment in the middle of research where she thought that she was not able to "hold it together anymore" but noted that as soon as she acknowledged this, she was able to keep going. She was acutely aware that the last part of the candidature could be difficult; she was almost anticipating this. Nevertheless she reflected that the last twelve months on the thesis were a positive experience (pages 23-24):

If you can find your role models and your mentors and if you can build your community ... and you can maintain your self-confidence, because I think a common story is, I don't know why it is, but a lot of people towards the end of their PhD ... the confidence, they fall apart. I've been trying to think about that and I've talked with a few people about it, it should be interesting for your study too ... what I see, because surely if you obviously you have several crises in your research and writing but surely as you're getting towards the end ... again I think it's coloured by my own very positive experience with the last twelve months of my thesis where I was able to go for it.

Eve was referring here to what advice she would give other women undertaking doctoral degrees. Core elements in her resilience were reflected here – in particular building a community through peer support, mentors and role models – as well as maintaining self-confidence. Interestingly for Eve, self-confidence was not an issue in the final twelve months of her candidature, as she likened the production of the thesis to previous work she had undertaken and felt comfortable with this process. For Eve, the confidence issue came later as the quite critical financial support provided by the scholarship came to an end (page 23):

But my own sense of stepping out and feeling my self-confidence start to wane again has been when those supportive structures like the university and the scholarship were removed at the end of it.

Eve continued here to explain that finishing the PhD was a positive experience for her and self-confidence was more of an issue earlier in her candidature:

Not finishing the PhD, I mean I felt like I was growing from strength to strength to strength, I think my crisis of my own self confidence was actually right at the beginning when I had my first conversation with [principal supervisor] about theoretical frameworks [seven lines deleted] The self-confidence one, happened at the beginning and it happened in the middle when I think I just got to a stage of where I thought all of my life I've been holding it together and I can't hold it together anymore. And as soon as I'd said that to myself, I kept going. But it was being able to say to myself "I can't do this anymore." And then a voice came back saying, "Yes you can." I must say that perhaps the truth of the matter is that I didn't see any other alternatives or options at that point in time.

Eve's description of despondency in the middle of her candidature highlighted that she reached a point where she thought she might not be able to "hold it together" and admitted this to herself. But in acknowledging this she found the strength to continue. This strength was partly resilience, yet Eve herself acknowledged that it was also due to the lack of options or perhaps ways of escaping that she could see at that point in time.

Financial security

Eve went on in this excerpt to discuss the role of the scholarship in allowing her to persist with her candidature. Continuing with the research enabled Eve to keep her scholarship (page 24):

The scholarship was my safety net, and I used that safety net, but there wasn't any point I don't think that I could honestly say throughout my candidature that I ever felt like, that I thought I was riding off the back of the university or that I thought that I was just going to take the money and I was never going to finish. It never ever occurred to me that I was doing it for those reasons.

There was a sense in which Eve saw the scholarship as a contract. She was paid regularly, but in return she needed to perform. Despite the intense trauma experienced with her partner's near death she was not going to "ride off the back of the university".

There is a fundamental sense that remaining on the scholarship is linked to performance, regardless of what else was happening in her life. Contrast this attitude with that of Elena who drew on a scholarship for three years without even producing a candidature proposal, let alone writing even a chapter of her PhD.

Eve talked about having experienced burnout twice before in her working life, but interestingly not during the PhD. She credited this to the financial support of the scholarship. This enabled her to focus on the research without looking for other work; thus a fundamental underpinning of her resilience was minimal financial security. While the stipend attached to the scholarship was roughly equivalent to the minimum wage, it enabled some sense of stability in otherwise often difficult personal circumstances (page 19):

Before I took up the offer of the place at [previous university], I was suffering from burnout. And that had actually happened twice, that's happened twice for me in my working life. Why it didn't happen this time is an interesting one. I think perhaps it was because through the scholarship I was able on a very basic wage or living allowance, with the top-up from the carer's pension, I was actually able just to focus on the job at hand which was to research and write my thesis. And for a long time ... [several words indistinguishable] ... so financially as long as I was careful, I didn't have to go out and look for more work, on top of being a full-time carer as well ... so that probably made the difference, and I was working from home, there were times when I had to, when that was the last thing I wanted to do, but in many ways it was, it also was convenient and that helped me get through.

Eve's resilience is shown in her ability to keep working through very physically and emotionally draining times. She had role models and mentors including her partner and supervisors. She also had a peer support network which helped her overcome the isolation that many PhD students experience, as well as support from administrative staff within the University. Her scholarship provided the opportunity to focus on her research and not take on outside work, particularly when she was a full-time carer for her critically ill partner.

Case Study Three: Andrea

Andrea's motivation for doing a PhD was, as previously discussed, a learning opportunity. She had her first child while doing her PhD and utilised childcare to give her time to work on the thesis (as her parents had done when she was young). While not being provided with the supervision she needed, she organised another co-supervisor and joined several peer support networks for graduate students. Andrea was one of the women who didn't report experiencing great highs and lows while doing their PhD. She emphasised the need to know yourself and how you best work – in her case she needed both guidance and the confidence to do it.

Starting a family

Like many younger women, undertaking postgraduate research often coincides with starting a family. Andrea had her first child while doing her PhD (page 4):

Of course the other thing that I forgot to mention is that you always look around ... how postgraduate study fits with your family plans as well. So I had [daughter] in that time which you could see, say it was a delay in terms of the formal progression of the PhD, but in terms of my learning I would say it was a definite benefit and I would recommend it to everyone ... but admittedly I have to fully rely on childcare at this point, just to be able to continue with my work.

Andrea discussed having a child during her PhD in a very matter-of-fact way, including her need to use childcare in order to continue studying. Andrea, Ebony and Jane all had children during their PhDs with varying impact on their research.

Overcoming isolation

Andrea also talked about isolation and how she actively looked for peer support outside of the supervisory arrangement as a way of building networks and resilience (pages 2-3):

So I think with almost any PhD I've come across it's a type of isolation you have to go through. At least the first one or two years until you get the frantic stage of "Gee I need to get something down on paper." And so ... [sighs] what I've done

in the second year was not only shape the project more to my own understanding of the topic but also to look more actively for postgraduate discussion groups, because what I've actually found is that not a lot of universities are prepared to foster some kind of postgraduate culture ... so you just don't ... readily kind of meet people that are either doing the same thing or even you an associated area ... but you could still share certain experiences or even library tips or which software to use and all these things that are incredibly useful.

Andrea understood that peer support was a good way to network and share information, even if students were in different research areas. She also commented that universities don't seem to understand this need for support. She continued to say that she found two groups (page 3):

So I found then two groups, one at a university and one not at a university where postgraduates were meeting ... and one group was more concerned about reading texts and just discussing them ... and the other was more a matter of what came up at the time that was important to the students that turned up. So they would either discuss a text or they would discuss supervisor problems or they would discuss how you structure a PhD thesis, what seems logical for your thesis, that type of thing. So it [was] just a matter of the person speaks who is actually in that situation where they need advice. So it's on a needs basis ... so that was very helpful.

These two different groups enabled Andrea to talk with other students about both research specific issues such as relevant literature and also more practical concerns such as supervisory relationships. These forms of peer support allow students to share their experiences and find different ways of doing things that they may not have previously considered.

Self confidence

Andrea initially reported needing considerable guidance but then realised that she needed the confidence to do it (page 3):

I was initially someone who looked for a lot of guidance and couldn't find it. Until you kind of start to realise that you can have all the guidance in the world, you still need to do it. And so it's a matter of ... presuming that you are confident enough to write the damn thing. So I guess in the end it comes down to your own self-esteem and things like that ... but obviously your way can be made a whole lot easier if you have proper guidance.

Andrea noted that guidance from supervisors only goes so far, and that a student needs to be confident that they can write the thesis. In the previous chapter she also linked this issue of self-confidence to also having a supervisor who had confidence in you, which would indicate that supervisors have a role to play in helping students to build resilience.

Persistence

When asked about the personal factors that help someone to get through a PhD, Andrea talked about being disciplined, focused, and academic and social pressures. Like several other women in this research, Andrea emphasised that she is someone who finishes what she starts (page 11):

I think I'm basically probably a person that ... finishes what she starts ... I think in the end the discipline to just sit on your bum and write a 1000 words every day. I think that type of thing gets you through, I think ... it's just discipline, it's not really intellect or skill; I think it's just discipline.

Like Eve and Tasha, among others, Andrea portrayed herself as someone who finishes a task that she commences. She notes here that discipline is important to being able to keep working on it every day. Andrea's was aware that people work in different ways, and that while some students work well from the outset, she had to find her own working style (page 11):

I know of people that have written two-thirds of their PhD in the first year, now, I'm not the type of person, I need the pressure and then I'm getting on with things, but I know someone that rewrites ... you know x many versions ... but I write one rough draft and then I go through that but then it's already pretty dense ... so it's just a matter of finding your own working style ... some people work well in the morning hours, or they go jogging and then come back to work or ... whatever suits the person, so you have know yourself well, and the type of hours you're good at learning ... you are better writing at that time ... and better at reading later ... so finding your level of work ... and it changes too, especially when you've got outside pressures and children, husbands, families, and friends.

Andrea worked well under pressure and reflected here that while you may develop an effective routine, it needed to be flexible in the face of external pressures. For her, using childcare, being disciplined but flexible, and utilising peer support all helped her to continue through her candidature to completion.

Andrea, like Eve, also used peer support networks to help overcome the isolation that research students often experience. Echoing a number of women in this study, Andrea mentioned being someone who finishes tasks that they start. Self-awareness of her most effective working style, and the realisation that she was the one that had to write the thesis helped Andrea to keep moving forward. Starting a family while studying appears to have made little impact on her progress; Andrea was happy to utilise childcare facilities to give herself the time required for her research.

Case Study Four: Jane

Jane enrolled in a PhD directly following her undergraduate degree. One major factor that impacted on her research was her father's serious illness. She discussed rearranging her schedule by studying at night in order to spend time with him during the day. She also started her family during her candidature.

Starting a family

Jane was six months pregnant when I interviewed her and she raised the issue of the timing of the baby and how it might affect her career (page 6):

Now that I'm having a baby the idea is that I'll have a break now so ... but that's something else that I think plays on my ... I was saying before that I regret that it's dragged my life out ... that to be honest and as much as it's probably, I don't know, something that I'd not ever really have wanted to admit before, the fact that I'm a woman and that I do want to have a baby does have to be fitted into that calculation of how long it's taken me to do this and whether it was the right thing to do ... and I guess it was taking so long that it's eventually got to

the point where we said, my husband and I said, "Well, look let's have a baby now and if I can find a job when I'm finished I can, and if I can't well I'll find a job that's just an engineering job or I'll do something else." So as far as my career goes it's probably not the best thing to do, but then there's probably never going to be a [right] time, and I'm already almost thirty so it was kind of hurry up and do it or we won't be able to.

Like many young women, Jane's decision to start a family coincided with the time when she undertook her doctoral degree. Nevertheless, she had sufficient confidence/resilience to decide to have a child even if that might impact on future career options.

Balance and perspective

Jane's father was diagnosed with cancer two years prior to the interview. She reflected that while she was distracted by this, the PhD allowed her to be flexible in terms of her use of time (page 18):

Two years ago now almost ... my Dad was diagnosed with cancer, which is ... another thing that ... it's life and life happens and ... it distracts you from your studies. And there's things that come up that mean that your studies have to be put on hold for a little bit ... you're not quite as productive as you otherwise would have been because there's other things going on ... I guess that in one sense it was good because I was able to do what I needed to do to be with him and my family ... because my study hours were flexible. So I could study all night and be with him during the day, or vice versa that I was able to be flexible like that which you know, not everybody's got that ability so I was lucky. I appreciate that fact ... that I was able to do that. But at the same time ... it does really distract you from what you're doing.

Jane understood that other facets of her life could and would impact on her studies, and that there would be times that productivity would be reduced. But the flexibility of a research degree enabled Jane to spend time with her Dad and support her family through this difficult time. She noted that these events also made her re-evaluate her priorities in life (page 18):

And changes too, I think, some of your opinions on life and what's important. And previously maybe I'd been more directed and gung-ho about getting this thesis finished and done and whatever and then maybe ... when that happened I

realised well hang on, no the clock does tick, a light does go on, and I guess that influences other decisions in your life about ... you've got to balance your life ... still have one ... away from university and away from your thesis ... because your thesis could take another three years and a lot of life can happen in three years.

Jane's father's serious illness caused her to reflect on what was important. While the thesis was important, she acknowledged that it could take a long time to complete and there were other aspects of her life on which she needed to focus. She continued in this excerpt to discuss that the pressure of the thesis can cause a lot of stress (page 19):

I mean the same with so many other life experiences too, somebody passing away or ... world events can happen and all of sudden you can think, "Well, hang on, no ... whilst it's important that this thesis gets finished and as much as I want it to be finished ... if at the moment it's causing me so much stress that I'm not sleeping at night and that I'm so sick all the time because I'm anxious and worried about it, it's not worth it." It's not worth making yourself sick over ... if you can do it without making yourself sick then do it that way. If you can't then you have to consider what it is you're doing and why you're doing it ... but ... that comes down to personal attitude and that's something that's completely internal and it's just a shift in your focus of saying, "okay I'm not going to let it get to me anymore."

Jane emphasised here that through difficult life experiences, one's perspective can shift. While her thesis was important to her, it was not worth making herself ill over it. She emphasised that she had to realign her focus. She discussed how she managed to make this mental shift in perspective when she realised that she had choices.

Choices

Jane went on to discuss how realising that she had a choice to continue or not actually helped her to keep going with the PhD (page 22):

I think that the knowledge that ... that I could stop it if I wanted to, or had to, is almost empowering. That you think, especially because if I have that opinion that you haven't failed in your life's work if you do let it go that that actually gives you the strength to keep going with it somehow ... it's the opposite ... it oppositely turns in your head ... you think I'm not doing it because I have to ... I'm not doing it because I've got something to prove, or because everyone expects me to ... I'm doing it because I choose to do it. And I could choose to

stop if I wanted to ... but I choose to still do it ... so that gives you ... some strength to keep going.

Her decision to continue was tempered by this realisation that whether or not she continued, it was her choice and that she was in control about making that choice. It was the knowledge that she had choices that helped build resilience.

Jane, like Andrea, had chosen to start a family while undertaking her degree. As Jane was interviewed while she was pregnant, her narrative doesn't elucidate how she coped once she had the baby. She mentioned that seeing the PhD as a choice, informed her decision to continue. While she regretted the length of time that the PhD was taking, she came to understand that other facets of her life were important and needed her attention as well.

Case Study Five: Karen

Karen's story illustrates the crises that can occur both with PhD candidature and also within the family, and that in these circumstances one needs to create a space to build resilience. Karen's supervisor died while she was enrolled in her PhD and she also had family issues, which resulted in her mother needing Karen's emotional support.

Interestingly she talked about seeing a counsellor who gave her "permission" to take as long as she wanted to grieve and to switch off the phone. She talked of a period of time when she felt she was a magnet that attracted problems and explained the strategies she developed to regain control.

Grief

Karen talked at length about her principal supervisor's death which occurred when she was in the third year of her PhD (pages 10-11):

Probably it was about three years in, coming to the end of the third year ... [principal supervisor] was pretty sick. He was pretty sick all the way through. He was only ... fifty-five ... but he'd been ill as a child [37 lines deleted] He was in intensive care ... and it was about a week or so before he passed away. And I mean ... it was just a horrible time ... because here's someone, it was sort of secondary to me at that time at that stage that he was my supervisor because he was someone, he was my mentor and ... I don't think there are a lot of people that get a mentor ... and I think you're damn lucky if you've had one, even for a while. You know, someone who you can really look up to ... respect their advice ... their opinions, their views even if you don't agree with all of them.

Karen had a good relationship with her principal supervisor, whom she described as more like a mentor. She was well into her candidature when this tragic event occurred. It was also one of the few times that she had had to deal with the death of someone close to her and she went on to explain its effect. Her hesitance in the narrative serves to illustrate its strong impact (page 11):

And, yeah ... yeah so it was just ... you know, I don't think ... I think my grandparents, or my grandfather ... my grandmother had died and you know, I'm just trying to ... there's no-one that, oh my acupuncturist died, that was a bit rough ... she'd died about a year before, only twenty-seven and had had breast cancer which is terrible ... I think for the first time I found myself not just sad that someone had died and "oh that's terrible, that's unfortunate" or whatever but really grieving, feeling just ... that horrible feeling that can't, you can't do anything about until some time passes.

Karen struggled to come to terms with the grief over her supervisor's death. In addition, he had other issues happening concurrently (discussed below). Karen went on to say that the memorial service helped her come to terms with her supervisor's death (page 12):

Anyway we had [principal supervisor's] service ... [two lines deleted] ... so that was a good chance to see everyone else feeling as crap as I did and ... we all had lunch together and colleagues came down from [interstate] ... that sort of thing's good ... Well I knew that everyone else was feeling just as...'cause I'd been into uni and as soon as I saw [colleague], one of my other colleagues, she started crying and that made me cry and everyone's trying not to cry and just discussing ... things.

Karen was helped in coming to terms with what had happened by interacting with colleagues from the university who had also known her supervisor. Sharing the grief helped her to accept what had happened.

Family issues

She concurrently had to deal with her family's concerns over her brother's drug addiction and subsequent legal issues (pages 11-12):

I went to see a counsellor at [name of university] because also at that time, my brother had been a drug addict for ... ten years or so [5 lines deleted] and so, I reckon like the same week that [principal supervisor] passed away ... it was coming up to the time that my family were going to court [over brother's access to his child]. Mum and Dad had a stake in this. It was really only my sister and I that didn't but yeah, I really didn't want to go because I had my own you know business to deal with ... but Mum ... really insisted. "Oh if you could just come for me" and I went as I had done a couple of times before in that year ... it wasn't a good outcome on the day and [brother] and his partner sort of freaked out and ran from the court ranting and raving and all the rest of it. And you know how you, with something like that you sort of leave the place just feeling like ... when you've done an exam and your adrenalin is so high and then when it's over you feel flat as a tack. You just feel wiped out. And I just felt shocking ... like that?

So, while trying to come to terms with her supervisor's death, Karen also had to provide emotional support to her family. Emotionally she was drained and reported that her family in turn didn't seem to respect that she had recently lost someone to whom she was close (page 12):

And I was so annoyed [laughs] I'd sort of been dragged into all this stuff when I had my own ... and just the fact that no one seemed to sort of really respect that, you know? And ... I think too my friend was getting married that week as well.

Karen had three major events with which she was dealing at the same time. She was "annoyed" at her family expecting her support while she was grieving.

Seeking help

Karen decided to seek counselling to help her through this difficult time, and also to help her find strategies to move forward (page 12):

I went to see this counsellor ... I talked through all this business with my ... that had been going on with my family because people just really seemed to be wanting stuff from me all the time but I seemed to be letting them ... take it?

Karen implied here that she felt her family and others were too demanding at a time when she was still grieving about the death of her supervisor, and that she was letting them "take" energy from her. The counsellor helped Karen to work through her grief (pages 12-13):

And she just said, "Take the phone off the hook for the day if you're trying to get work done." Because I was just sort of left thinking "well, God what am I going to do now?" I still feel like ... I'm on my way, but I really haven't resolved exactly what I'm doing ... and I've got all this other business to contend with as well ... and she said to me, I told her about [principal supervisor], and she said, "just because, you've had the ... the funeral or service or whatever doesn't mean you have to be finished with grieving. You take as long as you like."

This advice helped Karen to see that she could take back control by putting her needs first and also to understand that she could allow herself to take the time needed to work through her grief. This was the first step in Karen starting to take back control over issues which were draining her emotionally.

Taking control

Karen continued to describe in her narrative that she reached a point where she realised that she had to make some changes because she seemed to be almost a "magnet" for trouble. This happened over the Christmas break at the end of her third year of candidature (page 14):

I said to [husband] "That just does it. I've had it." I'd been through this period of this crap with my family, brother, I was sick of hearing about him, and that's how [colleague who referred Karen to me] and I got on as well, because of her

family ... I was baking every week, a slice, a cake and just eating it [laughs] and ... still teaching at uni and just really been digging a bit of a hole for myself ... and just out of control. Everything was annoying me. My neighbour, I'd say, "Hi, how are you?" and I'd regret saying "Hi, how are you?" because I'd get all of her shit. "Oh [name] this happened and oh you know, oh my kids" ... I didn't get paid one week and the girl was like "oh, well I'm sorry, it doesn't really matter does it?" and you'd think "Yes it does matter." Some woman ran into me on the [name] bridge ... and she said sorry ... and it was just heaps of stuff all at once and I'd just sort of been through this sort of period ... you've got to think after a while, like why am I a magnet to all of this. And that's because you just ... need to change some stuff, you need to turn things around.

Karen reported here feeling "out of control". Her realisation of this led her to start making some changes "to turn things around." She came through this period of family instability and profound grief at losing her supervisor by making a decision or series of decisions that, little by little, built her resilience. She talked about taking control back by doing little things that she had been putting off (pages 15-16):

At the same time I realised that there were so many decisions that I was putting off that meant that I couldn't move on with what I was doing, things like ... just stupid stuff but it seemed like a big deal the previous year. [12 lines deleted] ... And you know like, "Oh, that's another hurdle" so I just decided, I just had to take things on ... just tackle them and then I started going to these workshops that are offered through the University for anyone ... and it was a real kind of "Right, okay everyone, you've probably, you've read enough papers, you could go and read some more, but I'm sure you've read enough. And your PhD isn't going to be any better because you've read another one, and another one. So you should write. Get to it and write." And that's what I really needed that sort of kick up the bottom and so that kind of helped. And I ... wrote an introduction which ... it will change again now but that's okay because it's fairly sort of well-written and it won't be too difficult.

Karen took control back with her research and started tackling a number of tasks that she had been putting off and which were holding her back. In taking control she started moving forward again.

Support from others

Building this resilience would have been difficult without support from her husband – both financial and emotional (page 17):

At the start of last year [supervisor] read it and then my scholarship had run out by then. I don't know ... like August or something last year, and then when I worked for him that sort of gave me enough money ... to pay the bills and whatever. And [husband] had been saving while I was still working and ... from the start of this year and maybe even November last year I haven't worked at all and I've just been concentrating on writing up. Because [husband is] basically the one sort of, "You will finish this thesis" [laughs] more so than the university I have to say ... my candidacy expires on the ... well it was going to expire on the twenty third of June but I already put in for an extension and I got that. It was granted for six months part-time till the twenty-third of December, so that now gives me heaps of time to get it all done.

Karen and her husband had saved money to enable her to have a period of time at the end of her candidature to focus on writing without having to work.

Persistence

Having developed resilience, Karen was able to persevere, particularly towards the end. She noted that you have to take responsibility for yourself and do the work (pages 18-19):

You just have to keep moving. You can't make anyone else responsible. It's ... about you applying your bottom to the seat, and sitting in front of the computer and writing the sucker up. [Six lines deleted] Anyway, I just keep pushing on [20 lines deleted] No-one's on my back. No one is on my back, which is good but I still ... I put the pressure on myself.

Karen had taken responsibility for pushing herself forward to completion. It was interesting that while the other women in this research project discussed isolation, and overcoming it, as important in building resilience, Karen took the opposite perspective. She worked at home, turning a spare room into an office, and rarely went to campus in the last few months. As we see below, Karen found other people's interaction and opinions to be distracting.

Isolation

Another means of building resilience was keeping to herself and not listening to other people, because she considered this discouraging and would not help her complete the thesis (page 25):

The other thing is too that it's very hard ... you know people say "Oh it's nice to have all these sorts of continuing relationships with people and all the rest of it so you don't feel isolated and all that type of thing." But I often find that it can only sort of ... there's just been a comment or two from someone that just really puts me off and I really would have been better off not hearing it. So I just think I'm just better to lock myself up [laughs] because ... if something puts me off a little bit and I don't sort of get back into my writing straight away, then that's not helping me complete my thesis ... it doesn't take much to make you sort of think "oh, it's all a bit hopeless really." [Laughs] ... you are sort of on the edge a little bit ... because you're so into it yourself "Oh, what if I'm completely wrong", or I don't know ... just all that sort of stuff, so I just think that you're just better to shut up shop and get your own story going and get into it and get it done and if your supervisor likes it ... and they'll certainly tell you if they don't. Then there you go, that's all you need.

Karen endured the loss of her first principal supervisor and had to deal with her grief, at the same time as supporting her family in an emotionally stressful time. At the point of being out of control she sought the help of a counsellor, and together with the support of her husband, she gradually took back control of her life, including her PhD. She noted that she needed to keep to herself and not listen to negative comments from others, and maintain her perseverance. This strategy worked for Karen and contrasted with the strategies of the other women who sought peer support to help them overcome isolation in their PhD journey. It demonstrates that ultimately doctoral candidates need to develop strategies that work for them.

Case Study Six: Laura

Laura's narrative demonstrated that her successful journey was underpinned by enormous resilience that she had learnt from her parents. She discussed the ways in which her parents had encouraged and also helped her build an ability to do things for

herself. She described her experience as "phenomenal" (p. 11) and mentioned no personal issues that impacted on her PhD completion. The only minor difficulty that Laura mentioned was an intellectual problem of "feeling stuck" when working on her thesis.

Family background

It was clear in the narrative that Laura had learnt resilience at an early age. Her family had always been supportive of her education and career goals (page 28):

My parents ... have been supportive right from the outset ... they've been supportive in sort of any domain area that I've shown interest over the years.

Laura clearly had family encouragement and she lived at home throughout her doctoral degree. She expanded on this theme by discussing how they had encouraged her to be independent and do things for herself from a young age. This is illustrated in following example where she wanted to take up tennis. Parental support taught her lessons in independence, trying her best, and going after what she wanted; that is, she was being taught resilience (page 29):

It would have been the beginning of Grade Five or something and I said to my Dad and my Mum. "Oh, you know, I'd like to learn to play. You know, I like it. I want to learn to play. How do I do this?" And I'll never forget my Dad saying to me "Well, you have to become a member of a club. So you have to have a look and see about becoming a member of a tennis club." And that's what he said to me. I remember at that stage picking up the White...the local community Yellow Pages whatever it was and I looked up tennis clubs and I found a club that was just around the corner from where we were ... and he said, "Okay ring them." And I said, "Am I going to ring them?" He says, "Ring them." And I rang the clubhouse. And of course I wasn't getting anything because it's a clubhouse and of course people don't live there and I ended up ringing back. Dad said "well, what you have to do is just ring ... after school and you'll find out what they do. You're going to get someone that will answer. There will be someone there at some point."

Laura's parents encouraged her to be independent – to find out information and follow it up. When she was not having any luck, rather than take over, they advised her to keep trying (page 29):

So I'd be ringing after school. And I rang, I think it was a Wednesday afternoon or something and I got someone. And that was the ... one of the nights where they actually had functions on and people could go and play and all the rest of it. So I remember getting all the details down and the cost of membership and all of these type of things. The days ... the afternoons that they are open for these type of functions for juniors and all the rest of it. And I sat there and I said, "Well, this is the information that I have." And Mum and Dad are both ... beaming ... "Here's this child, how serious is she? You said it to her and ... she's done it."

By helping Laura to seek information and to persist when she initially couldn't get through on the telephone, her parents were teaching her valuable skills for her future as a research student. It is clear by their reaction that Laura was also aware that they were proud of her problem solving skills. Laura talked further about her parents' support of, and active interest in, her education (page 30):

They were very supportive in that endeavour. They were very supportive in the sense of education. Never ... never pushed. They never said, "You have to ... We encourage you. It's important to get an education. We're not saying that you have to be number one." So even from primary school Mum was always actively involved in the primary school when we were going through primary. Reading, writing ... all the important things and she'd come into classes and you know how you have your volunteer mums that would listen to reading or they'd help with other activities. That was Mum. But that's what she did ... through that process.

Laura's mother took an active interest in her children's education with an emphasis on encouragement, support and "doing your best." Laura continued to explain that this early start carried through to high school (page 30):

And you know after school you'd sit down and you'd be encouraged. "What did you learn? What did you learn at school today?" You'd have a reader that you'd bring home. They'd sit down, "Let's read the reader." You know, encouraging. Not "You must. You must do this. You must do that." There was, there was none of that. And that was just sort of the encouraging thing so by the time you got to ... high school, you were set ... I, well both my brother and I were set into certain ways. We knew that it was important to do as best as we could and that was the message. It wasn't, "You have to be the best of the best of the best and you can only be number one and anything less than number one is a failure. No. Do the very best that you can, and as long as we know that you've done the best that you can, be satisfied with the results. You can always look at improving the results but it's not this or nothing else." And so they've always

been very, very encouraging. And they've been very encouraging with regards to going to University.

Laura's family background and upbringing instilled in her values of working hard, trying her best and being independent. She had continuing encouragement throughout her secondary schooling and tertiary education, even when she changed disciplines. This is in stark contrast to Elena's story, as outlined in the next chapter, of a strict mother who expected her to excel at school and "be the best." While Elena succeeded academically, she had less resilience and coping skills when she commenced her PhD and had to learn to become an independent researcher. Laura's experience in trying to join the tennis club – of not succeeding on her first phone call and having to persist – taught her to problem solve and persist when things get difficult. This was central to her successful PhD journey.

Problem solving

Laura used an analogy of the PhD as putting together building blocks – a three-dimensional puzzle. She submitted her thesis within the three-year standard duration and commented that this required discipline, organisation and an ability to be critical of her own work (page 11):

Certainly I was very disciplined in order to do that. I did have a scholarship so it meant that I had three years full-time component to work towards it and it's a matter of setting an agenda. And I'm relatively organised, and I try to organise myself as to say what it is that I'm going to focus on. And I certainly didn't look at it from day one of year one saying well by the end of year three it's going to be finished. Certainly that was the ultimate goal, but I was looking at it in small segments.

Laura explained that her discipline and organisational ability helped her to manage her research project from the outset. She considered that her scholarship of three years should set the parameters of her initial timeline. She went on to explain how she broke down the project into manageable tasks (page 12):

What's the first thing that I needed to achieve? Oh, candidature. Okay, what timeline does that need to be done by? So then your energy then breaks down back from that first sort of goal. And the second one would be, okay ethics approval and clearance ... [four lines deleted] ... Getting it through the appropriate ethics committees, set-up and so on and then that next stage, which would have been "Okay, data collection." Meanwhile, of course you're still reading, your reading hasn't stopped. But looking at that type of progression, so I was sort of looking at it as building blocks. Building block one, got to the end of building block one, knew what building block two was, soon as I sort of ticked off that first building block, started the next one. And then as soon as that was achieved, started the next one. Of course you had those ongoing ones, which you always factored in. But that's how I sort of looked at it. It was just like building this ... puzzle or 3D puzzle but that at the end you're going to have that completed thesis which will go off to examiners ... and that was sort of the process and the mentality that I took through that journey which made it a lot easier to conceptualise, what I felt a lot easier to conceptualise on what needed to be done, how it was going to be done, and where I was going to end up.

Laura demonstrated considerable project management skills in her approach to the PhD. She focused on each task in sequence, but also kept an overall picture and plan of the way the puzzle fitted together. From the description above we can see that she knew what the next "building block" was before she finished the one before, and she kept the final goal in sight – the finished thesis. She explained that the "big picture" made the process much easier for her to conceptualise, while focusing on each discrete element.

Laura used the term "rollercoaster" to describe her journey. However her narrative was positive and I specifically asked if she could expand on what she saw as some of the low points. She didn't talk much about emotional lows, and the "rollercoaster" appeared to be an intellectual one. In the excerpt below she described this as "self-questioning" and demonstrating how she developed resilience in sorting through the literature to define her research topic (pages 20-21):

I suppose some of the low ... lower points through that process would definitely have been ... when you're really nutting out what it is that you're going to do ... [23 lines deleted] All of those things ... that was the first big sort of scenario we had to sit down out and work ... work out how and took a while to get that framework. The second one would have been when I had all this literature review written up on brand equity and of course some of it is talking about one

component, some was something else, so I had to restructure it. And that was mind-boggling. And that would have been one of those ... low-lights of that rollercoaster ride. [Seven lines deleted] So that was one of those titanic struggles that I had, just because the clarity in the literature base was not there. I'm thinking, "What have they all done? They've gone out on their own thing and labelled it differently but essentially it's the same thing."

Unlike the other women in this research project, all of the low points revolved around these intellectual issues and how she worked through them (page 21):

So definitely that would have been one of those ... trying periods, which when you're working towards it, or at the beginning of it, it really does seem like a period that's never going to end. "If I can't get this sorted, how am I going to the next stage? And what about this three-year completion, oh we're not going to meet that...not at this rate. We've come to such a slow here. Is it going to work?" So certainly there were times like that where you sat down and thought, "Where am I? Where am I going? How am I going to get there? What's the plausibility of getting there the way I wanna [sic] get there?" So you know, you do have a little bit of self questioning that did come in, in a couple of phases, but that probably would have been one of the bigger ones.

Laura's description here reflects her concern that these problems would prevent her meeting the submission deadline. She refers to this as "self questioning" and explains how she dealt with this difficult time by breaking down the research into stages and taking breaks and then coming back to it (pages 21-22):

I tried to break it down. I tried to take a step back and not think too far in advance and just look at ... I thought, "Well, whatever's going to happen at that end point will happen. We'll deal with it when we come to it." And then I thought "Okay, you've gotta break it down. It's gotta be more measurable. It's gotta be ... its more, more consumable parts. So that I can digest it ... what it is that I'm looking at and what it means say for my data collection perspective. What it means from my results perspective." It's no good setting the scene early on in your literature for something that you're not going to follow because then it will come up with the question of "well, you start talking about this material but it goes nowhere." So that's when I started to break it down in that way ... take a step right back from it and how do I do this? I left it for a bit. I thought, "No, need to clear my head. I'll do other things that are related to the thesis. I'll come back."

Laura's strategy to get through this time was to work on other aspects of her research and put the literature review, with which she was struggling, aside for several weeks.

She outlined how she gave herself a short break away that coincided with a conference (page 22):

I gave myself maybe a fortnight or two, three weeks about that, break from it. Didn't care what happened. I just wanted to really separate myself and what was really fortunate was that was at the time when I was heading overseas to a conference. [60 lines deleted] ... and things like that so there were some ... trying moments and some trying points but it was a matter of just trying to step away if you're working too closely with it and then just trying to break it back down and come through.

Laura's strategy of taking time away from the problem, while staying connected with her research, worked well. She brought this back to her research management practice of breaking the work down into manageable segments.

It is clear from this case that a stable family and a happy childhood provide a strong foundation for building resilience. Laura's parents not only encouraged her education but also helped her to build the skills to tackle problems for herself. She took a strategic approach to her PhD by breaking down the project into manageable tasks and working through each one. The difficulties within the PhD to which she referred were intellectual ones which she tackled by putting the work aside for a couple of weeks and then coming back to it.

Case Study Seven: Ebony

Ebony was working as an academic and had recently completed a research Masters degree. She had her first child while doing her Masters degree and her second while doing her PhD. Shortly before commencing her PhD, her mother passed away. She talked about the PhD as personal; the negotiation with her husband and her employer; and dealing with difficulties when the research goes wrong. Overall Ebony commented that doing her PhD was fun, although she certainly had to deal with a number of challenging issues.

Starting a family

Ebony's son was born while she was doing her research masters degree and her daughter was born while she was doing her PhD (page 2):

At that stage then I was a full-time academic, sort of drifting between being full-time and being about 0.6 when I had babies ... [Laughter] ... I had babies in the middle of both higher degrees ... and I don't actually see that as a problem really at all. [Laughter] ... And my kids don't see it as a problem, I think ... but it was just something about how our life is.

Ebony found ways to balance study, work and family responsibilities. She talked at length about she managed this with support from her family, especially her husband. For her this was not a difficult process (page 7):

I don't see ... anything particularly unusual about having had children in the middle of my research degrees. Neither of my children were planned [Laughter] so ... I can't say that we deliberately meant to have kids in the middle of my research degrees but it hasn't actually stopped anything very much ... I've had healthy, happy, normal, well-adjusted children. I haven't had the ... problems that some new parents have. My children didn't have colic, they both slept quite well, they didn't have major illnesses of any kind. So I've been able to get on with things.

Ebony didn't see children as impeding progress on her research degree. This was due in a large part to her husband being prepared to share the parenting (page 7):

I have a partner who's worth his weight in gold and who ... certainly sees parenting as a shared task, and good family support. So all of those things help my mother died before my PhD began but my sisters too have been quite supportive and helpful so for a ... for a time there my ... one of my sisters and I would alternate looking after each other's children in order to give each other freedom to work. And my mother-in-law has just been fantastic ... I don't tell mother-in-law jokes on the grounds that [she] doesn't live up to them ... but for my kids of course, they've never known a time when Mum, and Dad too, weren't studying.

A supportive partner together with sharing child minding with a sister enabled Ebony to balance family and study.

The PhD as personal

Ebony made the interesting point that a PhD is about you and what is important to you, it's personal (page 3):

The process of doing the PhD was, in retrospect, a lot of fun ... I was talking with [academic colleague] ... [I: Not many people say that] yeah, I did, I really enjoyed it. I was talking with [academic colleague] earlier and she said, "Well, you know, they're about studying yourself really." And I think she's right, that my PhD was about me ... and things that were important to me. And [hers] was about things that were important to her and I remember talking with [another academic colleague] who's in the same position. Parts of it were really difficult ... but ... it was also a lot of fun.

For Ebony this was particularly true. She later talked about her mother's struggle with arthritis, acknowledging that her PhD was partly an attempt to make sense of what had happened to her mother (page 5):

She died while I was in the pilot ... stage that ... while I was on [leave] in that ... project that informed the development of my doctorate ... so in lots of ways going into my PhD was about trying to make sense of what happened to Mum.

Since she was fifteen, Ebony had known her mother would die, although at the time the family did not know the nature of the illness, which was finally diagnosed as a form of arthritis. Ebony also talked about her own development of arthritic symptoms in the early stages of her PhD (page 5):

But then I was ... it must have been first year of my doctorate I'd had some arthritic symptoms myself on and off, and I'd also as an undergrad, been off to my doctor and had some investigations and been told that ... although I had symptoms, I didn't fit the diagnostic criteria for arthritic diseases at this stage ... but in the first year of my PhD I did and I had a flare and went off to see my doctor and suddenly I fitted the diagnostic profile and again, that's consistent with lots of people's experiences, that their symptoms build slowly and in the beginning, don't fit the diagnostic criteria, but after a while you do. And so my PhD went from being something making sense of Mum to something making sense of what was happening to me ... so it was a really personal experience in lots of ways.

For Ebony, the PhD was a very personal experience. Her project centred on interventions for people with arthritis; thus she was dealing daily with a topic very close

to her. When one of the early studies in her research had to be stopped, this could have led to Ebony's PhD stalling, but she persisted. She reflected that part of this was because she had anticipated her participants would respond as she would in certain situations (page 9):

And so there I am imposing on my research, attributes that are actually more about me than they are necessarily about the population I'm trying to study. You know, that ... I'm a pretty bloody-minded sort of person sometimes [Laughter] so when I say I'm going to do something, I damn well do it. But that doesn't mean that everybody who has rheumatoid arthritis responds like that ... and yet, I think I was expecting them to, so that's just one of the ways in which, you know, the project is ... quite subtly, about me rather than about the participants.

Ebony's experience here highlights her determination and persistence, but also her awareness of herself in the PhD process.

Overcoming obstacles

In one of Ebony's clinical trials the work had to be stopped, as the condition of the participants was deteriorating. This problem led to fears that the PhD might fall apart (page 6):

We couldn't be certain that the therapy wasn't actually the thing that was making them worse and so we ceased recruitment at that point and had to change the project ... and then had to tackle some of these issues about what happens when people get worse and therapies don't work ... and that was ... that was difficult. Emotionally that was hard ... I was losing what I'd invested in that particular trial. I guess there was a fear that my PhD might fall apart at this point ... it didn't [Laughter] but I think there was ... probably some concern that it might.

However Ebony realised that the negative results were worth reporting and so turned the aborted study into both a thesis chapter and a journal article (page 6):

I wrote a paper about that chapter. So there's a whole chapter in my thesis about that study and what ... went wrong but then I wrote a paper out of it that is basically about what it does to you as the researcher when your research falls over. It took me two years post-doc to get that paper published. It finally went to proofs this year but it got ... lots of rejections. People ... it was "we don't want to know."

Ebony said that this is her most popular academic article – how to cope when research doesn't work. It is interesting that researchers generally focus on the neat, tidy, successful research results – we don't see the struggle or the failures. This is a good example of Ebony's resilience in turning a negative into a learning experience that may help others.

Finding time

Ebony was awarded a Faculty scholarship that provided paid leave from teaching to write up her PhD (page 3):

The last six months was full-time. I got a Faculty scholarship to write-up. And that was really good ... it was a brave step, I think, on the part of the Faculty because I'm not sure that everybody that they gave them to ... finished. But I finished and I'm not sure that I would have finished without it, or it would have taken me a lot ... longer. I'm working on a big project at the moment that is a comparable sort of size and it just keeps dragging on. And I can't get a clear block of time to finish it, so that six months was invaluable. I had ... everything. I had all my data collection done and it was just writing ... but it was ... I needed that time.

This time-release scholarship enabled her to quarantine a block of time for writing up the thesis. She compared this experience to a current project where she was having trouble finishing because of a lack of time. The importance of this financial support from the University cannot be underestimated. Nevertheless, she had difficulty negotiating with her School for time release, and the process required considerable resilience (page 3):

My School weren't all that thrilled ... the Faculty were very supportive and ... my PhD I was actually enrolled in this School but I was working in another School. And it was the School I was working in that weren't all that thrilled because the terms of the Faculty scholarship were that you got ... they got twelve thousand dollars to buy sessionals to replace my teaching and my ... colleagues put a whole lot of conditions on that that in retrospect I should have just told them to go jump, but I didn't.

The challenge here was that the scholarship was awarded by the Faculty, but the School in which she worked had to make arrangements for her to be replaced. Ebony was prepared to compromise and agreed to teach one day a week (page 4):

That didn't change the completion of my PhD but it's another one of those things that makes me think "Gee, you know, if I hadn't had that period of time away, the PhD might never have got done, because all these other things were going on in my job..." How would I have managed? And look I don't know that I resent having picked up that teaching too much, either because it was a subject that I ... could teach well, had taught a lot before, enjoy teaching. And it was timed so that I came in and taught on the Friday. So I'd write for four days of the week. I'd actually be pretty, pretty tired and over writing and maybe having a gap, having a break from that wasn't such a bad thing.

Ebony found a way to make the arrangement work for her. She wrote for four days each week and then came in to the university to teach on Friday, which she reported actually gave her a break from the PhD. However the point should be made that the scholarship was awarded to provide a complete break from her teaching responsibilities. While Ebony demonstrated flexibility and made this situation work for her, for another female academic this extra pressure could have made the difference between completing or not.

Persistence

She went on to talk about the strategies she developed to complete the thesis. Like a number of the women in this study, she mentioned a history of being determined to finish things that she starts (page 4):

So look the final write-up. I ... [sighs] ... I really need, you know when I set goals I work to them and for the most part I make them ... and so I set myself a goal of actually finishing the writing during the period that I had as leave and I didn't quite make it actually ... and then I discovered that ... it was actually quite legitimate as long as I submitted within ... before the census date of the next semester to say well I'd still completed within the semester and so that was what I ended up doing. I sort of bought my extension on that deadline ... but that was pretty difficult for me. I'm not ... someone who easily says, "Oh, I'm running late. Help!" ... to me the deadline was going to be the end of July. And to be able to stretch it to ... mid-August or end of August ... felt like I was pushing the friendship.

Ebony's persistence in completing without asking for extra time showed great resilience. She set herself a goal of using the study leave from the university to complete her thesis. It should be noted that although the Faculty provided a scholarship to write up the thesis, and she reported feeling that she took advantage by submitting a few weeks later than anticipated, Ebony still completed her PhD in four years of part-time enrolment. The standard duration is three years full time, so she was well within the limits of timely completion.

Like most research students, Ebony at times found the PhD experience frustrating at times (pages 8-9):

I don't think there was time when I really resented ... doing my PhD ... there have been with other big projects where I've got to the point of resenting even taking it on ... but with my doctorate because I think it is in lots of ways about you, I don't think I've ever really felt that. Certainly I've been tired and frustrated with it at points but ... [I: it never got to the point of thinking I just want to chuck this] ... no ... no

She reported, however, that she never reached a point where she resented having started it or of wanting to quit. This determination was evident here and at other points throughout her narrative, as outlined above.

Negotiating support

In this section she talked about how she constantly renegotiated workloads at different stages in the PhD (page 15):

I shifted between full and various forms of part-time and that's one of the ways that the University has been a really supportive employer that it does just let you switch to part-time [laughs] and I did. I don't remember exactly the frequency now but when it ... all started to get a bit overwhelming "Oh well, maybe next semester I'll go part-time." [Seven lines deleted] And sure you take a cut in pay for that but you also get a lot of breathing space.

Ebony built resilience through being extremely disciplined in her work life. For her, the academic role she was in provided her with the flexibility to negotiate her workload to balance her study and family. Central to this ability to be flexible was the strong relationship with her partner (page 15):

And look too ... I have a partner who's worth his weight in gold. Not only because we do genuinely share household duties and childcare, but also because ... he returned to study too ... initially part-time while working. And then ... in 2003, four, five. He was ... full-time studying so ... for that part of my doctorate for 2003 and 2004 I was [working] full-time or close to full-time because ... we needed the income. He was always, and still is always happy to just sort of adjust the budget and we all pulled our belts in to make ends meet ... so you know the sacrifices were as much his as they were mine. I think it would have been harder to balance work and this type of study if I wasn't an academic, if I wasn't working for a university.

Although working less hours resulted in less money, Ebony and her husband negotiated to ensure that they could both balance study and work. She reflected that an academic career afforded her greater flexibility than other job. Together with this negotiation, Ebony's decision to prioritise research over other aspects of her life also gave her time to complete her thesis (page 16):

But I certainly got to a point where I had to start making decisions about what would give and so I ... really prioritised very carefully the things in my life and deliberately chose to give certain things up. I remember consciously giving up reading junk mail. And it probably doesn't seem like a big thing but it gave me time, you know? [three lines deleted] ... and that's more time that I have to do other things ... and I consciously gave up watching television of any type and I actually don't miss it. [Laughter] I very occasionally watch the news now but ... I actually stopped altogether [three lines deleted] I have completely got out of the habit of turning the TV on ... in my PhD that was a deliberate choice to say "I just won't turn that on. I won't watch it." I don't think I've ever been a really big TV watcher but that ... deliberate choice to not even go there ... they're some of the ways that I ... made the juggle.

Thus while Ebony continued to work and share home and childcare responsibilities, other aspects of her life were not seen as priorities. She was aware that this may not work for everyone, and commented that other women were surprised at her process of negotiation with her partner (page 17):

Every semester we'd renegotiate housework ... lots of other women seem ... shocked when I tell them that I even have these conversations with my husband. But we do ... every semester when my timetable changes and now the nature of his work is that is has sort of seasonal emphases as well ... we divide the household duties up.

Central to Ebony's narrative is the balance of work, PhD and home life, which she managed through ongoing negotiation with both her employer and her husband. Her resilience in deft and ongoing negotiation enabled her to remain focused on the thesis.

Ebony's resilience was facilitated through the support of her partner and ability to negotiate with her employer. She, like Andrea, didn't see having children as an obstacle to completing her doctoral studies. Strong self-discipline enabled her to focus only on research when she was not at work or with her family. This is contrasted with Tasha's story below, where she reported that time away from the thesis was a necessary component of her wellbeing.

Case Study Eight: Tasha

Tasha's journey has been a long and arduous one that she described as an "odyssey". She had multiple bouts of serious illness (both physical and mental), which disrupted her research. She also experienced considerable difficulty within the School in which she was enrolled. Nevertheless, she talked about the determination to finish, strong peer support and organisational ability as being key factors in her resilience. Tasha's was the only interview where there was noticeable lowering of the volume of her voice when talking about difficult subjects, and these sections are noted in her narrative.

An odyssey

She began by talking about the PhD as a journey or "odyssey" and used the word several times. She also used strong words such as "arduous" (page 1):

Since you've used the word "journey" [Laughter] I'll start with that because I was talking about this the other day with a colleague at University because she was talking about her PhD journey. I said, "I don't call mine a journey, I call mine an odyssey." [Laughter] because it's been an odyssey, because mine ... I started my PhD in 1998 and it's now 2008 ... I call it an odyssey because it's just been such an arduous journey with ... a lot of illness and a lot of hiccups.

When I interviewed Tasha she was within two months of completing her PhD which had taken almost ten years to complete. She had to deal with several episodes of incapacitating illness and in addition had a range of other issues to address.

Lack of support

Early in her narrative, Tasha talked about the lack of support from the School when she had experienced life-threatening illness when she developed pneumonia (pages 1-2):

I'm going to call it bullying that I got in the School of Nursing ... there are people I think deliberately made it hard for me, the lack of support. There also were deliberate hindrances that were put in my way, the lack of support and understanding that I got when I was ill. And ... I'm just trying to think of the lack of understanding kind of thing was like somebody said "oh ... you've said you were sick but that was quite a while ago and we haven't seen any writing from you recently." I'd actually been in intensive care dying of pneumonia and I'd just been out of hospital about three weeks and they were questioning why I hadn't produced any work. I was barely walking [Laughter] and ... things like that so it was really a very, very unsupportive environment.

She is not explicit here about who in the School made the statement, as her principal supervisor is located in a different School. Her illness meant that Tasha had to change to part-time enrolment, which brought further issues (page 2):

I had to change to part-time because I'd been ill and I asked "Do I need to clear out my office?" and they said, "Oh no, no, no, it'll be fine. And you can leave your stuff there. Sort it out when you're better." And then suddenly I get a phone call one day saying, "We need the office cleared this afternoon, come and get your gear. Get your data off the computer ... and ... now."

The traumatic experience of nearly dying from pneumonia that Tasha described was here juxtaposed with a distinct lack of concern or consideration by the staff of the university. This resulted in Tasha reporting that the School she was enrolled in was a very unsupportive environment.

Dealing with illness

As discussed above, Tasha experienced a life-threatening bout of pneumonia and was hospitalised. However she also experienced other health problems which were ongoing throughout her candidature (page 2):

So lots of difficulties just presented and made it harder than it had to be ... I call it my odyssey because ... there's the like multiple health problems and [they] made it ... pretty difficult ... Yes, lots of those, lots and lots of hospital admissions, long and short and all sorts of things ... so I call it an odyssey.

Tasha talked about how these illnesses disrupted the "connection" to her research and her enthusiasm. Yet the narrative demonstrates her resilience, despite the disruption. Even though she was passionate about her research topic, at the time of the interview she was in her words "over it" (pages 2-3):

A lot of them have been quite long and that ... two of the illnesses have actually necessitated a whole year off and because of that I felt like I've actually gone away from it and had to come back and start over and it's almost like starting again. So that's been really, really hard. I really ... I really literally felt like I was starting from the beginning on those two occasions. And other times I've had shorter periods of time, about seven months off, two or three months off, and even on those occasions I feel like I've had to start over again and re-immerse in the project ... I found that really, really difficult.

Tasha's recurring illness caused varying lengths of time away from her research project. She had progressed well in her first year, despite various bouts of minor illness, until she became seriously ill (page 5):

I went pretty well for the first year until I got sick. One year full-time ... in that year I had a couple of minor operations and a bit of minor illness but that was pretty good for me.

The illnesses became more frequent and in several instances much more severe. This meant that she had to continually go through the process of reconnecting with her research when she returned from periods of leave.

Persistence

When Tasha discussed this loss of connection, she also noted that she would lose her enthusiasm as well. As with other women in this project such as Eve and Ebony, Tasha reported a need to "finish it because I'd started it" (page 3):

And not just a connection but also the enthusiasm as well ... "I'm over it." ... I just don't like it. Even though I was really passionate about the topic I ... don't think I enjoyed it anymore. After a while it just was something that was there in my life and I had to do ... I had to finish it because I'd started it and I didn't want to let it go. It was kind of possessing me in this way that was illogical and ... I began so I had to finish it [said softly].

She expressed a strong compulsion to finish the project. She continued here to explain that she could see the point in the research but that her mood would shift day by day as she was nearing the end of her candidature (page 3):

And even now I think, "What was the point in all this?" But ... when I was writing the conclusion I thought, "Oh, this is why I did that, I remember now." Like, this actually does have a point for [nursing] and it does have a point for the profession. There is some sense in this. If I get this published and out there and [nurses] read it, this is really good. I remember, this was about ethics, this is why I did that. This is really good. And then I'll have a day when ... I'm really over it like, "Oh, was it worth it?" You have those ... sort of fluctuating moods I suppose where it's just all too hard.

Tasha could still see the usefulness of her project for her profession which helped her to persist with her thesis. It was not surprising that she felt overwhelmed, as she was working long hours at the time of interview, in order to finish. Although she noted how "challenging" this experience had been, she was determined to finish (page 3):

The odyssey thing like, Pilgrim's Progress or something, where you're walking on and on and it just seems to never end and because I'm having fourteen hour days I'm at uni at two o'clock in the morning trying to ... I'm

often in at two o'clock in the morning because I'm a night person and you're sitting there typing away and "what am I doing this to myself for?" [four lines deleted] ... or you remember what your participants gave to you ... something that's going to be very relevant to the practice and then I'm reminded of why and that's really good. But other times, it's just a drag [laughs] so it can be really, really challenging.

Later in her narrative, Tasha came back to this idea of persistence and "finishing what you start" (pages 20-21):

For me that plodding on, that ... persistence ... completing ... all those times when I thought "I have to do this because I started it and I'm going to finish it, no matter what." Even though many times I didn't want to anymore. I'm just going to keep going ... and just to get to the end ... sometimes just because I started it and I'm damned if I'm not going to finish it. [Laughter] ... I have a bit of tendency not to let things beat me ... so I'm a bit determined that if I start something I'm ... going to finish it. And if I ... start something I'm going to finish it well. I get frustrated with my PhD because I know I have not done as well as I could have, had circumstances been different. I ... have done as well as I could in the circumstances I had. I've tried very hard to make it the very best PhD I could because of the circumstances I had that I could have done a much better PhD if my circumstances had been different.

Tasha reiterated several times here that she was someone who finished tasks that they started, and finished them well. The frustration was intensified by her particular circumstances which she felt had impacted on the quality of her PhD. Tasha's persistence is even more remarkable when you realise at one time she was suicidal (page 21):

But there have been a number of times with the PhD where I nearly chucked it in ... but there have been a number of points during this PhD where I nearly chucked in life too ... because of probably severe depression and I just thought that being dead would be a whole lot easier. And when you want to be dead, what's a PhD? ... I seriously used to just wanna be dead so ... nothing really was very important at that stage and that was during the ... I took a year off. I wasn't doing the PhD at the time.

Tasha discussed how she developed clinical depression following a life-threatening bout of pneumonia that resulted in her being in intensive care. She completely lost interest in her PhD and in life (pages 21-22):

I spent nine months in a psych unit so I was pretty sick. That was after I had pneumonia. I suffered from severe post-traumatic stress disorder, major, major, major depression and ... it was ... pretty bleak. [22 lines deleted] But ... during that time my PhD was just ... I used to pretend I was interested in dealing with it ... perhaps to fool the psychiatrist ... I went to bed every night hoping I wouldn't wake up the next morning. Wake up every morning wishing I hadn't. Doing a PhD was really ... not something that meant anything.

It is a testament to Tasha's remarkable resilience that she came through this experience and returned to her PhD after a long and difficult absence. This was clearly an extremely difficult time in Tasha's life. She talked about the vital support she received from friends when she was hospitalised with depression.

Peer support

Tasha's friends demonstrated extraordinary kindness and persistence in meeting with her towards the end of her hospitalisation (page 22):

Interestingly though, one of things that motivated me back towards my PhD was two amazing friends that started their PhDs with me ... now they're doctors for quite a long time. They ... came ... to the hospital where I was and they said, "What can we do to help you get back to your PhD?" This was towards the end when I was starting to get a bit better and they were just such ... have always been and are still, just such wonderful friends and motivators and ... helpers with my PhD.

As Tasha began to recover her friends worked to re-engage her with the research by reading articles and discussing them. This kept her connected in some tangible sense with the PhD (page 22):

You know, they can't do my PhD for me, of course but ... they said, "What can we do? How can we help you? What would you like us to do?" And do you know, they read articles for me. They brought three copies of articles that were relevant to my PhD and ... they both read them and they came back to me and I read them and they read them, and they said, "Well, what did you make of this? And what did you think of that? And why did you choose this article? And how do you think this is relevant to your PhD? And this is what we thought and did you pick up on this? And did you...?" And so we worked through a few articles. We'd meet for coffee and work through a few articles at a pace that I could handle. And just gently tried to keep some interest for me in my topic.

This gentle encouragement and support, even in the face of Tasha's apparent resistance or lack of interest at times, kept her connected and she re-emphasised its importance (pages 22-23):

And I must have driven them around the twist and back again but gently ... they just kept prodding me gently. And every time I had some little victory "Oh you wrote a paragraph this week. That's fantastic! Great! What chapter was it in?" "I don't know if it will even go in a chapter." But they were just ... there. And I guess things like ... kept me going. And without those little helpers that ... that year, maybe I would have not kept going. I think fellow PhD students are ... as I said already, I've got a fantastic supervisor but fellow PhD students ... I think the support and encouragement that they give, especially when you find some special ones like that. They keep you ... in sight of the goal and genuinely around for me have just been ... brilliant.

Tasha recognised that without this support she may not have continued with her PhD. She also emphasised the importance of peer support in a PhD student's life, as noted by several researchers (Leonard, 2001; Phillips and Pugh, 2005; Vale, 2004).

Supportive and collegial environment

Tasha described her School as a very supportive and collegial environment, something that Andrea also mentioned as important in developing a research culture and supporting research students. The Head of School and postgraduate coordinator keep in touch with the students (page 23):

Where I am studying now in the School of Humanities, or was the School of Humanities, there was a very, very supportive collegial environment unlike my previous experiences with academia. [Two lines deleted] ... But of the ones that come in regularly, we're sort of checking up on each other and "how's the study going? And how's life outside of here as well?" And we all have quite a few things going on outside of uni that challenge us to keep up the study. But I think ... that we can use each other as sounding boards ... really helps us to keep going. [Nine lines deleted] And we all ... lunch at the same time. There's a big group of the PhD students and four of the academics that lunch regularly together. We have very lively conversations.

This developing research culture in Tasha's School helped her to feel supported and connected, not only with her fellow students but also with the academic staff and even the Head of School (page 23):

But they're also interested in all of our projects and I don't know how they keep everything in their minds. And often they must talk to each other about ... who each other's supervising and stuff. One of them said to me the other day, I met him in the corridor, "Oh [Tasha] I hear your project's going really well. Almost finished, that's fantastic. And [your supervisor] said this and that and..." And he went "Oh that's really nice. It's such good news. I always knew you'd make it." So those ... support networks are there so that's really nice and ... even our Head of School knows us all by name. There's sixty-four PhD students in this program and he knows us all by name. I think that's pretty impressive.

The importance of a research culture within a School cannot be underestimated. Tasha reported here that she had not only a group of students that she regularly interacted with, but also a number of academics who joined them for lunch and took a genuine interest in what they were doing.

Working independently

Tasha commented early in her narrative that the key to success in a PhD is self-motivation and discipline, which can be challenging after the structure of an Honours degree (page 6):

I think working independently is really hard ... getting into the pattern of study being work all the time and even though I'd done the Honours degree, there was more structure in the Honours degree. [11 lines removed] You really need to be consistent and ... if you don't have a plan for every day, you know, one day gets messed up, the next day gets messed up, the next ... a whole week's gone by, two weeks have gone ... and it can even be messed up just by little things like doctor's appointments or having be at physio ... and one fifteen minute appointment can use up half a day. And it's very, very easy to lose a couple of days out of the week and your whole timeframe's just gone.

Tasha understood that she needed to get into a routine, work independently and consistently. It is very easy for a full-time student to have their time nibbled away by

little things, in Tasha's case it was doctor's appointments, thinking that they can catch up later. This pushes the timeline out further.

Survival strategies

Tasha talked about being so close to finishing and the strategies that built her resilience or what she called survival strategies. She discussed what worked best for her, including being able to turn to friends for support and encouragement (page 31):

Persistence ... persistence ... Turning to friends ... it's really great when you can email a friend or SMS a friend and just say "Help, it's driving me crazy." Or "I'm just going totally out of my brain." And you don't have to say anything. And they send you back an encouraging email. There's been a couple of times when I've done that, "I can't stand this anymore." And of course it needs to be a friend who's doing a PhD because otherwise they have no idea what you're going through and ... they can send back emails that say, "It's okay. We've all been there. You'll get through it."

She highlighted here that peer support is most effective when it comes from friends who have also been, or are going through, the same experience and who can understand what you are going through (pages 31-32):

And sometimes it's, "You really need to take a day off. Just go and go completely away from your PhD. Don't take anything home with you. Go and take a day off." Go for a walk ... go to the beach. Go and watch a movie, have a coffee and ... I think having the freedom to contact people who really know what you're going through. That's a really good survival strategy. I think that taking a day off completely sometimes even at this really late stage, sometimes that's a really, really good idea. [26 lines deleted] It was the best thing and the following day I had the best day working on my PhD. It must be the first day in a month that I've had the whole day off and actually socialised. At this late stage I have not allowed myself to take ... time off ... hardly at all but having that whole day away from the study and then actually doing something fun ... Oh it was just fantastic and it was so refreshing and it really boosted my ability to work and I thought, "Mmmm ... that's actually a really good idea. Maybe I need to do that every week." Because I've been at uni seven days a week, even on the days I've worked, I usually go to uni after work and put in five or six hours work after a day's work and ... I ... think that perhaps ... I should be making an effort to take a day off. Having a clean break every ... just once a week because it was really a good thing to do.

Tasha noted that she had to be reminded that taking days off was important. This balance between writing and then relaxing and re-energising, was critical.

She talked again in this part of the narrative about the importance of persistence, organisation and self-motivation as factors in successfully completing a PhD (page 34):

But of the other stuff I think the greatest thing of all is just sheer persistence. I actually think doing your PhD is about five percent intelligence. And I do believe you probably have to have above average intelligence. I don't believe you have to be super, super bright. I don't think you have to be ... you know a Rhodes scholar or a ... Mensa ... bright person. I think you have to have above average intelligence but not brilliant. So it's probably five per cent intelligence and ninety-five per cent persistence. I wouldn't say ... ninety per cent persistence and five per cent organisation. It probably helps a bit [laughs] probably helps more than we know ... if all of us made it twenty per cent organisation we'd do a lot better at completing on time [laughs]

These aspects of persistence in her approach can be seen as the practical application of resilience.

Tasha's described her PhD experience as an "odyssey" and central to this were her frequent bouts of illness which involved frequent hospitalisation. One devastating visit to intensive care led to Tasha developing post-traumatic stress disorder and being hospitalised with severe depression. Nevertheless, through the support of friends Tasha stayed connected in with her research; and also found friends to be a good support at other times. Tasha's resilience was built through her experience of these illnesses and through her determination to finish what she starts. She talks about the need for persistence and perseverance, to just keep going one hour at a time.

Summary

All the women in this research faced challenges throughout their PhDs. Only Laura spoke about the challenges as solely intellectual. For the other women illness played a major role, either their own illness as in Tasha's case, or that of a partner, family member or supervisor. It would not have been surprising if, in the face of these difficulties, the PhD was relinquished or postponed until a later time. However, in all but one case the women persisted with their research despite the challenges.

This research suggests that resilience is developed through childhood experiences, overcoming major obstacles and self determination to finish what has been started. Mechanisms for building or enhancing resilience include peer support networks for overcoming isolation; family support; understanding that you have to do this yourself; and role models and mentors. The one woman who lacked resilience reported negative childhood/family influences affecting her ability to cope with the pressures of the PhD. While she began to build her confidence and start to develop networks within the department once she started teaching, this confidence did not successfully transfer to her PhD experience.

Several women mentioned that they finish tasks that they start, suggesting a trait of perseverance that was already well developed. Understanding the way in which you best work was also discussed, with several women noting that they had to work out for themselves how to do this. For Karen, it was not listening to other people's opinions and establishing a clear workspace at home. In Andrea's case, she needed to develop the discipline to keep writing every day and work out her own routine, as well as a certain amount of pressure to keep her focused. Eve had to often work through exhaustion to focus on her research, but mentioned that the PhD gave her another focus at the time her partner was given only weeks to live. Tasha also mentioned the need for persistence to keep working on the research one hour at a time.

The research also suggests that child bearing and child rearing is not an impediment to undertaking and completing a PhD. Three of the women in this research had, or were having, children. This is not uncommon as many women students are in their thirties when undertaking a doctoral degree. Contrary to the literature, both Andrea and Ebony didn't report that having children negatively impacted on their progress. In Andrea's case, utilising childcare worked well in order to provide clear time for her research.

Ebony negotiated with her husband and her employer in order to have time to focus on the PhD. Her ability to negotiate and renegotiate as circumstances changed enabled her to maintain focus on her studies. In Jane's case the full impact of having a child during her PhD was yet to be seen. She acknowledged that this was a choice that she had made with her husband, knowing that it was likely to impact on her PhD and future career options. The juggling of caring duties and PhD is, however, a highly gendered issue.

For Elena, the other woman interviewed in this research, her experience was very different. Her narrative described how she eventually withdrew from her research degree. As her experience contrasted sharply y with the other participants, her story is analysed separately in the chapter which follows.

Chapter Seven — Elena

Only one of the women who participated in this research did not complete her PhD. Elena withdrew after being enrolled for approximately three years. During this time she did not submit a candidature proposal which is a requirement of the university after six months full-time enrolment. Elena also changed supervisors. I thought it would be helpful to examine Elena's case as a separate chapter in order to investigate why she did not manage to complete her degree. She appeared to be on an academic career path more typical of young men than women. She was a high achieving Honours student who was encouraged by her Department to apply for scholarships to undertake postgraduate research. Her initial motivation for enrolling in a PhD was to become an academic. However as will be evident in this chapter as her story unfolds, her motivation was affected by difficult departmental politics and an extremely negative experience with her first supervisor.

The elements in Elena's story need to be teased out to understand the triggers that can turn a high flying young woman PhD candidate into a hugely unconfident and confused individual. It is also worth exploring to what extent gender was a factor in Elena's negative experience. This chapter follows the structure of the previous analysis chapters – Elena's motivation is analysed, then her supervisory relationships and lastly evidence of resilience.

Motivation

Elena's motivations for doing a PhD were largely extrinsic in nature. Her narrative conveyed early thoughts of an academic career that would enable her to become a university lecturer; and the encouragement and pressure from both her family and academic staff in the Department in which she undertook her Honours year. As will be

demonstrated, her experience within the Department, both with her supervisor and dealing with departmental politics, adversely affected her motivation for an academic career.

Motivation to commence

With Elena there was always an expectation from her family, primarily her mother that she would go to university (page 2):

So there was always an expectation for me to go to uni, and to follow through. But my Mum really was the one that was pushing me to do something really whizz bang like being a doctor or a lawyer and things like that and my heart just wasn't in that stuff but I really went to university not knowing what I wanted to do.

Elena's first mention of motivation highlighted the extrinsic family pressure to succeed academically. While a high-flyer at school she was relieved to find the university into which she had been accepted didn't offer law. Pressure from her mother to succeed academically was a strong thread in Elena's narrative.

Directly following this section, Elena first mentioned another of her strong extrinsic motivations to commence her research degree – to embark on an academic career (page 3):

I thought I wanted to be an English teacher and I wanted to be a lecturer ... my Mum did take me to a lot of Open Days at universities and things so I sort of had a fair idea of what was going to be needed to become a university lecturer so I kind of knew that that's where I was ...

She started her undergraduate career then with the idea that she would like to pursue an academic career.

The pressure from home to succeed continued throughout her Bachelor of Arts and into her Honours year. In this excerpt Elena explains the push to go into Honours as it was considered the more "prestigious" option (page 4):

I went through my Bachelor of Arts and again, like it was a logical progression because there was that pressure from home to keep going. You know "this is what you've gotta [sic] do, you've gotta [sic] go the whole way and then you've got to go out there and get a job and then eventually you're going to get married," so there was, everything was mapped out so of course I applied for my Honours and my Graduate Diplomas and I did get accepted for a Graduate Diploma in Psychology in Counselling Theories, but I ended up going the Honours because it was more prestigious and obviously again you know there was that pressure at home to take the most prestigious option rather than the option that maybe would have suited me better.

This excerpt indicates the way in which Elena's choices were shaped by family pressures in the lead-up to her Honours year. It is perhaps not surprising then that she was vulnerable to pressure from the Department to continue her studies into a PhD, as discussed in the excerpts below.

Elena achieved high academic results in her Honours year and gained considerable support from academic staff in the Department (page 5):

Honours year finished and again you know one of the top two in the class so it really set me up and there were lots of people in the department backing me, saying, "she's brilliant, she's gonna [sic] go places, let's give her a scholarship" so ... it was almost like ... I was on a bit of a rollercoaster. It was like "I'm gonna [sic] ride this and see where it goes."

Elena's success and the academic staff support also incorporated an expectation that she would continue to a PhD. As she went on to explain in the continuation of this excerpt this brought with it additional pressure to succeed (page 5):

I think looking back that there was a lot of pressure on me, not only from home but from uni at that stage because I had achieved so much to actually keep going. And there was the message of "this'd be a shame if you threw this away" and ... it was an underlying message, it was never said and it was all, also stuff like, "we've given you a scholarship and this is really amazing that someone as

young as you has been given a scholarship" and that was said. And that was a lot of pressure to keep going.

The pressure that Elena reports could be construed as a negative motivation. Her mother's expectations that she succeed academically, along with Elena's academic abilities, now combined with a push from the Department to continue her studies by undertaking a research degree.

Elena then discussed her success in gaining a scholarship, initially in terms of the prestige associated with being awarded an Australian Postgraduate Award and being allowed to enrol directly from Honours into a PhD (page 5):

So when I was granted a scholarship I applied for it, I was granted a scholarship to do, it was an Australian Postgraduate Award as well, so that was even more prestigious ... that was to do postgraduate research and initially my application was for a Masters, but because I'd achieved the scores that I'd achieved, the university also agreed to let me go straight into [a] PhD.

This excerpt contrasts with some of the other women in this research, where the first mention of the scholarship was in relation to the financial support necessary to undertake a research degree. Although Elena did mention later in her narrative the financial support provided by the scholarship, at the outset her focus is on the academic prestige associated with the awarded. In continuing her narrative Elena re-emphasised this pressure from the University that being awarded a highly sought after scholarship brought with it (page 5):

And yet again, unbeknownst to the University that was incredible that ... level of pressure was huge ... [6 lines deleted] ... [sighs] then I guess the other thing that happened around my PhD, so here we are we've got all this stuff, you know "you've gotta [sic] do it" you know all these messages about "you've really gotta [sic] do it, this is an opportunity too good to miss, nobody's been given this opportunity before and here you are in this position, it's a fabulous position to be in and we've recognised your skills and we're going to give you a scholarship and we're going to let you go straight to your PhD."

The external messages Elena reported were a strong influence on her decision to undertake a PhD.

Lastly, in relation to motivation to commence the PhD, Elena talked about her understanding that she needed a PhD to be a lecturer. As mentioned at the beginning of the narrative, she identified early in her undergraduate degree that she initially wanted to be a lecturer. I later drew her back to this point (page 17):

Yes definitely. I was told very clearly [10 lines deleted] I could see it, and I could see that every academic now had a PhD. So it wasn't just something that I'd been told, it was something that I could see was going to happen ... so I definitely ... if that's where I wanted to be, that's what I had to do.

In looking at Elena's motivations to commence a PhD we can therefore see strong extrinsic motivation with encouragement from family and academic staff, and wanting a PhD in order to develop an academic career as a lecturer.

Motivation to continue

There was negative motivation to continue with her PhD in order to become an academic. Elena's image of "an academic" and her subsequent experiences while undertaking her PhD were incongruent, and this impacted on her motivation to continue. She became disillusioned with what she saw as the politics and pressure in the Department. Her motivation to get a PhD in order to become a lecturer underwent significant change as she experienced politics within the Department (page 16):

I became disillusioned as well when I found all this out because I thought ... surely after two students have spoken to you about the same issues [a difficult supervisor], independently, you would do something about it but nothing was done about it. And that was really, that sort of started the downhill slope for me. I sort of started to go "Oh my God ... what I am doing in this field? And this isn't the kind of dynamics I want to be involved in." It just, all those starry-eyed ideas about what it was going to be like to be a lecturer and things were gone. I just lost ... lost its glitter.

Although Elena acknowledged above that her understanding of being a lecturer was "starry-eyed", she explicitly stated that she did not want to be involved in these kinds of "dynamics." She went on to describe her initial image of how she thought an academic behaved. This incorporated sharing knowledge and empowering students (page 16):

Yeah and the image for me was about, it was someone in a very prestigious, very powerful role who had, didn't abuse that power. Someone who was very professional, who used that power in order to share knowledge to students, to empower students and make them feel that they were capable to do anything they wanted to do. And I realised that that wasn't what it was going to be about.

However, this image was not borne out by her experiences. She continued in the following excerpt to explain how she came to realise that academic careers were highly competitive in nature (page 16):

And that ... it was almost a dog eat dog type of mentality. It's who can step over who to get the funding to get the research up and running and the more publications you had, and really [first supervisor] had that down pat. He had it organised, he knew what he needed to do to churn out the research. He knew how to get the funding, he knew how to use the system; he knew how to use his students to access the funding that he normally wouldn't have access to. And that was disappointing.

This new perspective changed Elena's motivation for an academic career, as she observed that her first supervisor's single-minded focus on his own career advancement included using his postgraduate students to access funding. Even her change in supervision couldn't ameliorate the negative impact of the behaviour of her first principal supervisor (page 16):

And although I had this person on one side who was doing everything so wrong, I had this other supervisor who I picked up later, [second supervisor], who was so above board and he just did everything right. He just got ... I just couldn't get over that I was going to have to work with people like [first supervisor]. [I: Okay, so that whole experience of what it can be like in the department as an academic...] Yeah, yeah it really frightened me. That's not what I want to be working in amongst. I want a positive working environment, I want to know that I'm going to be with people who are going to share their knowledge and aren't going to be frightened of each other, you know, each other's expertise or feel

threatened by it. And I really, I still to this day don't see why you need to be threatened.

She understood now that undertaking an academic career would mean cooperating with other academics whose working practices may be like those of her initial supervisor.

This was not a working environment to which she aspired.

The scholarship provided financial motivation to continue as a major source of income. Elena had now moved out of home and was supporting herself (page 13):

I think what I did, if I remember rightly is I took holiday leave or something, because I must have had to ... the income I was relying on at the time was the scholarship income and also the tutoring income so I can't remember exactly how I did it, but I must have taken some sort of holiday leave which must have been paid. And once that had run out that's when I panicked. [Nervous laugh] And I just realised that I couldn't go on like that and that I was doing myself and other students an injustice by hanging in there when I didn't really want to be there. And the more it wasn't the right place for me to be at that time.

Elena's motivation to continue partly centred on this financial support. Remaining enrolled allowed her to receive scholarship income as well as income from sessional teaching.

Elena's motivation was multi-layered and the four factors she discussed were all extrinsic in nature. She was encouraged by her family to go to university and performed well in her undergraduate degree. The strong grades enabled her to gain a prestigious scholarship, giving her the financial motivation to enrol and continue in postgraduate research. Although Elena noted elsewhere in her story that the scholarship was one factor that kept her tied to the PhD when she experienced difficulties with her supervisor, as an initial motivation the scholarship was predominantly linked to a sense of prestige and achievement. Elena noted that she perceived, with hindsight, an intense pressure to continue and succeed. Her motivation was clearly linked to her desire to

become an academic and her understanding that universities were putting pressure on lecturing staff to have a PhD qualification. However an academic career as a motivating factor "lost its glitter" as she experienced difficult politics within the Department.

Supervision

Much of this chapter focuses on unravelling the complexity of the relationship between student and supervisor. The literature considers this is central to a rewarding experience as a PhD student. When the relationship does not work the risks for both parties, and potentially for the university, are great. By focusing on what went wrong lessons can be learnt for all parties.

Elena's experience of supervision was vastly different from that of other women in this study. She had a male supervisor, as did several other women. However for Elena this supervisory arrangement soon became dysfunctional. The second supervisor she approached, after 18 months enrolment, was also male. There were some similarities between Elena's and Jane's experiences, in that Jane's supervisor pushed her for more and more experiments. By contrast, Jane had some negotiation strategies which helped her deal with this situation. Much of Elena's narrative centred on her first principal supervisor and the destructive nature of their relationship. Her language is very strong and negative in tone when she discusses him, and she often repeats words. It was clear during the interview that she had difficult talking about this supervisory experience even several years after she had withdrawn from her PhD.

Beginning of supervisory relationship

Elena chose her supervisor based on what she thought she knew of him from her undergraduate classes, but she did not mention any discussion at the outset about their mutual expectations of the supervisory relationship (page 6):

What had happened to me is I had a lecturer that I really, really admired throughout my uni years and I just thought this lecturer was just so above board and on the ... ball and very professional and I approached him to be my supervisor and he agreed. So on top of that I had this highly sought after supervisor who unfortunately didn't nurture me and really, really broke me down, and at the end of it, for me, that's, that's really, really what caused [she stutters here a bit, repeats really, what and caused] me to back out of my PhD, just that initial experience ...

Elena appears to have fallen for the flattery of being accepted by this "highly sought after" supervisor without any prior interaction, other than in a classroom. Leonard (2001) pointed out that this is a common problem for many women students. An initial discussion regarding meetings, feedback and support would have given Elena an indication of the incongruent expectations she encountered. Elena wanted someone to nurture and support her, but her supervisor appears to have expected her to be very independent (page 6):

But what I really needed at that time to get through was somebody who was really nurturing and supportive and was pretty much saying to me stuff like what I was listing before "you've got what it takes and you can do this," where what I had in contrast to that, in reality was a supervisor that was saying to me, "I did my degree in another country. In that country you weren't given any support. You should be able to do this on your own. Go away, do the work and come back and show me. And I don't really want to see you for the next three or four months until you've achieved this task."

Elena's principal supervisor had a markedly different supervisory style from the one she purported to require, especially in regard to regular meetings and support. Elena reported that he told her to go away and write the candidature proposal and come back in a few months' time.

Regular meetings

As outlined above, there was a lack of initial understanding between student and supervisor regarding their respective roles. Elena indicated she needed someone to whom she could ask questions at supervision meetings, but the reported interaction above indicated her supervisor offered little guidance and expected few or no meetings in the first four months. This excerpt follows directly from the previous one (page 6):

Where for me it was a question ... which I would actually go to supervision thinking, "I've got so many questions to ask and I'm afraid to ask them ... because I should know this." And that message was given to me really, really clearly [I: and if you don't know it you have to find it out for yourself] exactly, and that's ... what devastated me. It was just the worst, worst experience and oh, how do I say it? I was really disappointed in myself, because I realised I'd made the wrong decision when it was too late.

Elena realised in her first few months of enrolment that she had made an error in the choice of supervisor. She reported a very traumatic experience with her first supervisor and the match between student and supervisor was not good. The negative language she uses to express herself, in particular the repetition of words, only serves to emphasis her distress, even though this experience happened several years prior to the interview.

Support and encouragement

It is interesting that Elena knew that she had made the wrong decision, as indicated in the last two lines of the extract above, but says that she realised "too late." She outlined in the narrative her awareness of the type of support and encouragement she required, and explained in this excerpt that there was another person who would have been a more supportive supervisor (page 6):

Because I had another supervisor who was willing to back me but he wasn't in my field and he was incredibly supportive and he was the one that helped me through the scholarship phase and really gave me the confidence to do all that stuff and I just let him go because he wasn't in my field of expertise, and I just thought, "I can't do a thesis in an area I'm not interested in." But in looking back things would have been totally different if I'd gone with that supervisor.

She did have an alternative supervisor in mind who was very supportive and "gave her the confidence" to apply for the scholarship but he was not in her area of research. This seems to support the argument that even if the supervisor's expertise does not closely align with the student's research topic but can provide the type of support required, the relationship may be successful (Leonard, 2001; Phillips & Pugh, 2005; Vale, 2004).

Elena went on to discuss the behaviour of her supervisor in terms that strongly suggest bullying. Again the language she used was very strong. When Elena approached her supervisor for advice in one of the early supervision sessions, she reported that he told her she should know this, which did little for her fragile confidence, and he did not suggest any useful strategies such as referring her to the library staff or suggesting she undertake some training sessions (page 6):

But unfortunately I didn't, I got this other supervisor who was ... became very arrogant and very domineering and really put me down a lot and I just totally lost my confidence. I crumbled and as the months went past and I wasn't able to do the really basic things, and I knew that I should know, but I just didn't know, I didn't have anyone to talk to and I was too ashamed to go and ask for help ... [four lines deleted] ... I remember you know, having a supervision session where that was my top question and, "how do I do this?" And the response being, "Well, you should know this and if you don't know this, you shouldn't be doing this." And that was one of my first supervisions and that's what I went away with, feeling absolutely incompetent and stupid and wondering like, "How could I have gone from being a First Class Honours scholarship student to somebody who was so dumb and so stupid and really didn't deserve to be in this position?"

The lack of support and encouragement from her supervisor in the early stages of candidature appears to have exacerbated Elena's underlying insecurities regarding her own abilities. Elena continued in this excerpt to explain (page 7):

So it actually brought out the insecurities that I had about myself. And it was that stuff about feeling like I was a bit of a fraud. Like how did I ever get here ... maybe I've just tricked everyone into believing I'm smart. Do you know what I mean? So those little niggly insecurities that I had about myself, this supervisor managed to bring out and he brought them out very, very quickly.

As well as needing a supervisor who was more supportive and "nurturing", Elena also looking for someone who would help her to set goals and boundaries. While she had been a First Class Honours student, Elena was very young when commencing the PhD and appears to have succeeded as an undergraduate by knowing and meeting defined tasks. Contrast this experience of knowing what is expected and how to excel, with a research project which is independent, (largely undefined until you define it for yourself), and self-motivated. She was likely to have a more productive working relationship with a supervisor who was prepared to work closely with her and encourage her to become a more independent researcher. Her sense of incompetence and fear were internalised and escalated as time passed and the lack of support from her supervisor continued (page7):

And it wasn't supportive and it just progressed to a point where, you know my candidature was due to be handed in, six months rolled around, that didn't happen. Seven months, eight months, and the more that time went past and the more I struggled, the more incompetent I felt and it got to about a year when I cracked. [eight lines deleted] ... having a supervisor that wasn't going to support me through doing the very basic stuff, it just impacted on it as well, just sort of the fear ... so about a year passed before anything happened in terms of me like I, initially I internalised it all and thought I really am stupid, I shouldn't have this opportunity, this opportunity would have been better given to another student ... going through all that guilt, not being able to go home and have anyone to talk to about it. Not being able to admit to my Mum that I was struggling for fear of her, you know, sort of perceiving me as a failure.

The above excerpt highlights Elena's sense of failure, isolation and the lack of support she perceived from her supervisor. She used the word "cracked", a strong and very evocative word, to describe reaching the point at which she decided to take action.

Negotiating supervision

After twelve months, Elena tried to get help by talking to a visiting female research professor in the Department and then, on her advice, the Head of Department. However, the Head of Department strongly backed the supervisor and sent her back to work out

the differences with him. This form of negotiation with the Department didn't work for Elena (pages 8-9):

She was such an admirable woman, she was the one that supported my application for a scholarship ... and I went to her and she was tied at that stage too ... later on I started to realise that there were dynamics in the department as well at that stage. She could see that things weren't right but she was tired of fighting as well and she really didn't have the energy to go through with another complaint or another, I guess, disappointment for her. And, I remember going from [visiting professor's] office and [her] sort of saying to me something like maybe you need to talk to [head of department] about it and then me going in to [the head of department] and [she] brushing it totally aside and pretty much making me feel like I was making things up and that it wasn't really happening the way that it was, and that I should just go back and try and deal with it one on one with my supervisor.

Literature on managing supervisory relationships mentions utilising a third party, such as the postgraduate coordinator or Head of Department (Leonard, 2001; Phillips & Pugh, 2005). But in Elena's case this strategy was not successful. Her Head of Department did not offer to sit with both student and supervisor to help negotiate the difficulties Elena reported, nor did she suggest a third person who could intervene in order to resolve the situation. I probed Elena to elaborate (page 9):

It's the feeling that I got but she said things like, "I don't think that that's going to happen." And, "He's a very good lecturer and I think you could go and talk to him about it" and I was saying "Well, I don't feel I can" because by that stage all of ... I'd placed this supervisor on such a pedestal and it had crumbled. It just crashed down, because I thought he was just somebody who was very intellectual, had lots of insight in his own process, was able to nurture, but I found that he was totally opposite to all that ... [12 lines deleted] ... and it got more and more to the point where I didn't want to be under him, but also I was really frightened of him because he was sat on the committees that were going to review my project, and so I let it go and let it go and it just got to 18 months and it was critical. I was just ... this is not good, I mean I'm halfway through my PhD, I haven't even finished my candidature.

The advice Elena received was to go and talk with her supervisor about the issues that she had raised. However she reported here that she felt unable to do this. Again the language she used, particularly at the end of this extract, was evocative. She talked about putting the supervisor on a pedestal, which then "crumbled" and "crashed down."

While unable to negotiate with him, Elena's candidature time continued to tick away with no tangible progress.

Elena once more tried to reassess her situation at the midpoint of her candidature and seek support elsewhere. She approached another supervisor who agreed to take over the supervision and was willing to support her in talking to her current supervisor (pages 9-10):

Luckily by that stage I overcame my humiliation and I actually approached the initial supervisor who I should have gone with, and said to him, "This and this has been going on, this is the feedback I've been getting in my supervision, I'm really struggling, I don't know is this the right thing for me." And he was mortified ... at what had been happening. And he also was afraid ... not afraid, he was mortified as to the lack of confidence I had in myself. And he was sensational because he said to me, "Look," he goes, "everything is water under the bridge now, don't worry." He goes, "What do you want to do?" And I said, "I don't want him as my supervisor anymore. I'm frightened of him" and he said to me, "Well you need to think about that pretty much because who's going to be your supervisor?" and I said to him, "well, I should have always gone with you."

This second supervisor had been her Honours supervisor and she noted that he was "mortified as to the lack of confidence she had in herself." He offered her a high level of support, but Elena made the decision to approach her current supervisor on her own (page 10):

What he said to me was, "I will support you, don't think this is going to be easy because it's not. I know this isn't going to be easy. I don't want you to be going through that because you've got a brilliant career ahead of you. I will support you through this. I will be your supervisor, even if this isn't my area of expertise. We'll try and work around it. I will supervise you. Do you want me to go into a meeting with him, and you tell him that you don't want to be supervised by him anymore?" So he really supported me ... And I just said to, you know, my saviour, and I know I can say here that he was my saviour. I said, "Look I really feel like there's a level of responsibility from me in that I need to do this on my own."

Elena's second supervisor can be seen in the excerpt above to offer her support and encouragement both to continue with her degree and resolve her supervisory problems.

But her decision to approach the first supervisor to discuss their working relationship was disastrous. She claimed that he bullied her and resorted to emotional blackmail (page 10):

But that was a big, big mistake because when I went in to do that on my own I was specifically told, "Oh really, you want to do this? Don't forget," he goes "about who you're dealing with. Be careful what you say because I am on the committees that review your candidature and ethics". [I: So it implied threat?] Yeah, and he said, "you be careful what you say" and he made it very clear and that was the end of that session. He made it very, very clear that should I step out of line he was going to make it very difficult for me.

We must be careful in interpreting Elena's narrative as the other person is not able to provide their side of the story. We are relying on the "reported speech" from Elena and after some time has elapsed, this reporting may not be accurate (Riessman, 2007). However she clearly had had a traumatic experience which still had an emotional impact on her. The words she chose to convey her story were strong and she reported in detail several instances of her initial supervisor's behaviour. In the excerpt above, he doesn't refuse her request to change supervisor. What is implied is that she should not discuss her experience with him in a negative way. If she did, he would make life difficult for her within the Department and with confirmation of her candidature.

Elena, later in her narrative, mentioned that when she talked to her first supervisor about changing supervisors, she tried to soften the blow by saying it was about her and the style of supervision she needed (pages 18-19):

I said to him that I didn't want to be supervised with him anymore and that I think I would be better off with another supervisor. I felt that our styles clashed and just that it wasn't working for me. And I really tried to take the responsibility for that, to try and sort of lessen the blow ... and it just wasn't working, and I'm so behind and there's [sic] reasons for it.

However, this approach did not elicit a supportive response from her initial supervisor.

While Elena started working with her new supervisor who by contrast was supportive, she stated that she never fully recovered (page 11):

And I ended up going back ... to [new supervisor] and saying, I was really traumatised and I said this, this and this, and [new supervisor] was just blown away again. Because [new supervisor] is really above board in his practice, he's so transparent, he's so professional, so above board. He couldn't believe it almost, but he did believe it because I found out later that he also had knowledge of ... how [initial supervisor] practised in other areas ... [six lines deleted] ... but you know seeing also what had happened with the other student and her feedback to me, I started to realise you know that this isn't just about me, this was really about the bad supervisor, unprofessional supervisor. And it was a really, really hard time. I think [my new supervisor] would have ... been given a lot of grief but he never, ever told me about it. He always said to me, "Don't worry about it. Whatever happens don't you worry about it. It's not your problem. It's my decision to take you on. I know the risks. Don't worry." And that was it, I think I spent the next 18 months with [new supervisor], but I never, ever recovered.

Elena resolved her unsatisfactory supervisory relationship by finding a new supervisor with whom she was able to discuss her concerns. She indicated above that although she was certain her new supervisor may have experienced some difficulties within the Department, he never discussed the matter. In her first 18 months she made little progress. Even when she changed supervisors, the new arrangement did not help her rebuild confidence.

This destructive initial supervisory relationship, coupled with a lack of emotional support following the move out of home, was something from which Elena never recovered (using her own words). Now at three years of full-time candidature and no thesis proposal let alone a completed thesis, she reassessed her situation and decided to take a break (page 12):

I took leave ... I suspended it for a bit, for as much as I was allowed to. I think I got another extension on leave, and then that brought me up to the maximum allowable before I'd have to come back. And it was around the time that I'd have to come back that I started to panic and that's when I did even more thinking and I'm like, "Nope [sic], I have to give this up", and as hard as it is

and I had to go to my supervisor and tell him, [new supervisor's name], and that was really hard because he'd invested a lot in me. But he was really good about it because he just said, "Well, this is what's right for you, and it's okay and don't worry. And just go off and do what you need to do."

Once she had used all her leave, Elena had to make a decision about what to do. She decided to withdraw from the degree and advised her new supervisor. She recounted that although disappointed, he supported her decision to do what was best for her at this point in time. Interestingly when I probed further about her new supervisor's reaction, she admitted that he was not happy that she was giving up the PhD, but he was nevertheless supportive (page 13):

I guess you could hear the silence [Laughter] but deep down he knew it was the right thing for me, he knew I was struggling; he knew I'd never recovered from what had happened. And that I ... he really supported me. Yeah, so that was what I needed. He didn't make me feel like I was a failure.

Elena's decision to withdraw from the PhD was a difficult one. The new supervisor appears to have put Elena's needs and wellbeing first in supporting her decision to withdraw. She commented here that she still felt supported by him, even at the point she made such a difficult decision.

Monitoring supervisor's behaviour

Given Elena's difficulties, this raises the question of who monitors supervisors and what happens when difficulties are raised by students (or supervisors)? Elena, as previously mentioned, raised her concerns with two senior women within the Department. She was referred by one to the Head of Department, who suggested discussing her concerns with the supervisor. Later in the narrative Elena discussed how she discovered that she was not the only student who had concerns with this supervisor. It is interesting to note that the three students mentioned in the excerpt below (Elena, the student she talks to, and a further student referred to in passing) were all women (page 15):

I'm not sure if it was [student name] that approached me or I approached her, but anyway we started to talk about our experiences of being supervised, and this was a little bit after also I had told [visiting professor] and [head of department] as to what was going on ... I said to her, "Look I can't believe that these women aren't doing anything to help me." And it opened up the communication channels and she said to me, "well that's probably related to the fact that I've actually made formal complaints about [this supervisor's] practice with me as a student. I've found him to be highly unprofessional, he puts me down. I've gotten to a point where I almost want to give it in."

As Elena started to discuss her supervisory experience with the first supervisor, and the frustration at her perceived lack of departmental support, she found another female student who had difficulties with the same supervisor. Even though this woman had made formal complaints, Elena still had difficulty raising her concerns within the department. She went on to elaborate that there was a third reported student who had also experienced problems (page 15):

She said to me as well was that there was another student who had been supervised by [first supervisor] who'd also, their PhD had stretched out for years and years and years, and she was struggling for similar reasons ... so [sighs] that's the stuff that was going on at the time. So obviously what had happened as well, from what [student's name] was saying to me was that [first supervisor], being on so many committees, was pretty well respected and it wasn't difficult for me and her to understand why it was that he sort of mesmerised a lot of people. He made everybody believe, he made me believe, that he was so above board and so professional. You know he really came across that way and it wasn't hard for me to understand why other people on committees and things were able to, were seeing that side and weren't seeing that controlling person.

In comparing her experiences with another student, Elena came to understand that their supervisor had a strong professional reputation within the department. His image was one of integrity and he was well-respected (page 15):

So there was all that going on, I mean ... he was also very strong ... strongly liked by [head of department], which I didn't know at the time. So he was a bit of a charmer, to say the least and that became more apparent to me as time went by and it helped me understand why nobody took any action. Because I mean the big picture is that he was pretty powerful and what's one student or two students next to that kind of power.

The fact that he was well-respected in the Department apparently made it difficult for other people within the department to acknowledge the problems that these students encountered in their doctoral supervision. Elena said that she started to understand the power differential that was at work. She continued to reiterate that she had raised these issues with the Head of Department but considered that her problems weren't taken seriously (page 15):

He had so many people behind him and ... what can you do when the department manager or I'm not sure, I've forgot what they're called, but you know [the head of department] didn't want to see it, she didn't want to address it, she didn't want to acknowledge that it was a problem so what more could I do? [I: Yep, when the head of department won't do anything about it ...]. Yeah, what can you do about it? And I've gone there, and I've been honest and I've put myself on the line. And I've been told to back and address it myself and they can't see what's happening ... and it was only later on that I actually found out that it wasn't only a problem for me, it was a problem for other women who'd been supervised by him as well.

Although Elena and other female students had raised concerns, the Department supported this supervisor and his reputation remained intact. Elena also pointed out in her narrative that these concerns were noted by her new supervisor, but not by others in the Department who had the ability – and responsibility – to do address the matter (page 18):

It didn't need to be acknowledged by [second supervisor], it needed to be acknowledged by the people who had the power to do something to change it ... it needed to be, not even addressed but just acknowledged that this had actually happened, and this was fact. And that this man's capable of doing this and we need to watch him, we need to be careful ... [I: yep, so no one was monitoring the supervisors?] ... No, yeah and not only that, the person who was probably monitoring the supervisors was the person who was doing the abusing. He was the one on the committees, on the research committee, on the ethics committee.

Part of the problem for Elena was that while the University purported to be monitoring supervisors, the supervisor causing her so much difficulty was one of the people doing the monitoring, as a member of postgraduate research committees.

Elena had difficulty relating her story, even after several years. Her language was very negative when she spoke of her initial supervisor and the difficulties she encountered. Her narrative highlighted the importance of negotiation in a student-supervisor relationship, as well as the benefit of having an additional supervisor who could provide additional support that she needed. It also emphasised that these negotiation should begin prior to entering into a supervisory relationship. If a student can openly discuss the expectations of a supervisor before deciding to enrol, they will have a better understanding of the future relationship. Elena's narrative also underlined the need for a student to have someone to turn to within the Department, or even externally, such as a postgraduate research office, to discuss concerns particularly when the student feels that they are not being taken seriously by the Head of Department. While the Department had research and ethics committees in place which purportedly monitor some student-supervisor issues, what happens when the supervisor in question is a member of those committees? Who polices the police?

Resilience

Elena's story is important in terms of persistence and resilience, because of the eight women who participated in this research she was the only one who didn't finish her degree and the factors that affected her resilience were all negative. They included: an unsupportive supervisor as discussed in detail above; lack of confidence in her ability; fear; internalising the guilt of taking a scholarship opportunity that could have been given to another student; feeling unable to discuss this with family; the strong influence of her mother; and lack of peer support and friends.

Family background

Elena mentioned the fear and internalised guilt that developed in the first year of candidature when she was not making progress. She was afraid of being perceived as a failure, particularly by her mother, and thus was unable to admit that she was struggling (page 7):

Not being able to go home and have anyone to talk to about it. Not being able to admit to my Mum that I was struggling ... for fear of her ... perceiving me as a failure. [I: so you were in a way going home and covering up the fact that you weren't...] That's definitely it. Like my Mum wouldn't have even had a clue as to the turmoil that I was in at the time. And I just wouldn't have been able to talk to her about it.

Elena internalised these feelings and did not believe she could explain what was going on to her mother. She was afraid of being considered "as a failure". Elena's discussion of her upbringing highlighted the pressures from her mother to succeed. She specifically mentioned maternal control during her school years and how this resulted in few friends to whom she could turn (page 7):

And there was really no one else for me, because I didn't really have many friends, I didn't have the opportunity to establish you know friendship networks and ... it was hard.

This strict and inflexible family environment meant that Elena now had little in the way of peer support or other people to turn to for help or guidance. Her mother's influence, according to Elena's reporting, was strong, critical and manipulative. Elena later disclosed that she moved out of home within the first year after enrolling in her PhD to escape this negative maternal influence (page 11):

At that stage I still, I've sort of missed a bit of my history but in the first year of me getting [into] my PhD I moved out of home, because my Mum became even more controlling and more obsessive and more critical.

As mentioned earlier, Elena's scholarship provided the important financial independence needed to move out from home. She reported in her narrative that her

mother had expected her to find a job when she finished her first degree. Elena's decision to continue on to a research degree, even with the scholarship, appeared to only increase the tension at home and hence her need to move out.

Elena reflected later in her narrative that this opportunity to undertake a PhD on a prestigious scholarship might have turned out differently for someone who had a different childhood, indicating some degree of self-awareness of the barriers created by what she perceived as a controlling mother (pages 19 -20):

I think that if they'd provided that opportunity to another student at my age at that time, who didn't have such a controlling childhood or controlled childhood that person could have taken off with that, who had a more supportive home environment. But I wasn't that person. I had it tough at home and that ... I think that that in, my experience of home life was that I was the submissive person that really needed to take instructions and that carried on to the way I communicated when I did my PhD and it meant that I couldn't advocate for myself, I couldn't acknowledge ... my emotions, I couldn't talk to my supervisor, couldn't be assertive with him, couldn't follow the right channels for making formal complaints. I didn't feel empowered enough to do that. So that had a huge impact ... on the way that I functioned when I was at uni.

Elena considered that learned submissiveness early on meant she couldn't be assertive and she waited for other people to tell her what to do. As evident in the previous chapter, this was an unfortunate legacy, especially when faced with a supervisor who expected his postgraduate students to be independent. Importantly, on reflection Elena was insightful about the link between her childhood and the bullying experienced at the hands of her supervisor, but she seemed to be powerless to confront the behaviour – either at home (she simply moves out) or at university (she stays enrolled until the scholarship runs out and then withdraws from candidature).

Fear and guilt

Elena mentioned the fear and internalised guilt that arose in the first year of candidature when she was not making progress (page 7):

Having a supervisor that wasn't going to support me through doing the very basic stuff, it just impacted on it as well, just ... the fear ... so about a year passed before anything happened in terms of me ... initially I internalised it all and thought I really am stupid, I shouldn't have this opportunity, this opportunity would have been better given to another student ... going through all that guilt.

Self confidence

Elena reported excelling as a sessional tutor and research assistant, and thriving on it, but this confidence was not transferred to her PhD. In a sense, Elena was seeking diversions from the PhD that could restore her flagging confidence. Again she uses strong language at the end of this excerpt, referring to the PhD experience as "misery" (page 7):

And I actually took on some sessional teaching and I really buried myself in that teaching. I loved it. I thrived off it. That was what kept me in my PhD for the full three years ... 'cause [sic] it was just the teaching, the stimulation, the contact with the students, it was where I wanted to be at the time and also I was doing some research assistant work and, and managing some projects which ... it was funny how my confidence was split. Where I could walk into a classroom and I was really, really confident about my ability and I'd get the message across to students and I'd get great feedback, yet there was this PhD that I was struggling through and ... it was misery.

The misery described coincided with the misery of her family situation, where her mother became increasingly controlling. Perhaps the combination of this pressure was overwhelming. While she made a decision to escape her mother's influence by moving out of home, she seemed powerless to escape her bullying supervisor.

But Elena's confidence was restored through teaching. This enabled her to eventually look at the PhD and what was going wrong. She identified the factors at play in her psychological make-up that were impacting on her experience – namely wanting to be liked, being taught to be submissive and not being openly critical – and the realisation that she had to do something about it. As discussed above, Elena did seek help from two

senior staff in her Department, both women, but the Head of Department denied that there was any issue and told her to go back to the supervisor and sort it out herself (page 8):

And one year comes around and that's at the point where I thought, hang on a minute, how can I be achieving ... I've started to sort of ground myself again. Like when I built up my confidence in other areas I started to ... look at the bigger picture and say well, "something's not right here." And I've also been taught to be very submissive and to not be openly critical and I have also this thing about wanting to be liked so I didn't want to rock the boat but I got to a point where I was like, "something's not right here" and I've got to go and talk to someone about it.

She talked about reassessing whether or not to with the PhD. This was made easier because, by this stage, she had moved out of home (page 11):

And I just couldn't cope with it and for me I think at that stage it was like, "I'm going insane here." So it was a bit easier for me to let the PhD go at that stage because my Mum had absolutely no input into my future, and into my current decision, so I just ... sat down and I did a bit of an assessment and I said, "Alright you know, you've learnt a lot, there's a lot I still need to learn about myself and the way, and how assertive I am in getting what I need."

Realising that she had lost confidence in her ability to complete the PhD, and that she could never make up the time already lost, Elena rationalised that she remained as a postgraduate student in order to continue sessional teaching that she really enjoyed (page 12):

I did the full three years of teaching; sessional teaching and I adored it. I loved it and I realised that I was actually only in my PhD in order to maintain my sessional tutor role within the department because otherwise I wouldn't have been able to be a sessional tutor. And I thought, "This is wrong. Am I doing my PhD or am I doing this for teaching?" And it really was about teaching towards the end and my PhD had been left for so long, I just felt like I could never catch up all that work. And I just lost my confidence so much and by the end of it all I just sort of started to think, "Well maybe you need to go out there and do something outside of the University and sort of expand yourself in other ways, in social ways and see what's out in the bigger world before you come back to this."

This rationalisation of needing to be enrolled in a PhD in order to teach was possibly misplaced, but it was her way of justifying why she continued to draw a PhD

scholarship while doing little if any work on the thesis. But the self-confidence Elena developed through sessional teaching did not transfer to her PhD. In the excerpt above, we can see the point at which she realised this and decided to get out of the University system for a while. Elena decided to take a complete break, being was exhausted both intellectually and emotionally (page 12):

And that's what I did, and then ... I had some good friends built up by then who were really good supports for me and I talked it through. And of all the things I decided to do was waitressing and just sort of give myself an intellectual break 'cause [sic] I think I was emotionally and intellectually exhausted.

As Elena's confidence grew, aided by living away from home, she developed new friendships. This support structure gave her colleagues with whom to discuss issues during difficult times. Having been enrolled on a full-time scholarship for almost three years, Elena finally took a break from the University.

Financial support

Although Elena reported not wanting to continue the PhD, she didn't withdraw immediately. This was due to both financial concerns and wanting to continue teaching. After taking the annual leave provided by the scholarship she was running out of options. A cynical interpretation could be that she used up the scholarship and when the money ran out, a decision had to be made (page 13):

I think what I did, if I remember rightly is I took ... holiday leave or something, because I must have had to ... the income I was relying on at the time was the scholarship income and also the tutoring income so I can't remember exactly how I did it, but I must have taken some sort of holiday leave which must have been paid. And once that had run out that's when I panicked. [Nervous laugh] And I just realised that I couldn't go on like that and that I was doing myself and other students an injustice by hanging in there when I didn't really want to be there. And the more it wasn't the right place for me to be at that time.

Elena's decision to take a break from the University at that time appears to be linked not only to her growing confidence and recent reassessment of her situation, but also that the scholarship would not continue indefinitely. She now had to support herself, but the scholarship was drawing to a close. She also explained here that although the money was running out, she was not being fair to other students by staying in the degree.

Breaking point

Elena's evocative use of the word "cracked" earlier in her narrative indicated to me the time that she reached breaking point. I drew Elena's attention back to this word to explore it further (page 14):

It was more about, "I can't take this anymore, I can't take being put down like this anymore, I can't take feeling like this anymore." And it was just, "I've got to do something about this because it's getting too far down the track now; I'm six months overdue. I just can't take this anymore; I'm just drained ... so drained." And ... that's what it was about for me. It was just feeling like, "Oh my god, this has just gone too far. I need to do something about this." And it was, I guess I say "cracked" because ... I finally got to a point where I was starting to think that this isn't all my fault, and this is, you know I'm angry now. Someone's ... screwed me over here. [Laughter] And I've been taking this all on board as my own issues yet it's not ... and that was like a huge turnaround for me.

It is interesting that Elena is talking here about being six months past the deadline for her candidature proposal. At the university where she was enrolled, the proposal is due after the first six months of full time enrolment, meaning that Elena was now twelve months into her enrolment. She is already referring to being at breaking point, and yet she continued being enrolled for another two years until the scholarship was due to expire before withdrawing. This could be due to not seeing any other options but to continue and try to make up for lost time; it could also be due to needing the financial support of the scholarship as she had now moved out of home. This reference to the realisation that the entire fault did not lie with her, when taken in the context of the whole narrative, is to some degree incongruent with Elena continuing her enrolment. Did her reported family background and lack of self-confidence result in being unable to resolve this situation? Did both of those factors also affect her resilience? Was Elena

thinking that she would be able to make up the time with a change in supervision? Elena goes on in the excerpt below to acknowledge that she should have taken some leave at this point in the candidature (page 17):

I should have taken time off, I should have time off right then and there and come to grips with it and regained my confidence and then come back to do my PhD, but I didn't. Because it was like, "Oh my God, you've, you've fallen so behind there's no time to take any time off." And that was a big mistake.

Elena's decision not to take leave, which would have stopped her candidature clock ticking, was due to a sense of being "so behind" already. She did not confide in others – neither her new supervisor nor her friends – that she was not coping.

Asking for help

Elena elaborated on the fact that she didn't indicate to anyone how she was feeling, even though she had now changed to a more approachable supervisor (pages 17-18):

I don't know that anyone thought of it, or that anyone identified because I think also part of something that I keep ... continue the work on ... is that I can be feeling like I'm going nuts inside, but I present this very relaxed and in control on the outside and that wouldn't have helped [second supervisor] in being able to see that and say, "whoa, take the time out and then come back."

By not revealing how she felt, Elena acknowledged that everyone probably assumed she was coping. Thus they could not give her appropriate advice. Her lack of resilience relates to an inability to take control of her situation and an inability learnt in childhood not to express her emotions – "it was too dangerous" (page 18):

I wasn't in touch with my own feelings enough. Because I was never as a child able to express how I really felt. It was too dangerous ... you were going to get criticised if you expressed disappointment so I was never ever good at being able to be in touch with my own feelings anyway. And my own processes, so that was a huge learning curve for me in doing my PhD as well. Being able to identify that, that niggly feeling inside, what is it and how does it need to be addressed.

The passage reveals how Elena had learned not to express emotions, particularly negative ones. This made it difficult for her to seek help and understand what she was experiencing, and lack of self-awareness. Returning in the same excerpt to the question of leave, she also explicitly stated that "nobody acknowledged that I'd actually been through that" referring to her experience with her first supervisor (page 18):

I mean there was nobody there that could say what you've been through has been hell, take the time off, because nobody acknowledged that I'd actually been through that. Because it was all secretive and it was all ... [first supervisor] ... the wonderful [first supervisor] ... so how could I say that this ... needed to be addressed when nobody was acknowledging that that was a problem ... [two lines deleted] it needed to be acknowledged by the people who had the power to do something to change it ... it needed to be, not even addressed but just acknowledged that this had actually happened, and this was fact. And that this man's capable of doing this and we need to watch him, we need to be careful.

Unable to express her emotions, Elena was unable to ask for the help she needed. This was exacerbated by the point made here that people were not acknowledging that she had had a difficult time. If they did not acknowledge it, how could they suggest ways for her to move forward? It should also be noted that in her narrative, as discussed above, Elena did seek assistance from two people within the Department as well as her second supervisor, the people she refers to as having "the power to do something to change it", but her reported experience was not acknowledged or dealt with in a way that enabled her continue.

Early childhood experiences therefore left her with little confidence and also left her as a submissive person. One interesting aspect of the family story is the absence of her father. Who taught her to be submissive? Her reporting of the influences on her childhood indicates that it was her mother. Her cultural family experience is very different from Laura whose family encouraged resilience. Although Elena's resilience began to build through the confidence she gained in teaching, and the development of

peer networks and new friendships, it was not sufficient to overcome the obstacles in her PhD.

A key example of the impact of early life experience on resilience is illustrated in comparing Elena and Laura's stories. Both women are first generation Australians and come from the same southern European background. Elena's narrative outlines her situation with a controlling mother and absent father. Her mother pushed her to succeed in school, and stressed the importance of education, but within the narrow limitations of her expectations. Elena initially had few friends and her self-confidence only grew when she started taking tutorials in her department. In Elena's case, earlier experiences did not teach her how to cope with unfamiliar and difficult situations. She found her supervisory experience to be emotionally fraught. Although she learnt some coping mechanisms during her candidature, she was unable to complete her doctoral degree. In contrast, Laura's story is an example of supportive ways in which parents can raise children to build strong self-esteem and resilience. Education was emphasised, with the most important factor being that you must always do your best. Laura's parents also encouraged her to do things outside her comfort zone. Laura rarely mentions emotional challenges in her PhD candidature and had a strategic, project management approach to her degree.

Summary

Elena's story is one of a high achieving young undergraduate woman who was motivated to enrol in her PhD in order to become an academic. This extrinsic motivation was also influenced by the encouragement from her Department to apply for a scholarship. In her narrative Elena portrayed this encouragement as putting even further pressure on her to succeed and reinforcing similar pressure for her family. Elena also reported additional conflicting pressure from her mother to find a job and a

husband once she finished her Honours degree. She chose to cope with this conflict by moving out of home in the first year of her PhD enrolment, which lessened the influence of her mother.

Elena's story is a good example of how one main external motivating factor, without the intrinsic motivation of, for example, an intense interest in the topic can cause a postgraduate student to falter when that motivation is challenged. Elena's motivation to become an academic changed dramatically when she experienced departmental politics. The negative report of her first supervisor's questionable behaviour in order to secure funding was also a pivotal factor in her disillusionment with academia.

A key focus of Elena's narrative was her difficult supervisory experience. There are a number of lessons here. Her choice of supervisor was not based on a systematic exploration of who would be a suitable supervisor and of what her requirements for supervision might be. There were no preliminary meetings to investigate if the senior academic she chose had a supervisory style compatible with her needs. She noted clearly that she needed someone who would provide support, but given the time that had elapsed between enrolment and the interview for this research, could her self-awareness now be imposed on her experience at the time? Was she aware of her needs as a PhD student? While it is clear that Elena may have avoided the destructive supervisory relationship by interviewing prospective supervisors before committing to the supervisory relationship (Leonard, 2001; Phillips & Pugh, 2005; Salmon, 1992; Vale, 2004), how likely is it that she had the knowledge and skills to do this at the time?

Elena's case demonstrates the value of the recent move towards joint supervision at most Australian universities. A designated second supervisor may have provided another source of support and advice and, in particular, the experience and skills that

she didn't report receiving from her principal supervisor. Although Elena eventually did seek another supervisor, by the time she made this move it was too late. Her motivation, confidence and energy were low. Moreover, this second supervisor could not heal the rift between Elena and her initial supervisor which then deteriorated even further.

What was the role of the University, primarily the Department in this case? How was Elena able complete three years of candidature without submitting the research proposal which is due within six months enrolment? How could this lack of progress not be picked up in the twice-yearly progress reports that all students are required to submit? More worrying was the excerpt from Elena's narrative where she reported that the initial supervisor reminded, even warned, her that he held positions on several committees that would oversee her work. The implied threat was that if she complained about his supervision, he had the power to bring to the attention of the University her unsatisfactory progress. She was therefore in a powerless position and saw few avenues available to address the perceived injustice. Moreover, an approach to the Head of Department led to untenable advice to talk to the supervisor with whom communication had become severely strained. Why did the Head of Department fail to engage the postgraduate research coordinator to mediate, or fail to suggest a range of other supports available such as the postgraduate association or counselling services? It is clear that Heads of Department have a duty of care when a postgraduate student approaches them to report difficulties in a supervisory relationship to follow University procedures in relation to resolving such matters. In this case the Head of Department clearly failed in their responsibility to the student and in turn to the University.

Another lesson from Elena's story is that resilience is, to a great extent, learned by overcoming obstacles early in our lives. If we contrast Elena's story with Laura's we see a good example of how experiences in childhood can affect resilience. Both young

women are first generation Australians from the same Southern European background and both were raised in working class families. Laura's case in the previous chapter highlighted the way her parents encouraged her to problem solve and to persist when she initially didn't succeed. Laura used the persistence learnt early in life at several difficult points in her candidature. She also reported being encouraged at school to do her best, and not being judged if she was not top of the class.

Contrast this with Elena's reported experiences of being pressured to succeed and discouraged from making friends. She reported being initially isolated, but developed some friendships in the Department when she undertook her research degree and started sessional teaching. However when she encountered difficulties with her supervisor, she did attempt to resolve the problem by speaking to two senior women, including her Head of Department. Elena lacked the persistence to navigate her way through what increasingly became an intractable supervisory situation. She came to internalize the anger and confusion about what was occurring. Moreover she lacked strong peer support networks that may have helped her deal with these difficulties.

What are the more general lessons for students, supervisors and universities from Elena's case? Firstly that students need to be aware of their own needs in relation to supervision and not be afraid to "interview" potential supervisors to ensure that both parties have similar working styles and expectations. Students also need to be aware of their own motivation for undertaking the degree and how this might change. If Elena had perhaps had a strong intrinsic motivation in her topic, might she have been sufficiently engaged in her research to continue, even when her goal of becoming an academic was affected by her experience with departmental politics?

Supervisors also need to be aware that students' expectations and working styles may contrast with their own. While in some cases strategies can be implemented to find a way forward, both parties in the student-supervisor relationship must be willing to work towards this goal. Supervisors may underestimate the influence that they can have on a student's motivation and confidence.

There are further lessons for universities. One is that university requirements for reporting progress of candidature are there for a good reason. They allow progress to be monitored and provide a mechanism for checking when lack of progress is identified. It is also important that students know who they can turn to for advice and support in difficult times, and for universities to ensure that students' concerns are heard and addressed.

The following chapter draws together the findings of the four analysis chapters and provides links between the cases to highlight the importance of motivation, supervision and resilience in these women's experiences.

Chapter Eight — Discussion

What do these women's stories tell us in and of themselves? They provide very detailed accounts of the years the eight women spent undertaking research and writing their theses. While each woman shared a very personal and individual account of their PhD journey, several common themes were examined within their narratives. Overarching themes of motivation, supervision experiences and resilience have been analysed in chapters four, five and six, while chapter seven provided a detailed case study of what happens when supervision is unsatisfactory. This chapter analyses to what extent we can generalise across cases; and what are the lessons from these experiences for women current undertaking or considering PhD candidature, as well as for university policy makers.

Motivation

The Dever et al.'s (2008) QUT study noted that female PhD graduates were significantly more likely than male graduates to report that they pursued their PhD for intrinsic motivation factors, such as interest in the discipline and thesis topic, intellectual and academic development, and personal satisfaction. Extrinsic (or instrumental) motivation includes career advancement, facilitating career change, improving career prospects, acquiring specialist skills and improving pay. Dever et al (2008) noted that extrinsic motivation has been linked to better career advancement although perhaps this is "self-fulfilling": if a student is in a field where a PhD will bring advancement they are unlikely to advance further in their career without one. Students would probably be attracted to such a field because it interested them; so there could be some element of intrinsic motivation that was not analysed in the survey results.

The women in my research reported both types of motivation. The motivation in most cases was complex and six participants reported a mix of both intrinsic and extrinsic factors. Intrinsic factors were: personal interest in the discipline and topic; wanting to prove oneself academically; enjoying learning for its own sake; gaining the title "Dr"; and an interest in research generally. Extrinsic motivation included: wanting a PhD as a prerequisite for an academic career; furthering or consolidating a career; improved job prospects; gaining a scholarship; encouragement/influence from family and/or the university; active encouragement from supervisor/s; wanting recognition from others; and considering a PhD as a career option.

Does intrinsic or extrinsic motivation affect a candidate's future career once they complete a PhD? Dever et al (2008) and Western, Kubler, Western, Clague, Boreham, Laffan & Lawson (2007) assert that motivation is one of the factors that may affect women's experiences post-PhD. The survey on which both these papers was based found that, for female graduates, having strong intrinsic motivation such as an interest in the discipline or topic area was linked to lower earnings post-PhD. This could be due, as one woman in my study found, to a woman starting a family at the same time as beginning a research career. Women may therefore be choosing part-time work in order to balance work and family, or perhaps because not enough permanent part-time jobs are available. Thus women are left only with the option of fixed-term or casual appointments. But it may also be linked to women doing PhD's in "feminised" disciplines such as nursing and education that are considered low status and have low post-PhD earning capacity.

Phillips and Pugh (2005) noted that wanting to undertake a PhD in order to gain the title "Dr" could be a problematic motivation. For one woman in this study, getting the title

was an intensely personal motivation with elements of class interacting with poor careers advice in secondary school.

Three of the women in this study highlighted the desire to pursue an academic career as one of their motivating factors. For one, the seeds of that motivation were sown in her Masters by coursework degree with her minor thesis supervisor encouraging her to consider expanding the research to a PhD. This indicates how those with whom we interact can positively or negatively affect motivation. As indicated in Chapter Five – and discussed in further detail below – a supervisory experience of encouragement and integration into academic life can position a student well for the next stage of their academic career through induction into scholarly networks. This woman reported no negative experience of departmental politics impacting on her decision to become an academic. Instead, she was encouraged to take on sessional teaching and research assistant work, as well as to present at conferences.

Her experience was in stark contrast to that of another woman who, as well as experiencing serious supervisory difficulties, mentioned departmental politics as negatively affecting on her decision to pursue an academic career. A third woman who discussed an academic career as one of her motivations for undertaking a PhD, noted the heavy teaching workload of academics within her department and consequently talked about getting away from academia and back into the "real world" of work for a while. But she had not discounted the idea of an academic career at a future point.

From this research we can discern effective and less effective motivation and their link to positive PhD experiences. Motivation is multi-faceted and nuanced, and self-awareness can enhance positive motivation. Getting the title "Dr" may be one

motivation to undertake a PhD. However it is unlikely to be strong enough to sustain the intense efforts needed to complete a PhD. Positive experiences with potential supervisors or academic staff in previous degrees can have a positive impact on motivation. On the other hand negative departmental politics inhibit motivation, particularly where motivation to undertake a PhD was strongly linked to wanting an academic career.

The nuancing of motivation can blur the distinction between the different types of motivation. Wanting the title "Dr" can be an intrinsic motivation which is also influenced by other people's expectations or advice. It is therefore important to be aware that some factors in motivation can be blurred across both categories.

The table below outlines the effective and less effective motivational factors, both intrinsic and extrinsic.

Table Eight: Effective and less effective motivation

	Effective	Less effective
Intrinsic	Prove that you can achieve academically	Wanting the title "Dr"
	Interest in the topic	
	Interest in the discipline	
	Interest in learning for its own sake	
Extrinsic	Encouragement from supervisor – both to undertake and continue the degree	Encouragement from School – can put pressure on the student to succeed
	Financial support – can be an opportunistic motivation to undertake and continue the degree	Wanting recognition – showing the world you can do more
	Wanting an academic career	Impact of departmental politics on wanting to become an academic
	Role models – family, academic	Financial support of a scholarship can be a reason to stay enrolled when a period of leave may be more advisable and appropriate

Summary

All of the women in this research had more than one motivation for doing a PhD. In some instances the motivations were complementary, such as a personal interest in the topic and/or the discipline and wanting to begin or build an academic career. In some cases they were incongruent – being awarded a prestigious scholarship was motivation for one woman to start her degree, but the departmental pressure and expectations that went along with it were de-motivating.

Supervision

Supervision is pivotal to the PhD experience and all the women talked at length about their supervisors and the supervisory relationship, and frequently returned to this theme throughout their narratives. This finding was in contrast to some literature that indicated supervisory experiences were not always a key consideration (for example, Leonard et al., 2005). In some cases it was the core of the narrative and in others it was a central theme among others, such as peer support. A good supervisory relationship has a strong link to successful completion. With these eight narratives what were the most successful supervisory models? And what aspects of the student-supervisor relationships did these women report as being most useful? Where there was more than one supervisor this arrangement generally led to a good supervisory experience for students. But not all supervisors were active to an equal extent and clear negotiation of different supervisory roles by all parties was linked to more successful outcomes, as discussed below. Other questions to be explored here include: does the way in which a supervisor was "chosen" have an impact on success and satisfaction? How did the ability to negotiate with the supervisor/s regarding boundaries and needs/expectations affect outcomes? And how willing were the supervisor/s to participate in such negotiations? What role did support

during personal difficulties play? And did having a female supervisor have a positive impact on the student's candidature?

Contact with the supervisor prior to commencing the degree was positive in most cases – the supervisor often encouraged the women to apply, in some instances helping with scholarship applications. Early contact also appeared to help the women not only choose a supervisor, but also negotiate the supervisory relationship. Successful supervision arrangements included: support and encouragement from the supervisor, access to networks and resources, encouragement to attend conferences and publish, availability, and responding to draft chapters with timely critical feedback.

Supervisory models

Two of the eight women had a single supervisor. In both instances the student-supervisor relationships were reported as difficult to negotiate and the students did not have a second person to approach that could help to resolve differences. One of these women eventually withdrew from her degree and the other was shortly to take maternity leave. Although Heath (2002) reported no differences in levels of satisfaction between students with a single supervisor and those with two or more supervisors, in both cases in this research having a single supervisor was not conducive to either a positive supervision experience or successful completion. A second supervisor was reported by the remaining six women as someone who could be a sounding board, or could mediate to help resolve conflict without having to circumvent the authority of the principal supervisor, which can negatively impact on the supervisory relationship. The student who withdrew from her degree did approach the Head of Department in attempting to resolve her supervision problems. In itself this did not cause difficulty with the supervisor, as the Head of Department encouraged her to go back and talk to her

supervisor in an attempt to sort out their differences. But in this circumstance, where the supervisory relationship had clearly broken down, she was unable to negotiate with her supervisor.

The remaining women in this study had two or more supervisors and the level of interaction with co-supervisors varied. Only in one case did the two supervisors share the supervision load equally, and this was done on the basis of six months with one supervisor and six months with the other supervisor. Handover meetings took place half yearly and in the final six months both of the supervisors were equally involved. More commonly, for most women the principal supervisor undertook most of the supervision responsibilities. The co-supervisor would generally only play a role when there was written work to be reviewed or the principal supervisor was absent from the university. A key example of an effective supervisory model was one in which the woman referred to herself and her supervisors as a team. In this case the student worked primarily with her principal supervisor, but regular meetings were scheduled with her co-supervisor at key points in the candidature and to review written work. This participant spoke highly of her supervisory team and noted that, in comparison with other research students at the university, she knew she was "lucky" in her supervisory experience.

In another case, when a principal supervisor died, the student was able to arrange for one of her co-supervisors to become her new principal supervisor. This resulted in less disruption to her research than if she had had to negotiate with the Head of School for a new supervisor. These examples demonstrate that although a co-supervisor may not play a significant role under normal circumstances, their presence can be vital in ensuring continuity of supervision where a student has a difference of opinion with the principal supervisor or that person is absent from the university or simply cannot

continue to supervise. As discussed below, strong supervisory models included the negotiation of the working relationship and its boundaries; encouragement and support (particularly during difficult personal circumstances); availability; and assistance with networking, publication and attending conferences, all of which help to establish or build an academic career.

Encouragement and support

For at least two women in this research, supervisors were key people in encouraging them to undertake the PhD in the first place. Both reported a positive experience — despite one of them encountering personal trauma. Supervisors also played a key role throughout the candidature in encouraging the student during periods of intellectual and personal challenge. This was achieved in a number of ways. In one case the supervisors set small, achievable tasks that kept the student connected with her research. Another supervisor was supportive and encouraging when the viability of the student's research was seriously undermined as one of the linked studies "fell apart" and caused the student to question what she was trying to do. A further supervisor advocated on his student to perfect the supervisor advocated on his student's behalf when she considered she was disadvantaged due to her part-time status, and was supportive during her ongoing periods of serious illness. Emotional support was an important facet of the most effective supervisory relationships. An empathetic supervisor could share the student's personal difficulties and thereby give them space to be sad or angry or depressed without judgement.

This encouragement and support is vital to ensuring students survive the rough patches in their candidature. The role of supervisors in providing academic support and in advocating for them to the postgraduate coordinator or Head of School is critical.

Without this encouragement and support the PhD experience can often be challenging

and unresolved issues can linger, often to be exacerbated with the next "rough patch" the student experiences.

Negotiation of supervision

The women mostly reported successful negotiation of issues surrounding supervision. Leonard (2001), Phillips and Pugh (2005) and Vale (2004) emphasised the need for students to discuss the process of supervision at the beginning of the relationship, as well as on an ongoing basis. One case in this research was a notable exception to successful negotiation, and the inability to negotiate between student and supervisor was a major factor in the student withdrawing from her PhD. In this instance, there was no discussion regarding student or supervisor expectations prior to enrolling in the degree and taking up a scholarship, and when it became clear that she was not provided with the supervisory relationship that she had expected negotiations proved fruitless. If she had undertaken due diligence prior to approaching this supervisor, for example talking to some of his current students, a more informed decision could have been made. This due diligence must however be underscored with an awareness of the clear power differential between the student and supervisor. It is evident in this case that the supervisor was in a powerful position within the Department, including his membership on several committees that review candidature and ethics applications. The student reported finding it difficult to initiate conversations and the difference in power between the academic and postgraduate student appears to have made it difficult for her to persist, particularly in light of the lack of support from other staff within the Department. Notwithstanding the issue of power differentials, as emphasised by Leonard (2001, p.85), there is an example here of a woman student who was "flattered" that such a respected academic within her Department agreed to supervise her and accepted his offer of supervision gladly. There are responsibilities for all parties –

student, supervisor and university – to be aware of these issues in negotiating supervision.

In another case, when the supervisor was not providing the feedback expected, the student sought out an additional co-supervisor who provided the intellectual feedback that she required. This project was industry-funded with assigned supervisors, and it would have been impossible for the student to change both supervisors without giving up the scholarship. Nevertheless, the student was proactive in seeking out other supervision.

One woman's principal supervisor died and she then changed one of her co-supervisors to the role of principal supervisor. She reported some difficulties in negotiating a working relationship with the new principal supervisor, but at the time of interview she had managed to adjust to the new supervisor's different working style. The ability to negotiate an effective supervisory relationship that works for all parties is clearly central to a successful PhD experience.

Availability of the supervisor

Research on supervision stresses the importance of the availability of the supervisor (for example, Leonard, 2001). Heath (2002) provided some evidence to support the view that regular formal meetings between a student and supervisor(s) increased the likelihood of completion and also increased the satisfaction that PhD candidates report with their supervision. Where supervision worked well, participants reported being in regular contact with their supervisor, even if the supervisor or student was away from the university. In the two cases where the students only had a principal supervisor, there were periods when little contact occurred. In one case the supervisor expected the student to write a candidature proposal without any assistance or support. The student

consequently felt out of her depth and was unable to complete the task. This calls into question both the supervisor's responsibilities for ensuring that students meet the necessary hurdle requirements, as well as the university's responsibility for effectively tracking progress. It seems extraordinary that this student was enrolled for three years full-time on a scholarship, without completing a candidature proposal – the basic hurdle requirement before data collection can commence. In the other case, the supervisor was on leave and absent from the university and the student had difficulty getting equipment repaired. A co-supervisor in this instance could have provided support in negotiating with the technical staff for the required repairs.

A central component of the supervisor's role is the provision of constructive criticism and feedback on written work. Students need to be able to submit work and get useful feedback in a timely manner. In several instances the women described issues regarding consistency in and lack of feedback from supervisors. One noted that the feedback differed from one meeting to the next and advice could be contradictory; there was little feedback on the theory or methodology; and often she received only one or two comments on a ten-page draft. This woman sought an additional co-supervisor to provide constructive feedback that she considered was not forthcoming from her principal supervisor. In another instance, one woman reported that she received feedback overly focused on grammatical corrections, but accepted that her supervisor was correct and it was not worth wasting time arguing about grammar and punctuation. In a third instance, the co-supervisor had little knowledge of the methodology being used and thus feedback that she provided could be problematic. Here the student and principal supervisor discussed the issue and decided that the co-supervisor would be utilised in later stages to review drafts of the thesis, rather than be involved in the design and implementation of the research itself.

Leonard (2001) notes that availability can also relate to the student's ability to talk openly with their supervisor. In a number of the cases in this research, the women reported open and honest communication with their supervisor/s, particularly during stressful times including serious illness of the student or a family member, and during difficult periods in their research.

Same gender student-supervisor relationships

The literature has been unclear about whether female students have more successful supervisory experiences with female than male supervisors. Moses (1990) and Leonard (2001) both argued that gender of the supervisor could have an impact on women's satisfaction with their supervisory relationships. Smeby (2000) noted that most researchers advocate same-gender supervisors for female students. However he also noted that the literature both supports and contradicts its importance for women.

Smeby's (2000) research highlighted a tendency to same-gender relationships in graduate supervision, particularly for women in the natural sciences. But his findings were based on a survey of academics in one country and noted only the numbers of male and female students that they were supervising. The findings are tentative at best, as Smeby (2000) noted that they are not based on student and supervisor preferences and assessments.

This research project does not confirm previous findings on the impact of gender on student-supervisor relationships. In two cases participants had only female supervisors. One in the Humanities worked particularly well with the student reporting that she felt supported throughout her degree, especially during difficult times. Both of this student's supervisors were female and the boundaries of the student-supervisor relationship were negotiated to include an element of friendship. In the other case, a woman in the

sciences had a single female supervisor. This relationship was reported to have a number of difficulties, particularly with negotiation on how many experiments were still to be completed. The student noted that she had approached her supervisor because she saw her as a role model – a successful woman in a male-dominated discipline. She also had prior knowledge of some of the difficulties that other students had had in working with this supervisor and, believing that she had learned from their experiences, still chose her as a supervisor. It is possible that she underestimated her ability to negotiate where others had struggled, based on her respect for the supervisor and her previous interactions with her as an undergraduate.

One explanation of why women who achieve professional success fail to support and nurture other women coming up through the ranks, such as students, has been labeled the "Queen Bee" syndrome (Ellemers et al., 2004; O'Leary & Mitchell, 1990). Despite holding positions of power, these women do not offer support to other women. This syndrome describes a situation where a female is in a supervisory or management role, with female staff or students working under her. The woman in charge may interpret a female student who is highly educated or skilled as a threat (Bune, 2008). However it is unclear in this particular case whether or not the supervisor was deliberately holding her back. Another plausible explanation is that the supervisor had to overcome numerous obstacles to become a senior academic in a challenging discipline and was aware that the student's work might be scrutinised more intensely because of her gender. She was therefore perhaps working to a very high standard, and demanding the same standard of her student in order to achieve respect within her discipline. The student noted that it must have been difficult for her supervisor to reach her current position. Nevertheless, she still struggled to negotiate with her supervisor to finalise the experimental work, send chapters for publication and finish the thesis.

In a third case, one woman started with two female supervisors. She reported that the feedback she was receiving was not sufficiently critical, and varied from week to week. In this instance, she sought an additional co-supervisor who was male.

Therefore the experience of women in this research suggests that gender of the supervisor appears to have little impact on the student's level of satisfaction with the supervisory relationship. Other factors such as willingness to negotiate, availability, providing critical feedback, and encouragement and support were more important to successful completion of a PhD.

Support in building an academic career

Dever et al (2008) found that female students reported less support from supervisors in areas such as networking, meeting visiting academics, publications and attending conferences. All of these are key activities in building a successful academic career. In one of the most successful supervisory relationships in this research, the student was actively encouraged to attend conferences, meet visiting academics, build networks, teach and publish. Her principal supervisor provided broad support and mentoring that increased the likelihood of her successfully applying for an academic position. She reported in her narrative that prior to her graduation ceremony she had secured an academic job at a prestigious Australian university.

In another case, the supervisor had been reluctant to send articles out to journals for review. This potentially harmed the student's future career prospects. But as the student was in the sciences, it also impacted on her thesis writing. In many science disciplines chapters are submitted as journal articles in order to receive feedback. By holding back on these journal articles, the student could miss out on opportunities for critical

feedback that would help to improve the thesis, as well as build a publication record.

Also in this case, the student did not discuss any support provided by the supervisor to link into research networks outside the university.

Another science student in this study had informal contact with other postgraduate students in her department. However she did most of her research at home. She did not mention support from her principal supervisor for networking activities such as attending conferences.

This research therefore mostly supports Dever et al.'s (2008) findings. It is clear then, that some women are not supported in building an academic career and instead have to build their own support networks. For some women in this study, the gendering of academic careers began during PhD candidature, confirming Hatchell and Aveling's (2008) findings. Only one was strongly supported to forge an academic career while a postgraduate. Mostly they did not receive adequate support from their departments. Therefore by the time these women graduate, they are already experiencing less than optimal treatment. In a sense, the PhD experience conditions them to expect different treatment on the basis of their gender. This potential gender discrimination needs to be acknowledged and addressed if women are to optimize career opportunities when they complete their PhDs.

Supervisor as role model

One of the outcomes of PhD supervision is to build the next generation of PhD supervisors, in part through the students' experiences of their own supervision. How else do we learn to become academics with all that that entails? Students who do continue on to academic careers will learn from their own supervisory experiences.

Good supervision provides role modelling for the transition to becoming a supervisor.

One student specifically mentioned that her experience of supervision positively affected her own supervisory capacity. Another mentioned that her supervision experience would be a good basis for her own supervision of students as she commenced an academic career.

Summary

What are the key elements of effective supervisory models that lead to an optimal experience of the process and successful PhD outcomes for students? Several key factors are suggested to be central to an effective supervisory model. These include:

- Due diligence by students when choosing a supervisor/s. This includes an
 assessment of whether or not they can build a strong working relationship,
 however the power differential between supervisor and student does need to be
 taken into consideration;
- Two supervisors are highly recommended for effective supervision;
- A team approach to supervision can empower the student;
- Clear communication of expectations and boundaries by all parties;
- Encouragement and support, especially during rough patches;
- Availability and timely, consistent feedback from the supervisor are critical to successful completion;
- Having a female supervisor does not necessarily produce a good supervisory
 relationship for female students. The more important consideration is a good fit
 between student and supervisor; and
- Good supervision, as evident in previous research, helps students to build their academic careers and introduces them to scholarly networks.

Resilience

In looking at how the women in this research managed to survive their PhD candidature, a strong theme of resilience was evident in all the narratives. How the women developed – or didn't develop in one case – their resilience and how this helped them cope with the challenging events and experiences, was crucial to the outcome of their PhDs.

What sustains women through long and difficult doctoral candidature? What gets them through to the end of their PhD? Are they mainly internal factors? Most of the women talked about persistence and also at least two of them mentioned always finishing what they started. Vale (2004) and Phillips and Pugh (2005) note that one of the elements required is a single-minded determination. Only one woman in this study didn't mention moments of doubt, of thinking that she couldn't finish or wondered why she was doing a PhD. There was little in her narrative that reflected emotional struggle. When questioned about the "lowlights", as she referred to them, she talked about the difficulties in writing one of her early chapters and struggling with the different definitions around her topic. She also outlined how she systematically dealt with this issue – consulting with supervisors, and leaving the work for a couple of weeks and then coming back to it with a fresh perspective. In this instance, the woman related a childhood incident where her parents encouraged her to find out more about a hobby she wished to pursue, teaching her to persist in following up when at first she encountered difficulty in finding the information she needed.

Is resilience therefore a learned trait? In the case above, the woman's family history certainly seems to have taught her to be persistent. In another, where the woman withdrew, the family history was quite different and seemed to have left her traumatised

and unable to navigate through subsequently difficult interpersonal relationships. Some women had the ability to ask for, and/or accept, help when it was offered, in many instances being proactive in seeking support where none appeared available.

Role models, family and peer support

Most of the women mentioned role models, family and peer networks as important support structures in helping them get through the process. In one case the woman's older brothers and other women doing science-based PhDs were mentioned. In another, the woman modelled her supervisory role with her own students on the relationship she built with her supervisors. It is important that good supervision, as discussed above, provides role modelling for the transition post-PhD to the supervisory role.

The importance of role models in these women's doctoral experiences could bear closer investigation. Does the person identified as a role model provide explicit support through modelling appropriate behaviour? Or is the role model someone whom the student admires but with whom they do not discuss their experiences?

A number of women sought out peer networks in varying forms for additional support, although isolation from the university campus can impact on a student's ability to do this. One woman strategically approached two separate student networks where she could discuss her work and relevant articles; in this instance it was the first step in looking for additional support that she considered was not forthcoming from her supervisor. She later added a co-supervisor for further support. Another woman reported that isolation, through distance from her home campus, made it difficult to connect with other students and attend many seminars and social events at the university. However she overcame this in two ways: she connected with two fellow PhD students in her

department who kept in email and phone contact; and she joined an online network of PhD students in her discipline that had been established through students meeting at conferences and workshops. A further example of support networks came with one woman's hospitalisation and the persistence of several friends who frequently met with her to read articles and discuss research. In the case of the student who withdrew from her PhD, she reported having a very small social circle for emotional support. She connected with another student who had the same supervisor and a similar negative experience of his supervision. But at this point she was severely undermined and support networks had little impact.

"Make or break" times

Some of the women in this study experienced moments, or extended periods of time, that were "make or break" in their decision about whether or not to continue with the PhD. They mostly successfully navigated their way through these times and consequently this helped to increase their resilience. In one case, the student felt that life was out of control following the death of her supervisor. Over the Christmas period she took time out and then made a definite decision to get back on track. For another woman, an extended period of hospitalisation led to a disconnection from her research; but by accepting help from friends who worked through relevant articles and initiated discussions, she reconnected with her research project.

One woman's "make or break" time came within the first six months of her candidature with a partner's diagnosis of a life-threatening illness. She stayed connected with her research – taking work to the hospital and engaging with her supervisors to complete small, manageable tasks. In another instance, a student who was also an academic

gained a Faculty time-release scholarship to provide time-release from teaching and time and space for writing up her thesis.

The role of peer support in aiding resilience is important. The link between the two could be explored further. Do students who are resilient seek peer support as a way of strengthening resilience? Or does peer support help them to build resilience? Or is it both?

Summary

Resilience then is a key component in successfully navigating through PhD candidature. While family encouragement to be persistent may help to build resilience as an adult, role models within the university and internal and external peer support networks are also vital. Students who demonstrated resilience were able to deal with "make or break" experiences and remain focused on their research.

What are the aspects of resilience that helped these women through to successful completion?

- Learned resilience in formative years;
- Strong self-knowledge and focus builds resilience;
- Women who understand their working style, support needs and also have a strong internal drive to complete tasks that they commence are most successful;
- The resilience to overcome difficult events and stay connected with the research is important.
- The ability to find peer support and connect can help to build resilience
- Role models, family support and an understanding, communicative supervisor
- Financial support was a strong underpinning

Two other issues emerging from this research were: models of academic careers and the impact of childbearing on PhD completion.

Following the traditional "male" model of an academic career

There are two examples in this research where the women could be considered to initially fit what has been described as the traditional male model of an academic career trajectory. This male career model is one that is often followed by students who proceed directly from school to university. One was a clear example of how well this can work for all students who are given, and can take up, the opportunities offered such as conference attendance, publication and teaching. This student, however, was living at home with her parents and receiving a full-time scholarship. She did not have family responsibilities, including children, to take into consideration. Several of the women in this study were not in this situation. Instead, they had responsibilities such as family commitments, trauma and/or illness with which to cope. While this woman is a good example of the traditional male model working for a woman, it must be stressed that it does not necessarily work for many women students.

For a second woman, the beginning of her narrative described what could be another example of this traditional model of academic career trajectory. In both this and the example mentioned above, wanting an academic career was reported as a prime motivation for pursuing a PhD. In this case, the woman's confidence in her ability, that was clear in reports of her impressive undergraduate and Honours results, was destroyed during her PhD experience, primarily through a negative supervisory relationship. The lack of resilience also impacted on her decision to withdraw.

Given that most women's careers do not follow a trajectory more typical of men's academic careers, greater flexibility in university policies and procedures is required to open up opportunities, not only for women, but also for other groups of students, including international students, part-time and non-scholarship students. For example, care-giving or other responsibilities *may* make it difficult for women to take up critical career development opportunities such as attending overseas conferences or teaching classes that run in the evenings. Other ways in which flexibility is required include: more resources for part-time students, such as access to desks and computers; more part-time scholarships; and building peer support networks, both on-campus and online. Universities also need to consider cultural differences that international students are likely to experience and ensure that workshops and other sources of information are available to assist them in their transition to a Western academic environment.

Balancing a PhD and family

Some literature refers to women having difficulty balancing family and a PhD/academic career, due to the PhD/early research career timelines overlapping with the period when they are most likely to be starting a family (Dever et al., 2008; Leonard, 2001). Three of the women in this study had children during their PhD candidature. One of these also had a child who was born while she undertook her Masters by research degree. Two of the women did not see their family responsibilities as strongly impacting on their ability to finish their degree. In both cases, childcare facilities were utilised and negotiations took place with their husbands regarding sharing of housework and care of the children. In the third case, the woman made a decision with her husband to start a family while she was still working on her PhD because of the length of time that the PhD was taking to complete. She saw this as a choice that she had to make.

This is one of the significant findings of this research. It is possible for women who are mothers to successfully combine a PhD with a family. The limitation here is that all of the women were either on full-time scholarships or had a flexible job and/or partners who supported their research and were prepared to share and negotiate carer responsibilities and housework. It should be acknowledged that these could be considered optimal conditions under which to complete a PhD. Women, who are part-time students without scholarships, or who work and study, are likely to have greater restrictions on their time and flexibility. Nevertheless, women in this research were able to combine research and having babies. The only barriers were the perceptions of others – supervisors, departments and peers – that they may have difficulty balancing roles. One woman highlighted that there were hidden assumptions from her female supervisors when she had her baby:

"I wouldn't say that necessarily it was related to gender that I had difficulties, yet you could say there was, there's a certain presumption how things will go. And because they've been both mothers, you know how you will mother or any of those kind of things ..." (Andrea, p.7).

Caring responsibilities were not restricted to raising children. Four women in this study reported other family responsibilities impacting on their research. One had a seriously ill partner; another reported that her father had been ill. In a third case the after-effects of her mother's death prior to commencing the PhD, affected one woman's experience. Finally one student reported family problems with a sibling, and her parents' need for support at that time, as impacting on the time available for research and here emotional well-being. Therefore for women both within and outside this project it must be acknowledged that family commitments extend beyond childrearing to caring for

partners and aging or ill parents. The juggling of caring demands and a PhD is clearly a highly gendered issue.

The flexibility and understanding of the university, particularly supervisors, in dealing with a student who requires leave, or to change to part-time enrolment, in order to balance research with outside pressures (children, or own or other's illness) can provide women with a sense that their circumstances are understood. In at least one case, assistance from the postgraduate support staff was mentioned as crucial to the student knowing that the university understood her circumstances.

A different experience?

While all except one of the women in this study completed their PhDs, what was the impact of that experience on their future careers? It is clear that only one woman was groomed by her supervisors to use the PhD candidature to set in place the building blocks for a successful academic career. Six of the eight did not report discussions with their supervisor of what their post-PhD experience might look like and how they might be encouraged to put in place the building blocks for an academic career. This research therefore further corroborates the findings of Dever et.al (2008) and Hatchell and Aveling (2008) that one of the differences between male and female PhD students is that there is not necessarily an expectation from supervisors and the Department that they are undertaking a PhD in order to become academics. It is important to note that the women were not asked specific questions regarding their experiences, and therefore this 'non-reporting' does not necessarily mean that discussions did not take place for at least some of the women.

Several women in this study were disillusioned by departmental politics and consequently decided not to pursue academic careers. We need to therefore question if the culture of academic departments is unwelcoming or even overtly hostile to women who are PhD students, as suggested by Hatchell and Aveling (2008).

Therefore, a key finding of this research is to suggest that the gendering of academic careers begins during PhD candidature where some supervisors and Departments treat women differently to their male PhD students. There is an assumption that women students do not necessarily want to be academics, as Dever et.al. (2008) identified, and therefore women are not groomed for a future academic career. Is the different treatment due to the PhD candidature often coinciding with women starting a family and the assumption by supervisors that they have therefore chosen family over career, resonating with the story of a young scientist in the most recent APESMA survey (APESMA, 2010)?

Barinaga (1992) concluded her article with an important observation. Some women argue that the pipeline "leaks" may never be completely patched and that to do so may be undesirable. In part this is because some women will continue to step out of the academic career path for personal reasons. It is not that we are aiming to make the career paths of women mirror those of men, but more ideally to equalise opportunities for women by broadening the system to accommodate different styles and alternative routes through academia and other careers. Hatchell and Aveling (2008) agree with Blickenstaff (2005) that diversity, equity and inclusivity are crucial in providing improved workplaces and academic communities. Blickenstaff (2005) argues that in terms of scientific disciplines, the continuing underrepresentation of women is a loss of

potential significant contributions; and that increasing diversity will lead to more inclusive research.

This research, however, has shown that women continue to have less than optimal experiences throughout their PhD which can affect their decisions about continuing to academic careers. While at least one woman successfully combined parenting and an academic career, she acknowledged that this took a great deal of negotiation and renegotiation both within her family and with the university. Other issues that affected these women during their PhD candidature, such as family or personal illness, also required negotiation and understanding from supervisors and their universities.

Improving the rate of women proceeding from their increased numbers at undergraduate levels, through their PhDs, and retaining them into academic careers will continue to be a struggle unless universities more closely examine their gendered culture and work towards more inclusive and supportive systems, policies and practices which both understand and respond to more diverse career path options than those typically ascribed to men.

Limitations of this study

Several limitations of this study should be noted. All of the participants interviewed were on scholarships for all or part of their candidature. Although one woman was working as an academic, she received a Faculty scholarship which enabled her to get time-release from (most) of her teaching obligations to concentrate on writing up her PhD. There may be differences in the experiences of women who work part-time or full-time while undertaking their PhDs. The amount of time they can devote to their research may be more restrictive if they have other responsibilities.

All of the women were local students, no international students interviewed. While there was some variation in cultural background, international students may have additional issues relating to their cultural background, race and/or living away from the support of family and close friends, and a familiar cultural context, as well as additional financial pressures.

How does the story vary over time? Two women explicitly mentioned that the story told would vary depending on when it was being told. One student said that the story she told would have been different had I interviewed her shortly after she withdrew from her degree. She acknowledged that she had had time to reflect on what part of the experience related to her (for example, personality, experience, age) and how much was due to her supervisor. In another case, at the start of the interview I asked for her to tell her story in whatever way she wished to tell it. This woman responded that it "will vary from day to day and minute to minute." (Andrea, p.1)

Only eight women were interviewed in this research. However, they included a diversity of disciplines and a wide age-range of participants – from their mid-twenties to late forties. A limitation of this research was that no women over fifty were included, nor any who had undertaken their entire candidature on a part-time basis. This limitation needs to be acknowledged and addressed in future studies.

Future studies

Differences between male and female PhD student experiences could be further explored through undertaking a comparative qualitative study, preferably longitudinally and also to follow their post-PhD early career experiences. The QUT survey (Dever et al, 2008) provided a good overview of the sector (albeit with only Group of Eight

universities). However, the survey in that research doesn't provide qualitative data on the depth of PhD experiences as discussed in previous chapters, nor does it help us to unravel the nuanced and entwined ways that different factors, both internal and external, can impact on women PhD students.

As there is only one woman in this study who withdrew and was able to discuss her experience, further research into students who withdraw from their doctoral degrees is needed. Analysis of these stories in relation to those of "completing" students could help elucidate important factors which could then be used to inform university policy and practice.

The Anglo-centric nature of the women who participated in this research is also acknowledged. Further research into students from more diverse backgrounds, including international students, could help to develop alternative models of success and expand our knowledge of what it takes for all students to achieve academic success and how the organisation can better respond to the changing needs of its students and its future academic workforce.

This thesis has noted disciplinary differences in the experience of women undertaking PhDs. Further research might explore in depth the specific disciplinary contexts and compare, for example, the PhD experience of women in social sciences where female representation in academia is high with that of women in engineering which has the lowest representation of women academics.

Reflections on research informing practice at an individual level

At the beginning of this thesis I reflected on my journey and the resonances I had with these women's experiences. I have learned a great deal through this research not only at a concrete level of providing advice to students, but also in developing the ability to question the status quo and look beyond the individual student and supervisor to the larger issues of university culture – how this may be gendered in almost invisible ways and how this can continue to be addressed.

On a practical level, I have discussions almost daily with potential PhD applicants and enrolled students both male and female. I advise those who haven't yet begun to choose their supervisor to try to find supervisors that have a similar working style. It is now policy at Victoria University, along with other universities across Australia, for all students to have at least two supervisors. This is borne out by these women's stories about having a co-supervisor to whom they can turn, either in difficult times or when the principal supervisor is absent. I also encourage discussion about expectations, motivation and factors of resilience and support. My own experience with peer support and online support options has encouraged me to discuss the idea of developing online forums, chat rooms and/or blog spaces for students within a new research portal being developed within Victoria University. These can help students, even those off-campus or part-time, to overcome issues of isolation and connect with other students.

On a broader scale I have seen the ways that women students juggle and balance their personal lives while continuing their studies, particularly those who have children during their candidature. While I can offer scholarship holders a short period of paid maternity leave, students not on scholarship must use leave of absence to suspend their candidature and spend time with their families. Current government and university

policy in Australia requires a PhD to be completed within four full-time or eight parttime years to be considered a "timely completion." Future government funding to
universities takes completions into account – money flows back to the university
according to a set formula – but not until two years after completion of the degree.

There may be ways in which departments, and universities, subtly or overtly try to
discourage students from enrolling part-time or taking leave. This would disadvantage
women students more than men due to women still undertaking more family
responsibilities such as childcare, thus needing more flexible study arrangements.

On a personal and professional level, I have seen the impact that stories of other women's experiences have when they resonate with students and staff. As Hatchell and Aveling (2008) noted, this approach of telling stories allows individual experiences to be told and heard by others, contributing to our understanding the phenomenon of women leaving their academic careers. Given that the statistics on women's participation at PhD level and upwards through the academic ranks have not improved greatly over the last ten years as I have undertaken the research, I believe we need to continue to investigate the complex issues that need to be addressed. In this way we can further understand the experiences of women at different levels from the PhD onwards, and continue to challenge the dominant university culture to develop more diverse and equitable institutions at all levels.

Chapter Nine — Conclusion

This research examined eight women's stories about their PhD experiences in order to explore in detail their decisions to undertake a research degree; their lived experiences of this journey and what factors increase the likelihood of successful completion. How have these women's stories added to what we know about the PhD experience? And what are the implications of this for the development of university policy and practice?

This thesis utilised thematic narrative analysis to interrogate the stories of the women's experiences of their doctoral research degrees and focussed on what content the narratives communicated. The analysis of the narratives was methodical, focused and detailed, while still retaining a sense of the "whole" story.

The study found that motivation to do a PhD is multi-faceted. In some instances the motivations were complementary, such as a personal interest in the topic and/or the discipline and wanting to begin or build an academic career. In some cases they were incongruent – being awarded a prestigious scholarship was motivation for one woman to start her degree, but the departmental pressure and expectations that went along with it were de-motivating. The research therefore concluded that the environment in which students undertake their PhD can have a significant impact on motivation.

The second important finding was in relation to effective supervisory models. Several key factors were found to be central to effective supervision. These include: due diligence by students when choosing a supervisor/s; that two supervisors are recommended for effective supervision; a team approach to supervision empowers the student; clear communication of expectations and boundaries by all parties; encouragement and support, especially during rough patches; availability and timely, consistent feedback from the supervisor are critical to successful completion; having a female supervisor does not necessarily produce a good supervisory relationship for

female students – the more important consideration is a good fit between student and supervisor; and good supervision helps students to build their academic careers and introduces them to scholarly networks.

A third important finding was that resilience is a key component in successfully navigating through PhD candidature. Key factors in resilience include: learned resilience in formative years; that strong self-knowledge and focus builds resilience; women who understand their working style, support needs and also have a strong internal drive to complete tasks that they commence are most successful; the ability to overcome difficult events and stay connected with the research is important; the ability to find peer support and connect can help to build resilience; role models, family support and an understanding, communicative supervisor strengthen resilience; and financial support was a strong underpinning to successful completion.

Two further issues emerging from this research were: models of academic careers and the impact of childbearing on PhD completion. Given that most women's careers do not follow a trajectory more typical of men's academic careers, greater flexibility in university policies and procedures is required to open up opportunities for other groups of students, including women, international students, part-time and non-scholarship students. Another significant finding was that women in this research were able to successfully combine research and having babies. The only barriers were the perceptions of others – supervisors, departments and peers – that they may have difficulty balancing roles.

Finally, this research suggests that the gendering of academic careers begins during PhD candidature where some supervisors and Departments appear to treat women differently to their male PhD students. There is an assumption that women students do not necessarily want to be academics, as Dever et.al. (2008) identified, and therefore women may not be groomed for a future academic career.

These research findings have direct relevance to my role as a postgraduate scholarships coordinator, especially in advising women about the importance of negotiating supervision, being clear about expectations on all sides, and of ensuring they have at least two supervisors.

The relevance of these findings to HE policy and practice is that Universities need to ensure that all students have access to effective supervision, resources, funding to present at conferences, and mentoring to link in to national and international academic networks. Effective progress in the PhD candidature must be monitored in order that any issues can be identified and resolved in a timely manner. This research has demonstrated that joint supervision, now recommended in most Australian and UK universities, helps to ensure that students are supported when their principal supervisor is absent from the university and that another person is available to provide advice and help their student negotiate difficult patches in their journey.

This research suggests that University policies and practices need to take into account the different needs of diverse groups of PhD students. Part-time students should not be disadvantaged in terms of access to resources or linking with academic networks. Access to adequate childcare, financial support and to facilities such as desk space and computers are particularly important for women doing PhDs. Support to present at conferences needs to take into account the additional challenges this presents for women with young children. Listening to the stories of these women, and others in the HE sector, can help to inform future policy and practice which will lead to institutions which are more equitable, diverse and inclusive.

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Appendix A — Consent Form

Victoria University of Technology

Consent Form for Participants Involved in Research

INFORMATION TO PARTICIPANTS:

We would like to invite you to be a part of a study into 'Women's decisions to undertake higher research degrees: A Narrative Approach.' Please see the attached Plain Language Statement outlining the aims and methods of this research project.

CERTIFICATION BY PARTICIPANT

I, of			
of			

certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the research project entitled:

Women's Decisions to Undertake Higher Research Degrees: A Narrative Approach

being conducted at Victoria University of Technology by:

Ms Lesley Birch, PhD Candidate

I certify that the objectives of the research project, together with any risks to me associated with the procedures listed hereunder to be carried out in the research project, have been fully explained to me by Ms Lesley Birch, and that I freely consent to participation involving the use on me of these procedures.

Procedures:

In-depth unstructured interview/s

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this research project at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I	provide will be	e kept confidential.
Signed:	}	
Witness other than the experimenter:	}	Date:
}		

Any queries about your participation in this project may be directed to the researcher (Name: Ms Lesley Birch ph. 9688 4659). If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MC, Melbourne, 8001 (telephone no: 03-9688 4710).

[*please note: where the participant/s is aged under 18, separate parental consent is required; where the participant is unable to answer for themselves due to mental illness or disability, parental or guardian consent may be required.]

Appendix B — Plain Language Statement

Women's Decisions to Undertake Higher Research Degrees: A Narrative Study

This project is designed to investigate women's lived experiences as they relate to decisions concerning the undertaking of postgraduate research degrees. The general aims of this research are threefold: to provide a more in-depth understanding of women's decisions to participate in postgraduate education; to contribute to the theorising of postgraduate research education, by providing a means for studying women which has potential for transferability to other areas of equity in postgraduate education; and to further develop the methodology of narrative inquiry in the area of higher education.

More specifically, this research aims to identify and evaluate strategies used by women who undertake postgraduate research degrees; to develop those strategies to assist women who might not otherwise continue in higher education to make a more effective evaluation of their options; and to use narrative inquiry to enable the breadth and depth of women's lived experiences, as they relate to postgraduate research degrees, to be more fully understood.

Participants will be asked to talk about their experiences in higher education, in particular whether or not they decided to proceed to postgraduate research degrees and why. Participation will be sought from approximately 10 women from diverse backgrounds from a number of universities. These will initially be in the Melbourne area, but there may be some extension to interstate universities.

All interviews will be tape-recorded with the permission of the interviewee, and notes will be taken of non-verbal interactions and other field observations. Tapes will be transcribed by the researcher (this is an integral part of the qualitative research process). Each participant's transcript will be made available to them after transcription and discussed in order to ensure that they are happy with the way in which the information is presented and its accuracy.

Each participant will be given a code name in order to maintain confidentiality. The only people to have access to confidential information are the three researchers. This confidential information will be stored in a locked filing cabinet at the Postgraduate Research Unit, Victoria University, where the PhD candidate is employed.

All participants have the right to withdraw their consent at any time. This includes their consent to be interviewed and/or for the transcripts to be used.

Appendix C — Example of Initial Transcription

This is an example of the raw data transcribed directly from Eve's interview. [E=Eve, I=Interviewer]. The original transcript was 39 pages, single spaced.

E: Role models I think are important, and I must, I mean I mustn't leave my sister out of this...my older sister. I saw her return to study, after she had raised three small children, and she, and she returned to do her mature age entry into university and she actually dux-ed the class, she dux-ed the lot of them, she had been a librarian by training and trade before she got married and she returned, ended up returning firstly to be a librarian at the Canberra CAE, and then ended up at ANU as a librarian. Um and she only retired a few years ago, but her kids and her partner could not see, they were all dumbfounded and they could not understand why she wanted to return to study.

I: uh huh

E: And in fact the lot of them were, ah, were not very supportive actually except perhaps for my niece. So she's got two boys and a girl, and the girl was supportive. The men could not understand why Mum was going back to study, and I think I watched all of that unfold too, and that made me even more determined. I thought "If she can do it, I can do it"

I: Yep

The discussion goes to a topic that the participant wanted to be off the record. This bit has therefore not been transcribed. It lasted about three or four sentences.

I: So she was very supportive of what you wanted to do?

E: yes she was, I think she'd been, she'd seen herself go through it, and uh, had acknowledged at the beginning the lack of support from her own family members, and she didn't want to see that happen to me. So I think that she was a role model, and she still is a role model, in you know, in terms of acceptance of, of life, of my choice of lifestyle, my wanting to return to study, wanting to do a lot of different things I think that sort of have been going in the opposite direction, and it's not the logical step to take at this time in your life when you should be consolidating and is what in fact I was trying to do with my study. But I believe I'm into the next step or stages of, still, as a single independent woman, trying to consolidate financial security in my life.

Appendix D — Example of Second Version of Transcript

This is a sample of the second version of the transcript which had all my non-lexical utterances removed, as well as identifying information regarding the State where the participant's sister resides. In doing this, the transcript was shortened from 39 pages to 27 pages. Note that I have left in my question in the middle, as I wanted to ensure that I captured the interaction that occurred between researcher and participant – the coconstruction of the narrative. In this segment I identified that Eve related to her sister as a role model.

E: Role models I think are important, and I must, I mean I mustn't leave my sister out of this...my older sister. I saw her return to study, after she had raised three small children, and she, and she returned to do her mature age entry into university and she actually dux-ed the class, she dux-ed the lot of them, she had been a librarian by training and trade before she got married and she returned, ended up returning firstly to be a librarian at the [interstate] CAE, and then ended up at [interstate university] as a librarian. Um and she only retired a few years ago, but her kids and her partner could not see, they were all dumbfounded and they could not understand why she wanted to return to study. And in fact the lot of them were, ah, were not very supportive actually except perhaps for my niece. So she's got two boys and a girl, and the girl was supportive. The men could not understand why Mum was going back to study, and I think I watched all of that unfold too, and that made me even more determined. I thought "If she can do it, I can do it"

I: So she was very supportive of what you wanted to do?

E: yes she was, I think she'd been, she'd seen herself go through it, and uh, had acknowledged at the beginning the lack of support from her own family members, and she didn't want to see that happen to me. So I think that she was a role model, and she still is a role model, in you know, in terms of acceptance of, of life, of my choice of lifestyle, my wanting to return to study, wanting to do a lot of different things I think that sort of have been going in the opposite direction, and it's not the logical step to take at this time in your life when you should be consolidating and is what in fact I was trying to do with my study. But I believe I'm into the next step or stages of, still, as a single independent woman, trying to consolidate financial security in my life. And I'm still not there yet.

Appendix E — Example of Extract of Transcript

Used in Analysis Chapter

Here is the transcript above and the work done to remove unnecessary description and focus the excerpt to Eve's salient points around her identification of her sister as a role model. In the extract below, the italicised segments were removed and replaced with a note in square brackets identifying how many lines were removed. The actual excerpt used in Chapter Four is shown underneath.

E: Role models I think are important, and I must, I mean I mustn't leave my sister out of this...my older sister. I saw her return to study, after she had raised three small children, and she, and she returned to do her mature age entry into university and she actually dux-ed the class, she dux-ed the lot of them, she had been a librarian by training and trade before she got married and she returned, ended up returning firstly to be a librarian at the [interstate] CAE, and then ended up at [interstate university] as a librarian. Um and she only retired a few years ago, but her kids and her partner could not see, they were all dumbfounded and they could not understand why she wanted to return to study. And in fact the lot of them were, ah, were not very supportive actually except perhaps for my niece. So she's got two boys and a girl, and the girl was supportive. The men could not understand why Mum was going back to study, and I think I watched all of that unfold too, and that made me even more determined. I thought "If she can do it, I can do it"

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Actual Extract used in Chapter Four:

Role models I think are important, and I must, I mean I mustn't leave my sister out of this ... my older sister. I saw her return to study, after she had raised three small children ... [five lines deleted] ... but her kids and her partner could not see, they were all dumbfounded and they could not understand why she wanted to return to study. And in fact the lot of them were not very supportive actually except for my niece ... [two lines deleted] ... and I think I watched all of that unfold too, and that made me even more determined. I thought, "If she can do it, I can do it."... [four lines deleted] ... So I think that she was a role model, and she still is a role model in, you know, in terms of acceptance of life, of my choice of lifestyle, my wanting to return to study.