UNIVERSITY OF SOUTHERN QUEENSLAND

FACTORS AFFECTING THE RETENTION AND PROGRESSION OF POSTGRADUATE BUSINESS DISTANCE EDUCATION STUDENTS

AN EXPLORATORY CASE STUDY AT THE UNIVERSITY OF SOUTHERN QUEENSLAND

A dissertation submitted by

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ABSTRACT

Universities have traditionally focused their efforts on recruiting new students and increasing participation rates. However, higher retention and progression rates of students are likely to have a beneficial effect on the overall performance of universities in terms of their student-based income. The majority of previous studies addressing student retention have largely been focused on younger undergraduate on-campus students therefore this research seeks to investigate the factors which affect the retention and progression of postgraduate business students undertaking their studies by distance education. This study is based on a qualitative exploratory research design comprising twenty semi-structured in-depth interviews conducted with current and former students and university staff members. The key findings of this study indicate that a combination of situational, institutional and dispositional factors impact upon the retention and progression of postgraduate business distance education students. The employment and family commitments of students, whether students believed that their studies would benefit their career goals and the design of the distance education program appear to be the most important factors impacting upon student retention and progression. In contrast to the majority of services marketing literature, it would appear that student satisfaction is not a key factor impacting upon student retention and progression in this context. This research also provides a range of managerial implications and recommendations for postgraduate distance education providers.

CERTIFICATION OF DISSERTATION

I certify that the ideas, results, analyses and conclusions reported in this dissertation are entirely my own effort, except where otherwise acknowledged. I also certify that the work is original and has not been previously submitted for any other award.

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This research study involved conducting in-depth interviews with current and former USQ students as well as USQ staff members within the Faculty of Business. While I am unable to thank them individually due to the necessity of maintaining their anonymity, I express my deepest gratitude for the time and enthusiasm which they gladly contributed to my research. Sharing their personal experiences and perspectives made this research study possible.

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Chapter One

INTRODUCTION

The purpose of this study is to identify the factors which have an impact upon the retention and progression of postgraduate business students undertaking their studies by distance education through a major Australian distance education provider. In addition, this study seeks to explore how these factors could impact upon the retention and progression of postgraduate business distance education students.

In this first chapter, an overview of this research study is provided including the research background (Section 1.1), the research question and associated research issues (Section 1.2), a justification as to why this research was conducted (Section 1.3), an overview of the research methodology (Section 1.4), definitions of key terms adopted for this study (Section 1.5), the delimitations establishing the boundaries of this research (Section 1.6) and an overview of the structure of this dissertation (Section 1.7). A summary of this chapter is then presented (Section 1.8).

1.1 Research background

Postgraduate business students undertaking their studies by distance education represent a significant source of enrolments for Australian tertiary education providers, with enrolments in this field expanding from 13,400 to 14,600 in 2002 and 2003 (DEST 2007). However, subsequent enrolment trends indicate that the number of distance education business students is in a state of steady decline, with enrolments falling to approximately 14,200 in 2004 and then to 13,400 in 2005 (DEST 2007). Given that Australian Government learning and teaching funding models incorporate student retention and progression rates as key institutional performance indicators when allocating learning and teaching funds to universities (DEEWR 2008a), as well as the fact that the market for postgraduate business degrees by distance education appears to be in decline (DEST 2007), a more comprehensive understanding of the factors which impact upon the retention and progression of currently enrolled students is of critical importance to all tertiary distance education providers if they wish to remain financially viable. In particular, additional qualitative research into the factors impacting upon student retention is needed as rich qualitative data would better serve the needs of universities in managing student retention (Astin 1997).

The logic of customer retention in the services sector – that it is cheaper to retain existing customers than it is to recruit new ones – applies as much to the tertiary education sector as any commercial service (Bejou 2005). In spite of the importance of student retention and progression, the problem of keeping students enrolled in their programs is less well understood than the process of recruiting new students (Johnson 2003) and there is a lack of research into student retention (Derby & Smith 2004; Snell & Makeis 1993; Wyman 1997) as universities have traditionally focused their efforts on the recruitment of new students and increasing participation rates in tertiary education (Trotter & Cove 2005). Furthermore, distance education is a model of education that typically experiences higher drop-out rates in comparison to traditional on-campus delivery (DEEWR 2008b; Tresman 2002; USQ 2007a).

The increasing importance of student retention and progression in regards to the financial sustainability of universities, as well as the apparent lack of research into student retention in the postgraduate business distance education student context are issues that this research aims to address. The research question and key issues for this research are discussed in the following section.

1.2 Research question and issues

In light of the demonstrated logic that it is cheaper to retain existing students than it is to recruit new students, the research question to be addressed has been defined as:

> ***What affects the retention and progression of postgraduate business students undertaking their studies by distance education?***

Two research issues have been developed to address the research question. A relevant framework to determine the retention and progression of postgraduate business students undertaking their studies by distance education is needed so that postgraduate distance education providers can maximise both their government funding and student-based income derived from course fees. A key component of this framework is an understanding of the factors which impact upon the retention and progression of postgraduate business distance education students. Therefore, the first research issue for this study is:

> ***RI1.   What factors impact upon the retention and progression of postgraduate business distance education students?***

The second research issue seeks to explore the reasons how the factors identified in the first research issue have an impact on the retention and progression of postgraduate business students undertaking their studies by distance education. This understanding will allow postgraduate distance education providers to determine the relevance and priority of each factor when implementing retention and progression strategies. Therefore, the second research issue for this study is:

> ***RI2.   How do these factors impact upon the retention and progression of postgraduate business distance education students?***

In this section, the research question and associated research issues were presented. These two research issues will form the basis for the data collection and analysis in order to address the research problem. A justification for this research is presented in the following section.

1.3 Research justification

This research is justified on three grounds: gaps in the student retention literature, the increasing importance of student retention and progression to the financial viability of universities and practical benefits to distance education providers.

Gaps in the student retention literature. The majority of studies that have addressed university student retention have largely been focused on younger undergraduate students undertaking their study on campus (e.g., Ozga & Sukhnandan 1998; Tinto 1975; Yorke 1999) with only a limited number of studies (e.g., Gibson & Graff 1992; Smith 2004; Tresman 2002; Truluck 2007) concentrating on mature aged students undertaking their studies by means of distance education. Even fewer studies (e.g., Geri, Mendelson & Gefen 2007) have concentrated on the retention of postgraduate business students undertaking their studies by distance education. Therefore, this study will investigate the factors which impact upon student retention and progression in the context of postgraduate business students undertaking their studies by distance education.

Additionally, while the positive impact of customer satisfaction on customer retention is well established in the services marketing literature (e.g. Anderson & Sullivan 1993; Cronin, Brady & Hult 2000; Gustafsson, Johnson & Roos 2005; Shin & Elliott 1998), including the tertiary education sector (e.g., Navarro, Iglesias & Torres 2005; Pariseau & McDaniel 1997), the factors considered in this study to be dispositional factors, are not typically addressed in models of distance education student retention. Hence, this study also sought to establish whether student satisfaction has an impact on the retention and progression of postgraduate business students undertaking their studies by distance education, thus contributing to the development of existing theory in the field of student retention and progression.

The increasing importance of student retention and progression. A number of researchers (e.g., Derby & Smith 2004; Snell & Makeis 1993; Wyman 1997) have commented on the limited research conducted on student retention strategies, which is unusual considering that the cost of recruiting new university students is several times more expensive than retaining existing students (Joseph, Yakhou & Stone 2005). Furthermore, student retention and progression rates are key institutional performance indicators in the Australian Government learning and teaching funding models used to allocate learning and teaching funds to universities (DEEWR 2008a). Hence, a comprehensive understanding of the factors impacting upon student retention and progression is of increasing importance to universities as it has a direct bearing on their financial viability.

Practical benefits to distance education providers. Continuing students typically constitute a larger proportion of university student enrolments than new commencing students (DEST 2007). The consequence of this is that even a small increase in the rate of continuing student retention will have a greater positive impact on a university's student-based income, more so than a corresponding increase in commencing student enrolments as a result of the relative size of these two student cohorts. The findings of this study could assist distance education providers to develop appropriate strategies to improve the retention and progression of postgraduate business students undertaking their studies by distance education. This is particularly important when the market for postgraduate distance education enrolments is in a state of decline and Australian Government funding of the tertiary education sector is increasingly tied to student retention and progression rates.

This section has justified the research on three bases: gaps in the student retention literature, the increasing importance of student retention and progression and practical benefits to distance education providers. An overview of the research methodology used to address the research question and issues in this study is presented in the following section.

1.4   Research methodology

In this section, an overview of the research methodology used for this study is presented. This research methodology is described in detail in Chapter Three.

Case study design. A qualitative research design was adopted for this study and involved conducting a single exploratory case study. A single case study that was representative of other major distance education providers was conducted (Yin 2003). The main purpose of this study was to determine what the factors are impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education and also what can be done in order to enhance their retention and progression. 'What', 'how' and 'why' questions lend themselves to investigation through exploratory case studies (Yin 2003, pp. 5-6). Moreover, an exploratory case study design was selected as this research did not require control over behavioural events (de Weerd-Nederhof 2001; Yin 2003) and was seeking to understand and document complex contemporary event (i.e., postgraduate business distance education student retention and progression).

Multiple sources of data. A major strength of case study data collection is the opportunity to use many different sources of evidence, as it allows for triangulation of data and hence enhanced construct validity (Yin 2003). The multiple sources of data utilised in this study included:

- **Interviews:** semi-structured in-depth interviews of:
    - 18 postgraduate business students in the three interviewee categories (i.e., six current active students, six students progressing through their studies at a slower than desired rate and six students who have withdrawn from their studies)
    - two staff members responsible for student retention activities for postgraduate business students;
- **Self-reflective personal narrative:** analysis of the researcher's responses to the issues raised in the interviews based on his perspective as a postgraduate business student;
- **Document analysis** of relevant policies, strategy documents and other materials regarding student retention initiatives at the selected case institution; and
- **Internal records**, including:
    - internal institutional records related to student retention and progression at the selected case institution
    - survey data of exiting students collected by the selected case institution.

The interviewees for this study were selected using stratified purposive sampling in which the researcher used judgement to select the most productive sample from a number of different interviewee categories to address the research question (Marshall 1996; Patton 1990; Zikmund 2003). Interview questions (Appendix B) were drawn from factors and issues identified in the literature reviewed in Section 2.3. The interview questions were tailored to the four interviewee categories identified earlier.

Data analysis method. Analysis of the case study data involved the identification of key factors or themes in the data, guided by the key constructs outlined in the provisional research framework, presented in Figure 2.2 on page 31 (i.e., institutional, situational and dispositional factors). Transcribed student interview data was analysed using the NVivo 7 software package in order to identify these themes and issues. The data from staff interviews, documents and archival records were used to improve the construct validity of the research through triangulation of multiple sources of data (Yin 2003) and also to develop recommendations of how to improve student retention and progression based on the factors identified from the student interview and archival survey data. All interview data was de-identified to ensure the anonymity and confidentiality of all interviewees.

A brief overview of the research methodology used for this research study was provided in this section. In the next section, definitions of key terms adopted for this research study are presented.

1.5   Definitions adopted for this research study

In this section, several key terms are defined in order to establish their meanings in respect to this research project. Each of these key terms is discussed in turn.

Student retention. The term *student retention* has been defined a number of different ways in the literature. Indeed, there appears to be a lack of a common definition of student retention (Longden 2002). In the context of this research study, the definition of student retention has been synthesised from definitions in previous studies (Astin 1997; Astin, Korn & Green 1987; Derby & Smith 2004; Ashby 2004) and is stated as whether a student successfully completes a program of study within a reasonable timeframe. In this case, a 'reasonable timeframe' is represented by the maximum time typically allowed for a student to complete a postgraduate program of study which this is typically four to six years for a master's degree undertaken part time (i.e., an average of one course successfully completed every semester).

Student progression. Student progression in the context of this study is defined as a student's movement through the course from admission to graduation, satisfying minimum course requirements at each stage of the course (UWS 2004).

Postgraduate. A postgraduate program of study in the Australian context is defined as a graduate certificate, graduate diploma, masters or doctoral degree (DEEWR 2008c).

Distance education. Distance education is defined in the context of this study as all arrangements for providing education through print or electronic communications media to persons engaged in planned learning in a place or time different from that of the instructor (Moore 1990).

Situational factors. Situational factors are those which arise from a student's particular circumstances in life at the time, such as the need to spend time with family members, caring for dependents and work responsibilities (Cross 1981; Gibson & Graff 1992; Pyper & Belanger 2004).

Institutional factors. Institutional factors are those which result from procedures, policies and structures of the educational institution that exclude or discourage working adults from participating in educational activities (Cross 1981; Gibson & Graff 1992; Pyper & Belanger 2004).

Dispositional factors. In the context of this research, dispositional (otherwise referred to as attitudinal) factors are individually and collectively held beliefs, values attitudes or perceptions that may inhibit a person's participation in organised learning activities (Findsen 2002; O'Mahony & Sillitoe 2001).

This section has discussed the key definitions adopted for this research. The delimitations of scope for this research are addressed in the following section.

1.6   Delimitations of scope

Because this research is qualitative and exploratory in nature, the findings of this research can only be generalised within the boundaries of this research study. Four delimitations of the scope of this research are identified in the following section.

Coursework postgraduate business students. This research focuses on the retention and progression of students undertaking postgraduate business degrees by coursework. Therefore, the findings of this research may only be generalisable to students enrolled in coursework business degrees at the postgraduate level and not to students enrolled in undergraduate or postgraduate studies in other fields of education or through higher degrees by research.

The distance education study mode. As discussed previously, this research is confined to students undertaking their studies by distance education. Therefore, findings from this research cannot be generalised to postgraduate students undertaking their studies in an on-campus setting.

Australian students. The scope of this research will focus exclusively on students from Australia. This domestic student focus is justified on the grounds of the budgetary constraints of personally interviewing offshore international students. Consequently, the findings generated from this research cannot be generalised to students of any other nationality.

Students residing in Southeast Queensland. The interviewees in this study were all living in the Southeast Queensland region in Australia at the time that this research was undertaken. This focus on students living in this region is justified on the grounds that the majority of postgraduate distance education business students enrolled through the case institution reside in Southeast Queensland. As a result, the findings of this research cannot be generalised to students in other geographic regions in Australia or in other countries.

This section has identified and discussed the four major delimitations of scope in this research: postgraduate business students, the distance education study mode, students originating from Australia and students residing in Southeast Queensland. The next section will present an overview of the structure of this dissertation.

1.7 Structure of the dissertation

This dissertation is divided into five chapters. Chapter One provided an introduction to this research study including the background to this research, the research question and associated research issues, a justification for why this research was conducted, an overview of the research methodology used in this study, definitions of key terms adopted for this study and the delimitations of this research.

Chapter Two commences with a discussion of the context of this study (Section 2.2). Next, factors impacting upon student retention identified in previous studies are discussed including situational factors (Section 2.3.1), institutional factors (Section 2.3.2) and dispositional factors (Section 2.3.3). Based on this, gaps in the student retention literature are identified (Section 2.4) and a provisional framework for investigating the research question is presented (Figure 2.2 on page 31).

In Chapter Three, a discussion of the research methodology utilised for this study is presented. First, the qualitative research design adopted for this study is discussed (Section 3.2). Next, an overview of the case study methodology used in this research is presented, including a justification for case study research (Section 3.3.1) and a detailed description of specific case study methodology employed (Section 3.3.2). Next, methods used to improve the validity and reliability of this research are presented (Section 3.4) and limitations of case study research are acknowledged and addressed (Section 3.5). Finally, the ethical considerations of this research are discussed (Section 3.6).

A detailed discussion of the research findings is provided in Chapter Four. At the start of this chapter the interviewees in this research study are described (Section 4.2). Following this, a comprehensive discussion of the situational factors (Section 4.3), institutional factors (Section 4.4) and dispositional factors (Section 4.5) revealed to have an impact on the retention and progression of postgraduate business students undertaking their studies through distance education is presented.

In Chapter Five conclusions about the research issues (Section 5.2.1) and research question (Section 5.2.2) are discussed and a revised research framework based on the research findings is presented (Figure 5.2 on page 87). Next, theoretical implications for both student retention and case study methodology are discussed (Section 5.3).

Following this, practical implications and recommendations for postgraduate business distance education providers are presented (Section 5.4) and limitations of this research are acknowledged (Section 5.5). Finally, implications for further research are presented (Section 5.6).

An outline of the structure of this dissertation was presented in this section. A summary of Chapter One is presented in the following section.

1.8 Summary of Chapter One

In Chapter One, the purpose of this research study was identified and the background to the research study was explained (Section 1.1). Next, the research question, '***What affects the retention and progression of postgraduate business students undertaking their studies by distance education?***' was identified and two research issues were developed to address the research question (Section 1.2). Third, a justification for undertaking this research was presented (Section 1.3). Fourth, an overview of the research methodology used to address the research question and key issues was presented (Section 1.4). Next, definitions of key terms adopted for this study were briefly discussed (Section 1.5) and the delimitations of this research were acknowledged (Section 1.6). Finally, a brief outline of the structure of the dissertation was provided (Section 1.7).

In Chapter Two, literature relevant to student and customer retention is reviewed, gaps in this literature are identified and a provisional research framework developed from this literature review is presented.

Chapter Two

LITERATURE REVIEW

2.1　Introduction

This chapter examines the concept of student retention and progression in the tertiary education sector and the factors impacting upon student retention and progression. This chapter commences with a discussion of the postgraduate distance education context in which this study is conducted (Section 2.1). Next, factors identified from the literature as impacting upon student retention are categorised as situational, institutional or dispositional, in particular expanding on the work of Cross (1981) and Gibson and Graff (1992) in the context of mature aged student retention (Section 2.2). Next, gaps emerging in the student retention literature are identified (Section 2.3), a provisional framework for investigating the factors that impact upon postgraduate business distance education student retention and progression is presented (Section 2.4) and a summary of Chapter Two is presented (Chapter 2.5). An outline of this chapter is presented in Figure 2.1 on the following page.

Figure 2.1: *Outline of Chapter Two*

2.1 Introduction

| 2.2 The context of this study |

| 2.3 Factors impacting student retention |

| 2.3.1 Situational factors | 2.3.2 Institutional factors | 2.3.3 Dispositional factors |

| 2.4 Gaps in the student retention literature |

| 2.5 Provisional research framework |

| 2.6 Summary of Chapter Two |
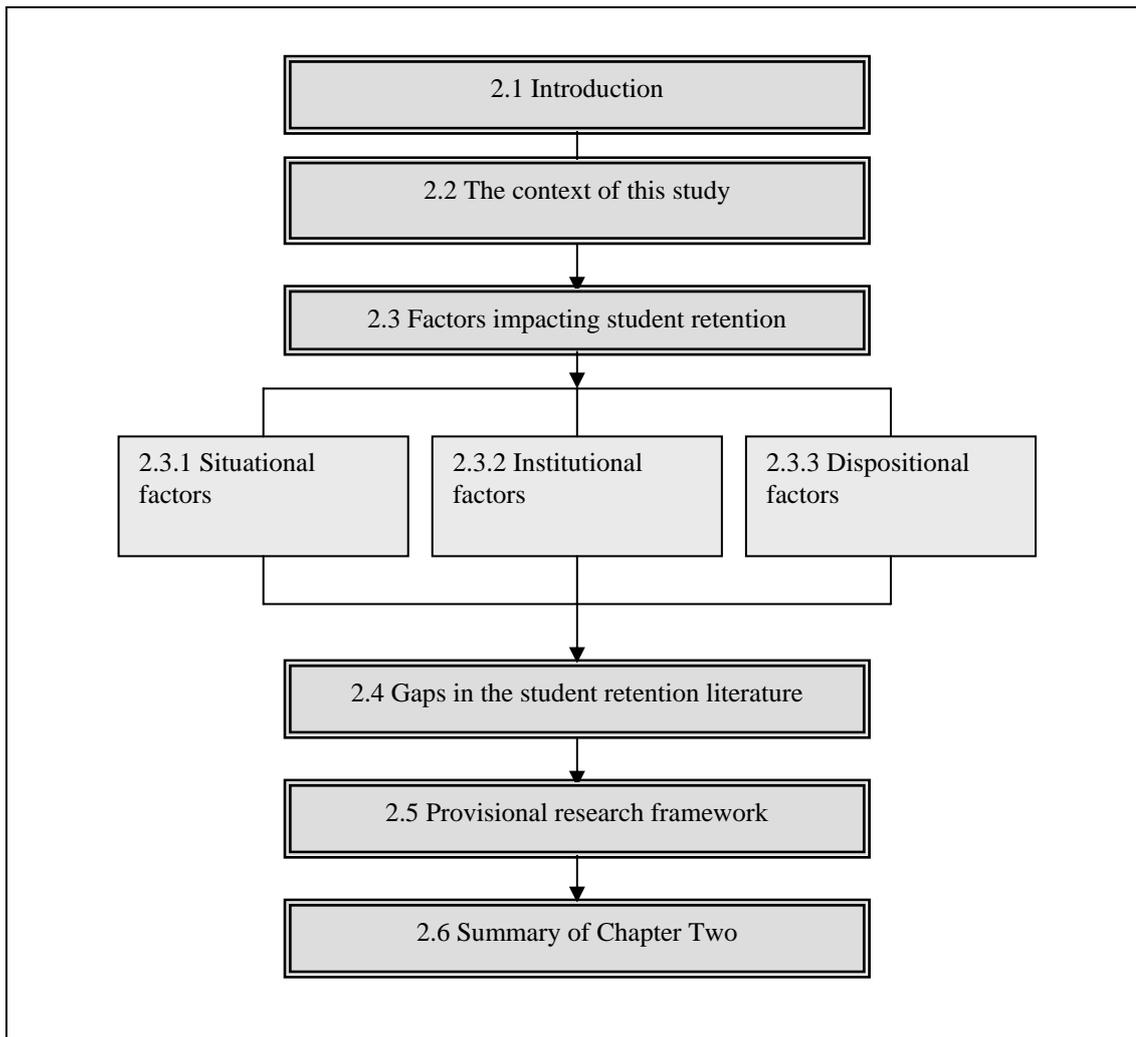
Source: developed for this research

2.2   The context of this study

While student retention has been extensively researched in an on-campus undergraduate context, relatively few studies have been dedicated to understanding the factors impacting upon the retention and progression in the mature aged postgraduate distance education student context. Prior research undertaken in this context is summarised in Table 2.1 on the following page.

Table 2.1: *Summary of research into student retention*

Research area	Examples of literature
Distance education student retention	Ashby 2004; Geri, Mendelson & Gefen 2007; Gibson & Graff 1992; Lesht & Shaik 2005; Packham et al. 2004; Seidman 2005; Simpson 2004; Smith 2004; Tresman 2002; Truluck 2007; Vines 1998
Mature aged postgraduate distance education student retention	Geri, Mendelson & Gefen 2007; Smith 2004; Truluck 2007

Source: developed for this research

Distance education. Distance education has enjoyed a long history and is now established as a reputable method of education as evidenced by the establishment of numerous distance education systems worldwide (Tresman 2002). Distance education is an effective form of instructional delivery for mature aged students, as distance education allows students to access a wide range of academic programs from academic institutions throughout the world (Truluck 2007). Students enrolled in distance education programs typically receive a print-based study package, comprising an introductory book containing a study schedule and assessment details, a study book and a book of supplementary readings. In some cases, this material may be provided on a CD ROM or online, which allows students to study directly from their computer screen or print the materials themselves.

Despite its apparent convenience and flexibility, student retention rates in distance education programs are lower in comparison with full-time on-campus higher education (Lynch 2001; Palloff & Pratt 2001; Simpson 2004; Tresman 2002). Moreover, according to Simpson (2004) this student turnover is accepted as one of the consequences of the difficulties associated with distance learning, including the need for students to be more focused, better time managers and have the ability to work alone and with others through virtual means more so than their on-campus counterparts (Hardy & Boaz 1997). Additionally, distance education students are required to become flexible enough to learn in a virtual environment where they are unable to touch, see or hear the people with whom they are trying to communicate (Truluck 2007). These challenges inherent to distance education appear to be the result of the separation (or perceived separation) between the learner and the teacher, and the learner and their classmates. This is supported by Smith (2004) who states:

> '[distance education] is generally differentiated from other modes of teaching and learning by the idea that geographical distance separates the learner and teacher (or institution) with learning materials and various technologies being used to deliver programs – therefore the actual teaching component is significant in the success of the learner.' (p. 30)

This was further supported by Cross (1981), as cited by Gibson and Graff (1992, p. 3), who suggested that the nature of distance education itself may be a barrier to successful completion due to the 'relative isolation and the physical distance between learner and instructor and learner and classmates.' While Taylor and Bedford (2004) reported in their case study of student retention that teaching staff do not believe that the differences between on-campus and distance education students contributed to student withdrawal, there appears to be evidence to suggest that distance education students face different challenges and issues than their on-campus counterparts which may contribute to non-completion of their academic program. Indeed, studying by distance education may be daunting for many mature aged students because they must not only balance work, family and community responsibilities, but in addition they must find time to study (Truluck 2007). For many mature aged students, their only previous study experience has been in a typical classroom where students attend class once per week, while in the distance education environment interaction and participation can be a daily requirement. Adjusting to these different demands can be stressful for mature aged students (Truluck 2007).

Mature aged postgraduate students. Prior research (e.g., Eagle & Brennan 2007; Gibson & Graff 1992; Navarro, Iglesias & Torres 2005; Pyper & Belanger 2004; Trotter & Cove 2005) has demonstrated clear differences in the factors influencing students' retention and attrition behaviour between young students who have come to university directly from high school and mature aged students who have returned to study as adults who may or may not have undertaken tertiary study earlier in their lives. While considerable research (e.g., Braunstein, Lesser & Pescatrice 2006; Lowe & Cook 2003; Mayo, Helms & Codjoe 2004; Tinto 1975; Yorke 1999) has been undertaken to understand the retention of young on-campus undergraduate students, only a limited number of studies have been conducted to understand the retention of mature aged students and postgraduate students. The few studies which have been conducted into mature aged student retention (e.g., Eagle & Brennan 2007; Gibson & Graff 1992; Navarro, Iglesias & Torres 2005; Pyper & Belanger 2004; Trotter & Cove 2005) and postgraduate student retention (Geri, Mendelson & Gefen 2007; Smith 2004; Truluck 2007) have suggested that the factors leading to the retention of young students and mature aged students are different. Hence, this research sought to address this gap in the literature.

The preceding section has presented the concept of student retention in the mature aged postgraduate distance education student context. The factors identified in the literature as impacting upon student retention are explored in the following sections.

2.3   Factors impacting upon student retention

Tinto (1975) suggested that student retention should not be the goal of the institution *per se*. Instead, retention is the outcome of providing an educationally beneficial and developmentally advantageous experience, so that students will form favourable perceptions regarding the quality of their experiences and make the decision to persist with their studies (Tinto 1975). While the model proposed by Tinto (1975) has been validated by considerable empirical evidence over the past 30 years, more recent research into older 'non-traditional' students (e.g., Eagle & Brennan 2007; Kevern, Ricketts & Webb 1999; Navarro, Iglesias & Torres 2005; Tresman 2002; Trotter & Cove 2005; Yorke 1999) proposes that other variables beyond those identified by Tinto (1975) are involved in students' decisions to withdraw from their studies. Several more recent studies (e.g., Eagle & Brennan 2007; Kevern, Ricketts & Webb 1999; Navarro, Iglesias & Torres 2005; Tresman 2002; Trotter & Cove 2005; Yorke 1999) have proposed that the forces driving student retention differ between young students and mature aged students and indicated that a higher rate of student attrition is observed amongst mature aged students. Navarro, Iglesias and Torres (2005) concluded that this group of students (i.e., mature aged postgraduate students studying part time) has very different needs and motivations in comparison to their younger counterparts. However, in spite of this, very few studies are dedicated to exploring the retention of mature aged students, particularly in the postgraduate distance education context.

Barriers to mature aged student participation in tertiary education. One author who extensively researched the specific needs of mature aged students was Cross (1981), who developed the *Chain of Response Model* to explore the barriers to mature aged students' participation in tertiary education. While these barriers are often considered crucial to mature aged students' decision of whether or not to participate in tertiary education programs, they may continue to be as important, as students reconsider their ongoing participation throughout their studies (Gibson & Graff 1992). Hence, it could be argued that these barriers to participation may be as relevant to student retention as they are to student recruitment. Barriers which may serve as obstacles to mature aged student participation in tertiary education may be classified as situational factors, institutional factors and dispositional factors. Each of these factors will be discussed in Sections 2.3.1, 2.3.2 and 2.3.3 respectively.

Table 2.2 on the following page presents common barriers to adults' participation in tertiary education and indicates that situational factors are generally cited by a higher proportion of potential students as barriers to their participation, followed by institutional and dispositional factors respectively. Cost, time pressures and home and work responsibilities are the most critical situational factors, while a lack of flexibility and the amount of time required to complete a program are the most critical institutional factors. Concern with being too old to study and a lack of confidence in their abilities were the most critical dispositional barriers to mature aged students' participation in tertiary education, although it should be noted that dispositional barriers appeared to be generally less critical to students participation than situational and institutional factors.

Because Cross's (1981) study was focused on barriers to mature aged students' participation in tertiary education, the present study will identify the factors that have impacted on the retention and progression of external postgraduate students.

Table 2.2: *Barriers to mature aged students' participation in tertiary education*

Barriers	Percent of potential students
Situational Barriers	
Cost, including tuition, books, childcare, etc.	53
Not enough time	46
Home responsibilities	32
Job responsibilities	28
No childcare	11
No transportation	8
No place to study or practice	7
Friends or family don't like the idea	3
Institutional Barriers	
Don't want to go to school full time (i.e., lack of flexibility)	35
Amount of time required to complete program	21
Courses aren't scheduled when I can attend	16
No information about offerings	16
Strict attendance requirements	15
Courses I want don't seem to be available	12
Too much red tape in getting enrolled	10
Don't meet requirements to begin program	6
No way to get credits or a degree	5
Dispositional Barriers	
Afraid that I'm too old to begin study	17
Low grades in the past, not confident of my ability	12
Not enough energy and stamina (i.e., student motivation)	9
Don't enjoy studying	9
Tired of school, tired of classrooms	6
Don't know what to learn, or what it would lead to	5
Don't want to seem too ambitious	3

Source: Adapted from Carp, Peterson & Roelfs (1974)

Mature aged student retention in distance education. Gibson and Graff (1992) adopted the three-barrier structure proposed by Cross (1981) in their investigation of mature aged student retention in an undergraduate distance education context. Moreover, they expanded on Cross' (1981) model to include *independent study barriers*, as their study proposed that the independent study context itself represented a barrier to some learners because of the inherent isolation and physical distance between learner and instructor and learner and classmates (Gibson & Graff 1992). Their study revealed that the perceived intensity of barriers to completion distinguishes students who completed their studies with those who did not successfully complete their studies in terms of situational barriers, independent study barriers and dispositional barriers. However, no significant differences were found between completing and non-completing students' perceptions of institutional barriers, suggesting that these do not have a significant impact upon students' decision to persevere or withdraw.

Exploring each of these categories in greater detail, Gibson and Graff (1992) found the following factors, presented in Table 2.3, have the greatest impact on the retention of mature age distance education students undertaking undergraduate academic programs.

Table 2.3: *Factors impacting mature aged distance education student retention*

Situational	*Dispositional*	*Independent Study*
• Balancing home life with studies • Finding enough time to study • Balancing employment with studies	• Motivation • Ability to concentrate • Confidence in one's ability • Setting specific study times • Energy • Thinking one is too old to be a student • Not knowing the value of the degree • Increased stress	• Few opportunities to meet with instructors • Deciding how to study • Few opportunities for discussion • The time required to complete a degree • Feeling isolated • Sufficient guidance from instructor • Taking responsibilities for one's own studies

Source: adapted from Gibson and Graff (1992)

Gibson and Graff (1992) also concluded that dispositional and independent study factors were the most relevant in terms of predicting which students will drop out of their distance education studies, with institutional factors of limited relevance. They also indicated that they were also able to control for the effects of gender, age, distance from campus, employment status, marital status and family structure, with a chi square analysis revealing that completers and non-completers did not differ significantly based on these variables. Because Gibson and Graff's (1992) study was focused on the undergraduate context, the factors which they concluded to be irrelevant were still investigated in this study because an understanding of the impact of these factors on postgraduate students was required. Gibson and Graff (1992) concluded that students who successfully completed their external academic program typically expressed an intention to complete a degree, had 2-3 years of university and had taken a course within two years prior to enrolment.

The reliability and validity of Gibson and Graff (1992). A high level of internal validity was exhibited in Gibson and Graff's (1992) study. The research instrument was adapted from a peer-reviewed study on barriers to mature aged students' participation by Schmidt (1983) and based on categories suggested by Cross (1981), albeit with the addition of the *independent study* category. The construct validity of this study, the extent to which an instrument measures a characteristic that cannot be directly observed (Leedy & Ormrod 2005), is also enhanced by using Schmidt's (1983) validated instrument. While the Gibson and Graff (1992) indicate that a stratified random sample of non-completing students was utilised for this study and a very high response rate of 72.9% was achieved, the external validity of this study is limited by the fact that the interviewees for this study were drawn exclusively from a single institution in the United States of America and were all enrolled in undergraduate academic programs at the time of their departure. Consequently, there

is nothing to suggest that the results of this study would be generalisable to other contexts such as the postgraduate distance education student context. Clearly, an understanding of the specific factors impacting upon the retention of postgraduate distance education students remains a gap in the literature, which is discussed further in Section 2.4. Hence, this study addressed this gap in the literature by determining the factors which impact on the retention and progression of postgraduate business students undertaking their studies by distance education.

A relatively high level of statistical validity was also apparent in Gibson and Graff's (1992) study, in that the statistical tests utilised by the authors are appropriate for hypotheses under examination (Garson 2007). Gibson and Graff (1992) used *t*-tests extensively in their study to determine if any significant differences existed between completers and non-completers in terms of the overall intensity with which they perceive barriers to completion in their program of study which is an appropriate use of this test of statistical difference. However, the authors did acknowledge that 'conducting a large number of *t*-tests may yield significance where none actually exists' (1992, p. 6) as significance may be found purely due to random correlations (Peres-Neto 1999). They also made use of discriminant analysis to identify the best linear combination for distinguishing among completers and non-completers on the basis of learning style data. This is appropriate for discriminant analysis as this technique is suited to investigate the differences between or among groups (Garson 2007). The study satisfies a number of assumptions required for discriminant analysis, including categorical dependents, independence, adequate sample size and interval-level data (Garson 2007).

Adopting this structure as a research framework. It would appear that Gibson and Graff's (1992) study exhibits an adequate level of validity and hence the structure which they proposed was adopted as a basis for this study. Based on a comprehensive review of the student retention literature, an expanded provisional framework based on the structure proposed by Cross (1981) and subsequently by Gibson and Graff (1992) was developed (Figure 2.2 on page 31). This provisional research framework categorises factors emerging from the literature as impacting upon student retention as institutional, situational or dispositional. While Gibson and Graff (1992) added *independent study* as a fourth category to Cross' (1981) framework in order to make it relevant for the distance education context, it is proposed in this study that students opted to study by distance education due to circumstances in their life (i.e., situational factors) which made full-time on-campus study impractical. Hence, *independent study* is categorised as a situational factor in this study and not as a discrete category.

Moreover, while Cross (1981) and Gibson and Graff (1992) focused on obstacles to mature students' continued participation in tertiary education, an examination of the literature has revealed a range of enabling factors which may serve to enhance student retention (e.g., Chyung 2001; Lesht & Shaik 2005; Simpson 2004; Visser 1998). Consequently, the term 'factors' is used throughout this study to encompass obstacles to and enablers of student retention and progression.

Intuitively, not all of the factors identified in previous studies into student retention would be applicable to mature student retention, nor would all be applicable to the distance education context. For example, a lack of transportation to class, the poor scheduling of classes and strict attendance requirements (Cross 1981) are not applicable in a distance education setting. Therefore, in order to explore Cross' (1981) *Chain of Response Model*, in regards to mature distance education student retention, the following sections of this chapter classify factors identified from the student retention literature as impacting upon student retention according to the three categories suggested by Cross (1981): (1) situational factors, (2) institutional factors and (3) dispositional factors.

The preceding section discussed and critiqued the previous research which formed the basis of the provisional framework used in this study, to explore the factors impacting upon retention of postgraduate business distance education students. In the following sections, the factors identified from the literature as impacting upon student retention across a range of tertiary education contexts are categorised according to the previously discussed framework, commencing with a discussion of situational factors. In the interests of brevity, only key findings from each study are discussed in this chapter, however a detailed summary of the literature reviewed for this research study is presented in Appendix A at the conclusion of this dissertation.

2.3.1   Situational factors

Situational factors refer to those which arise from the student's particular circumstances in life at the time, such as the need to spend time with family members, caring for dependents and work responsibilities (Cross 1981; Gibson & Graff 1992; Pyper & Belanger 2004). Situational factors have emerged from the literature to be important drivers of mature aged students' decisions to withdraw from tertiary education, with numerous studies describing situational factors as being responsible, at least in part, for mature aged students to drop their studies (e.g., Ashby 2004; Kevern, Ricketts & Webb 1999; Packham et al. 2004; Simpson 2004; Tresman 2002; Yorke et al. 1997). These factors include (1) employment status, (2) financial pressures, (3) family commitments, (4) the health of the student and (5) the independent study context. Each of these situational factors and the authors who have researched them are summarised in Table 2.4 and are then discussed in turn.

Table 2.4: *Situational factors synthesised from student retention literature*

Author / Year	FP	ES	FC	HS	IS
Cabrera, Stampen & Hansen 1990	✓				
Gibson & Graff 1992		✓	✓		✓
Powers & Mitchell 1997		✓			
Yorke et al. 1997	✓				
Kevern, Ricketts & Webb 1999		✓			
Yorke 1999	✓	✓	✓		
Mason & Weller 2000		✓			
Mason 2001		✓			
Palmer 2001	✓				
DesJardins, Ahlburg & McCall 2002	✓				
Tresman 2002			✓		
Ashby 2004	✓		✓		

Author / Year	FP	ES	FC	HS	IS
Bettinger 2004	✓				
Christie, Munro & Fisher 2004	✓		✓	✓	
Lorenzetti 2004			✓		
Packham et al. 2004			✓		
Simpson 2004		✓	✓	✓	
Manthei & Gilmore 2005		✓			
Braunstein, Lesser & Pescatrice 2006	✓				
Pompper 2006			✓		
Truluck 2007		✓	✓		

Note: FP = Financial pressures; ES = Employment status; FC = Family commitments;
IS = Independent study context; HS = Health of the student.

Source: developed for this research

Students who withdraw from tertiary education and subsequently re-enrol overwhelmingly indicate that they originally withdrew due to situational reasons (Pompper 2006). The implication here is, that once their personal issues were resolved or dealt with, they were free to re-enrol, having no dissatisfaction with the institution or a predisposition which led them to be unsuccessful in their studies. This has important implications for retention management because, in spite of some situational factors being institutionally unavoidable, such as illness and some other personal reasons (Simpson 2004), other situational barriers such as financial issues (Braunstein, Lesser & Pescatrice 2006) and lack of time (Hunt 1998) may be able to be addressed or resolved by institutional interventions. A range of situational factors identified in prior studies are discussed in the following section.

Financial Pressures. Another frequently stated barrier to mature aged student retention is that of financial pressures (e.g., Palmer 2001; Yorke 1999; Yorke et al. 1997), with some studies suggesting that financial issues are the most critical factor leading older students to withdraw from their studies (e.g., Palmer 2001; Yorke 1999). Financial hardship also has the effect that on-campus students needed to take on paid employment to alleviate their financial difficulties, with the result that their academic performance suffered due to the decreased time that they could invest in their studies (Palmer 2001).

Logically, a student's ability to pay for their studies also has a strong impact on their retention (Cabrera, Stampen & Hansen 1990). A range of prior studies (e.g., Bettinger 2004; Braunstein, Lesser & Pescatrice 2006; DesJardins, Ahlburg & McCall 2002) have validated the link between financial aid and student persistence and have concluded that financial issues, as a driver of student attrition, can be mitigated through the provision of financial aid to students. While some studies have suggested that students tend to be more responsive to increases in financial aid rather than tuition reductions, following a comprehensive review of the literature, the effect of financial aid on student retention remains inconclusive.

An equally prominent body of student retention literature suggests that financial issues do not play as large a part in mature aged student retention as do other barriers to participation (e.g., Ashby 2004; Christie, Munro & Fisher 2004). Previous studies have concluded that the level of financial pressures on students who continue with their studies versus those who withdraw are actually very similar, with no significant differences between those students who are categorised as 'financially advantaged'

and 'financially disadvantaged' (Christie, Munro & Fisher 2004, p. 623). Moreover, some studies (e.g., Ashby 2004) have concluded financial problems are not as commonly stated by withdrawing students as they were in Yorke's (1999) study, in which they were identified to be the primary driver of mature aged students' departure from higher education.

As there is a lack of consensus in the literature regarding the impact of financial pressures on student retention, particularly in regards to the postgraduate distance education context, this study explores whether external postgraduate business students identify financial pressures as having an impact on their retention and progression in their academic programs.

Employment status. The necessity for mature aged students to balance their employment with study and other life commitments (e.g., family and recreational commitments) is frequently identified as an obstacle to student retention (Gibson & Graff 1992; Kevern, Ricketts & Webb 1999; Simpson 2004; Yorke 1999; Truluck 2007). A number of prior studies have concluded that student employment and its impact on the time available to students for study has become a primary reason for student withdrawal (Mason 2001; Mason & Weller 2000; Powers & Mitchell 1997).

In contrast, other studies (e.g., Manthei & Gilmore 2005) have suggested that working while studying is not necessarily detrimental to a student's academic activities and concluded that, in fact, modest levels of work can enhance students' learning and academic success, while at the same time not overly restricting their social or recreational activities. Students need to be able to determine how much work they can successfully manage before it begins to impact negatively on the academic performance or free time (Manthei & Gilmore 2005). While this may be true for the on-campus undergraduate students engaged in part-time employment (Manthei & Gilmore 2005), the same cannot necessarily be concluded for mature distance education postgraduate students who, according to the previous definitions of being a mature aged student presented in Section 1.5, are more likely to be studying part-time while fully employed. Hence, this study investigates whether employment impacts upon the retention and progression of postgraduate business students undertaking their studies by distance education.

Family commitments. Family commitments were also identified as a situational factor impacting on mature aged student retention, because mature aged students are more likely to have family responsibilities (Lorenzetti 2004; Yorke 1999). A number of studies identified family commitments as a barrier to mature aged student retention (e.g., Christie, Munro & Fisher 2004; Gibson & Graff 1992; Pompper 2006; Simpson 2004; Truluck 2007). The result of these situational barriers is that the mature aged student is faced with a case where they do not have adequate time to complete their studies, which typically leads to them withdrawing from their academic programs (Ashby 2004; Christie, Munro & Fisher 2004; Gibson & Graff 1992; Packham et al. 2004; Truluck 2007). Logically, students whose academic life is well-integrated with their extra-institutional life are less likely to withdraw from their studies (Tresman 2002). Hence, this study explores whether external postgraduate business students have considered family commitments to have an impact upon their retention and progression in their studies.

The health of the student. The health of the student was identified in prior studies (Christie, Munro & Fisher 2004; Simpson 2004) as having an impact on student retention. Hence, this study investigates whether external postgraduate business students believe that health problems affected their retention and progression.

Independent study context. As discussed in Section 2.3, Gibson and Graff (1992) expanded on the model presented by Cross (1981) in order to address the distance education context, by adding the independent study barriers factor. They suggested that the independent study method itself presents a barrier to some learners because of the inherent isolation and physical distance between learner and instructor and learner and classmates. Their study provided empirical evidence that independent study factors differentiate completers from non-completers (i.e., they have an impact on student retention). This study seeks to explore whether postgraduate business students perceive that having to study independently by distance education has an impact on their retention and progression.

Summary of situational factors. Section 2.3.1 explored the various situational factors identified in the literature which appear to have an impact on the retention of distance education students, including financial pressures, employment status, family commitments, the health of the student and the independent study context. Institutional factors which have been identified from the literature as appearing to have an impact on student retention and progression are discussed next.

2.3.2   Institutional factors

Institutional factors are those which result from procedures, policies and structures of the educational institution that exclude or discourage working adults from participating in educational activities (Cross 1981; Gibson & Graff 1992; Pyper & Belanger 2004). While one study concluded that institutional factors were not as critical in causing students to withdraw from their studies as situational and dispositional factors (Gibson & Graff 1992), a number of studies have concluded that institutional factors impact on student retention and progression (e.g., Ashby 2004; Lesht & Shaik 2005; Johnson 1997). The factors emerging from the literature include (1) relevance of the program, (2) distance education program design, (3) student support systems, (4) student orientation and (5) staff responsiveness. Each of these institutional factors and the authors who have researched them are summarised in Table 2.5 and are then discussed in turn.

Table 2.5: *Institutional factors synthesised from student retention literature*

Author / Year	*RP*	*PD*	*SS*	*SO*	*SR*
Coldeway 1982			✓		
Gibson & Graff 1992	✓		✓		
Pringle 1995	✓				
Rowntree 1992			✓		
Moller 1998		✓			
Ozga & Sukhnandan 1998	✓				
Vines 1998					✓
Witte & Waynne 1998		✓			
Hall 2001	✓				

Author / Year	RP	PD	SS	SO	SR
Chandler, Levin & Levin 2002				✓	
Lorenzetti 2003		✓			
McGivney 2003	✓				
Rowley 2003				✓	
Smith & Beggs 2003			✓		
Trotter 2003	✓				
Wang, Sierra & Folger 2003		✓			
Ashby 2004	✓				
Derby & Smith 2004				✓	
Mabrito 2004		✓			
Simpson 2004			✓		
Smith 2004	✓				
Lesht & Shaik 2005		✓	✓		✓
Parmar & Trotter 2005	✓				
Voss & Gruber 2006	✓				
Geri, Mendelson & Geffen 2007		✓			

Note: RP = Relevance of the program; PD = Distance education program design; SS = Student support systems; SO = Student orientation; SR = Staff responsiveness

Source: developed for this research

Relevance of the program. Previous research into student retention has suggested that students are mainly concerned about the vocational aspect of their studies and are less interested in their subject and consequently wanted to encounter valuable teaching experiences to be able to pass tests and be prepared for their profession (Voss & Gruber 2006). Thus, students are more likely to withdraw from their studies if they do not believe that the program of study provided by the institution is providing them with valuable experiences to prepare them for their chosen career path. Hence, this places responsibility on the distance education provider to deliver an educational experience which students perceive to be relevant and beneficial to their chosen career path, as prior research has suggested that reinforcing the vocational success aspect of postgraduate study may be a way to drive student intention to complete an academic program (Pringle 1995). Hence, this study explores the extent to which the relevance of an academic program to a student's career objectives impacts upon their retention and progression.

Irrelevance of the program to students' careers may be due to inappropriate program choice (i.e., the academic program does not address the needs of the student). Inappropriate program choice is a significant factor in withdrawal among students in tertiary education (McGivney 2003). This was validated in a study conducted by Ashby (2004) into student retention in the Open University, a major distance education provider in the United Kingdom. In this study, 14 percent of students completing the withdrawal survey gave 'course was not what I expected' as a reason for withdrawal (Ashby 2004, p. 72). This emphasises the importance of getting students enrolled in the right academic program, at the right level in order to meet their educational goals. Ashby (2004) discussed a number of strategies that had been put in place at the Open University in order to improve information, advice and guidance to students prior to their enrolment in order to improve student retention. In cases where conventional (as opposed to mature) students did not have enough pre-enrolment information about the program in which they enrolled, a situation of program incompatibility occurred (i.e., the program failed to meet the students' needs) which ultimately resulted in student withdrawal (Ozga & Sukhnandan 1998).

This suggests that student preparedness and compatibility of choice are vital to ensure that students are more likely to complete their studies, both of which rely on comprehensive and accurate pre-enrolment information (Ozga & Sukhnandan 1998). Thus, providing comprehensive pre-entry information to students has the potential to improve retention (Hall 2001; Parmar & Trotter 2005; Trotter 2003).

Preadmission counselling may be undertaken to ensure that a match is achieved between the interests and intentions of the student and the nature of the academic program, because where students' interests, as indicated in learning preferences, do not match those of the academic program, levels of attrition will increase (Gibson & Graff 1992). Matching students to specific academic programs is an initiative of best practice in improving retention in postgraduate distance education academic programs (Lesht & Shaik 2005), as 'finding [a] match between interests and degree emphasis seems all important' (Gibson & Graff 1992, p. 8). This suggests that it is important to ensure adequate information and guidance are provided to students prior to enrolment, so that they may be able to make an informed decision and not enrol in a program that fails to meet their needs. Hence, this study explores:

1. whether external postgraduate business students identified inappropriate program choice as a factor impacting upon retention and progression; and
2. whether inappropriate program choice was due to lack of comprehensive pre-enrolment information and guidance from the case institution.

Distance education program design. Careful program design (in terms of delivery and support systems) has been demonstrated to be an important factor in enhancing the retention of distance education students (Lesht & Shaik 2005). Careful program design allows students to feel as though they were part of a community in which interrelationships are highly valued and students are not left to feel as though they are out on their own. In other words, programs should be designed to minimise the sense of distance between students, their classmates and their teachers or the academic institution (Lesht & Shaik 2005). However, balance needs to be reached between the optimal levels of structure which facilitates the learning process, while maintaining the necessary flexibility afforded by a distance education environment, as this flexibility was one of the primary reasons for people to enrol in distance education course in the first place (Lesht & Shaik 2005). Additionally, students' levels of satisfaction with the distance education materials provided has been demonstrated to have an impact on their retention (Geri, Mendelson & Geffen 2007).

A sense of community can be achieved by structuring the distance education program as a cohort model, in which students are admitted to the program and proceed through their coursework in an articulated sequence and generally at the same time (Gaide 2004; Lesht & Shaik 2005; Lorenzetti 2003). This sense of community between students enrolled in the distance education program appears to be of critical importance to program completion (Moller 1998; Witte & Waynne 1998), as students in distance education courses tend to be more successful when they have opportunities to interact with other students, the instructor and course content (Mabrito 2004). To this end, synchronous teaching sessions may be included to lessen the feeling of isolation among students, as forming learning communities and establishing social networks may have a positive impact on student retention (Lesht & Shaik 2005; Wang, Sierra & Folger 2003).

While a well structured distance education program appears to have a positive impact on retention (Lesht & Shaik 2005), a distance education program which is not structured in terms of meeting the needs of a student body has the potential to be a barrier to successful program completion. In an example given by Cross (1981), a program which had a compulsory one-week on-campus residential component may have inadvertently encouraged student withdrawal, as some student groups may have found it difficult to attend these classes due to work and family commitments, especially if the campus is geographically distant from the student. This can also manifest itself in other ways, such as requiring a minimal level of access to information technology such as a Pentium-class computer with internet access (e.g., USQ 2007b). Students on low incomes may be less likely to have access to this equipment, thus reducing their capacity for persisting in their academic program (Cross 1981). The key implication is that a distance education provider must be flexible; both in terms of the program structure and the resources students need to be able to access in order to undertake it successfully, to accommodate the various needs of its student body. Hence, this study investigates whether the design of a distance education program has an impact on the retention and progression of external postgraduate business students.

Student support systems. Any institutional initiatives to prevent student attrition should not be undertaken without the necessary systems in place to ensure that students receive the assistance and support they need in order to be successful in their studies. However, Simpson (2004) suggested that:

> 'these activities will only have positive outcomes if successful to the end of a course – for example, retrieval will only have positive effect if the retrieved students subsequently proceed to pass their course.' (p. 85)

This point emphasises the importance of having effective support systems in place for students. It is not enough to prevent students from dropping-out of their studies only to have them fail their course upon their return. In other words, the challenge for the institution is to determine the reasons why students choose to drop-out and attempt to manage these reasons as much as possible
The importance of interventions to increase student retention was made explicit in a prior study which suggested that students who have had a successful experience with other distance education courses are most likely to complete subsequent distance education courses (Coldeway 1982). Similarly, students who had previously withdrawn from their university studies are most likely to suffer from attrition (Smith & Beggs 2003). Thus, it seems that early intervention is critical (Gibson & Graff 1992). Therefore, this research investigates the programs in place at the case institution to provide support to students.

Supporting the learner and helping students with the content of the program and assessment tasks, alongside assistance with personal difficulties such as managing stress and workload and maintaining interest in their studies are critical in the distance education context (Rowntree 1992). Due to the increasing usage of electronic methods for delivering distance education (such as CD ROMS and the internet), technical support is also of critical importance for distance education students, because students need to be able to manipulate the technology necessary to

study at a distance, prior to the start of the program and to progress through the program satisfactorily. Prompt response, timely resolution of technical difficulties and unobtrusive troubleshooting during online sessions are all important to the student's progress in the program (Lesht & Shaik 2005). Hence, this research seeks to investigate whether the presence of student support systems will impact upon the retention and progression of postgraduate external business students.

Student orientation. Prior research has suggested that there may be a positive association between involvement in orientation and student retention (e.g., Chandler, Levin & Levin 2002; Derby & Smith 2004; Lesht & Shaik 2005). Effective orientation of students may help to establish expectations about the program and course, the value of the learning community, rapport between students, instructors and staff, expectations for technologies to be used in the program and a culture of education reform (Chandler, Levin & Levin 2002). For example, a student in Lesht and Shaik's (2005, p. 2) study indicated that during the orientation session, 'lasting friendships are made and reinforced with future regular session which also serve as a major social occasion.' Lesht & Shaik (2005) suggested a face-to-face orientation so that students establish a sense of belonging to the institution.

A contrasting view is that retention initiatives which require more time, study and commitment from students, such as orientation, are not practical in the long term because students who are already struggling with workload will not benefit from the additional workload resulting from an orientation course, even if it is implemented with the best intentions (Rowley 2003). Hence, orientation may be beneficial for students and have a positive influence on retention; however they must be structured in such a way that does not require a substantially greater investment of time and resources on the part of the student. Therefore, this research explores whether postgraduate external business students suggest orientation as something that they feel would have a positive impact on their retention and progression.

Staff responsiveness. Inaccessibility and non-responsiveness of teaching and administrative staff emerged from the student retention literature as a common cause of mature aged student withdrawal in the distance education context (e.g., Lesht & Shaik 2005; Vines 1998). Students who have trouble getting their questions answered may be more likely to withdraw from their studies than students who have their questions addressed promptly and effectively by university staff (Johnson 1997). This was not a traditional institutional barrier identified in Cross' (1981) *Chain of Response Model*, however the absence of institutional policies and procedures governing contact with distance education students can be seen as an institutional barrier to retention when evaluated against the stated definition. This study investigates the extent to which the case institution has policies and procedures that ensure prompt and effective handling of distance education students' questions and issues and whether external postgraduate students indicated that staff responsiveness had an impact on their retention and progression.

Summary of institutional factors. Section 2.3.2 explored the institutional factors from the literature which appear to have an impact on the retention of distance education students, including relevance of the program content, distance education program design, student support systems, student orientation and staff responsiveness. Dispositional factors identified from the literature which appear to have an impact on student retention and progression are discussed next.

2.3.3 Dispositional factors

Dispositional (or attitudinal) factors are individually and collectively held beliefs, values attitudes or perceptions that may inhibit a person's participation in organised learning activities (Findsen 2002; O'Mahony & Sillitoe 2001). While Cross (1981) characterised dispositional factors as only being related to the student's self-concept as a learner, confidence levels and self-motivation, the broader definition of dispositional factors appearing in more recent student retention research has been adopted for this study. The terminology *dispositional factors* and *attitudinal factors* appear to be used interchangeably in the student retention literature (e.g., Findsen 2002; O'Mahony & Sillitoe 2001), however the term *dispositional factors* is used in this study to represent these factors.

The dispositional factors revealed in the literature to have an impact on student retention include (1) student satisfaction, (2), student motivation, (3) self-efficacy (i.e., self-confidence as a learner) and (4) realistic goals and intentions. Each of these factors and the authors who have researched them are summarised in Table 2.6 and are discussed in turn in the following section.

Table 2.6: *Dispositional factors synthesised from student retention literature*

Author / Year	SS	SM	SE	RG
Cross 1981			✓	
Gibson & Graff 1992		✓	✓	
Holmberg 1995			✓	
Pringle 1995		✓		
Athiyaman 1997	✓			
Pariseau & McDaniel 1997	✓			
Elliot & Healy 2001	✓			
Mackie 2001		✓		
Longden 2002	✓			
Tresman 2002		✓		
Banwet & Datta 2003	✓			
Hill, Lomas & MacGregor 2003	✓			
Rowley 2003			✓	
Christie, Munro & Fisher 2004		✓		
Bennett 2004		✓		
Packham et al. 2004		✓		
Watson, Johnson & Austin 2004				✓
DeShields, Kara & Kaynak 2005	✓			
Seidman 2005	✓			✓
Taylor 2005	✓		✓	
Devenport & Lane 2006			✓	
Douglas, Douglas & Barnes 2006	✓			

Author / Year	SS	SM	SE	RG
Petruzzellis, D'Uggento & Romanazzi 2006	✓			
Helgesen & Nesset 2007	✓			
Truluck 2007		✓		

Note: SS = Student satisfaction; SM = Student motivation; SE = Self-efficacy; RG = Realistic goals and intentions

Source: developed for this research

Student satisfaction. Although not included in the distance education student retention framework adopted for this study (Gibson & Graff 1992), numerous studies in the student retention and services marketing literature (e.g., Athiyaman 1997; DeShields, Kara & Kaynak 2005; Douglas, Douglas & Barnes 2006; Longden 2002; Pariseau & McDaniel 1997; Petruzzellis, D'Uggento & Romanazzi 2006; Seidman 2005; Taylor 2005) propose that student satisfaction has a strong positive impact on retention. As this factor is an attitude it has been categorised as a dispositional factor for the purposes of this study in line with the previous definition.

From the services marketing literature, customer satisfaction may be defined as an individual's overall evaluation of the performance of a service offering or service consumption experience (Athiyaman 1997; Johnson & Fornell 1991). A number of studies in the services marketing literature conducted across a wide range of industries have empirically demonstrated that satisfaction with the service provided has a strong positive impact on customer retention (e.g. Anderson & Sullivan 1993; Cronin, Brady & Hult 2000; Gustafsson, Johnson & Roos 2005; Shin & Elliott 1998). Customer satisfaction is a function of a cognitive comparison of expectations prior to the service encounter with the perceptions of the quality of the service actually received (Oliver 1980). This is known as the disconfirmation paradigm (Athiyaman 1997). The disconfirmation paradigm holds that disconfirmation of expectations regarding service performance may lead to three potential outcomes:

- confirmation of expectations, which leads to satisfaction;
- negative disconfirmation, which typically leads to dissatisfaction; and
- positive disconfirmation, which typically leads to delight.

(Rust & Oliver 2000; Walker 1995)

In a similar fashion to customer satisfaction, student satisfaction may be defined as a short-term attitude that results from a student's evaluation of the quality of the educational service provided to them (Elliot & Healy 2001). Hence, more favourable perceptions of service quality result in students being more satisfied (Petruzzellis, D'Uggento & Romanazzi 2006). A positive relationship between student satisfaction and student retention has been proposed in a number of studies (e.g., Athiyaman 1997; DeShields, Kara & Kaynak 2005; Douglas, Douglas & Barnes 2006; Longden 2002; Petruzzellis, D'Uggento & Romanazzi 2006; Seidman 2005; Taylor 2005) conducted in the tertiary education context. Previous research (e.g., Banwet & Datta 2003; Helgesen & Nesset 2007; Hill, Lomas & MacGregor 2003) has concluded that student satisfaction with the teaching and learning aspects of their university experience is a key driver of retention, while other aspects of the university experience, such as campus facilities, remain an influencing factor but not to the same degree. Similarly, other research (Petruzzellis, D'Uggento & Romanazzi's

2006, p.360) has proposed that tutoring, contact with academic staff members and other aspects related to teaching and learning were fundamental 'must be' items in terms of student satisfaction and consequently student retention. Hence, it appears that satisfaction with the teaching and learning aspects of the total student experience may have a positive impact on student retention.

In contrast to the proposition that satisfaction with teaching and learning is the most important factor impacting student satisfaction and retention, other research (e.g., (Athiyaman 1997; Seidman 2005) has proposed that the more satisfied a student is with their entire college experience, the greater the likelihood that they will successfully persevere with their studies. In defining the student experience, Petruzzellis, D'Uggento and Romanazzi (2006) propose that the student experience goes beyond teaching and learning to include the other services provided by universities, such as accommodation, alumni associations. Research conducted in an on-campus context (Petruzzellis, D'Uggento & Romanazzi 2006) proposed that scholarships, counselling, internships, internet access and refectories (eating establishments on campus) were considered by students to be a case of 'more is better', in that the absence of these will not result in students being as dissatisfied as if a critical element (e.g., teaching and learning) is absent, but will result in greater levels of satisfaction if available (Petruzzellis, D'Uggento & Romanazzi 2006, p. 360). The same study concluded that work placements, leisure time, accommodation, international relations, language courses and online exam bookings were considered to be 'delighters' by students, in that the absence of these elements would not lead to dissatisfaction, but the availability of these would lead to increased levels of student retention. Hence, it appears that satisfaction with the total student experience, not just the core teaching and learning aspects, may have an impact on student retention.

It should be noted that the prior research which investigated the link between student satisfaction and student retention was undertaken in an on-campus context. Hence, this study explored whether student satisfaction has an impact on student retention in the postgraduate business distance education student context.

Student motivation. A commonly cited dispositional factor in the literature is that of student motivation (e.g., Christie, Munro & Fisher 2004; Gibson & Graff 1992), with students who are motivated to complete the course being more likely to successfully complete their distance education studies (Packham et al. 2004). Mackie (2001), in her study of undergraduate student withdrawal behaviour, goes on to suggest that de-motivation occurs when social and organisational integration (i.e., the level of participation in university social life and the organisational support within it) and external integration (i.e., non-academic issues such as finances, family commitment and employment) fail to occur. This supports the proposition that situational factors (e.g., finances, family commitment and employment) may have an impact on students' motivation to complete their studies (Palmer 2001). Students whose academic life is well-integrated with their extra-institutional life are less likely to withdraw from their studies (Tresman 2002).

Previous research has also indicated that students are also more likely to remain motivated and persist in their studies if they realistically believe that their efforts will be successful and will lead to vocational success (Bennett 2004; Pringle 1995). Further, a retention strategy was described by Truluck (2007) in which students were

called by course staff upon their enrolment in order to highlight the benefits they will receive by obtaining a master's degree. This is a logical approach in light of research which suggests that students not realising the value of their degree is a key driver of student withdrawal (Gibson & Graff 1992). Hence, this study investigates:

1. whether student motivation has an impact on retention and progression of postgraduate business students undertaking their studies by distance education; and
2. the factors that contribute to students becoming de-motivated or remain motivated to continue with their studies.

Self-efficacy. Self-efficacy as a learner, the level of confidence that individuals have in their abilities as a learner has also been identified as a key dispositional barrier in a number of studies (e.g. Devenport & Lane 2006; Taylor 2005). Particularly due to students' lack of confidence and having doubt about their ability to cope with studying by distance education (Gibson & Graff 1992) or a belief that they are too old to be students (Cross 1981; Gibson & Graff 1992; Holmberg 1995). Some previous studies (Gibson & Graff 1992; Taylor 2005) have suggested that additional coursework dealing with study skills, studying via distance education and other skills (e.g., stress management) could help mitigate the impact of this obstacle.

While additional coursework dealing with study skills may present a solution, it is important to consider the situational barrier of inadequate time when assigning students additional coursework which will require more resources and commitment from students who are already struggling (Rowley 2003). Additionally, there appears to be little-to-no evidence in the literature to suggest that postgraduate students have issues related to self-confidence as a learner. Hence, this research investigates whether students in the postgraduate business distance education context identify their self-confidence as learners had an impact on their retention and progression.

Realistic goals and intentions. Success, and therefore retention at university may be positively related to having realistic goals and intentions. In distance education, the introduction of activities that help produce clear education goals may help to enhance student retention (Seidman 2005), as a lack of clearly defined goals is a key withdrawal factor for distance education students (Watson, Johnson & Austin 2004). Hence, this study explores whether an absence of clear goals and intentions have an impact on the retention and progression of postgraduate distance education students.

Summary of dispositional factors. Section 2.3.3 explored the dispositional factors identified in the literature which appear to have an impact on the retention of distance education students, including student satisfaction with the educational service provided, student motivation, the self-efficacy of students and realistic goals and intentions.

In summary, Section 2.3 has discussed the factors identified from the extant literature as having an impact on student retention. These factors are classified into three categories: situational factors (Section 2.3.1), institutional factors (Section 2.3.2) and dispositional factors (Section 2.3.3). The impact of these factors on the retention and progression of postgraduate business students undertaking their studies by distance education is to be investigated in this study. Therefore, the research issues developed for this study are:

> ***RI1.***   ***What factors impact upon the retention and progression of postgraduate business distance education students?***

> ***RI2.***   ***How do these factors impact upon the retention and progression of postgraduate business distance education students?***

The gaps in the student retention literature identified from this literature review are presented in the following section.

2.4   Gaps in the student retention literature

As discussed throughout this chapter, numerous studies (e.g., Eagle & Brennan 2007; Kevern, Ricketts & Webb 1999; Navarro, Iglesias & Torres 2005; Tinto 1975; Tresman 2002; Trotter & Cove 2005; Yorke 1999) have been conducted into student retention over the past several decades, of which a number investigated the retention of mature aged students, students studying by distance education and the impact of student satisfaction on retention. In spite of this extensive body of research, a comprehensive literature review (Appendix A) has revealed only a limited number of studies which have focused on postgraduate student retention (e.g., Smith 2004), and even fewer studies which have focused specifically on postgraduate distance education students (Geri, Mendelson & Gefen 2007; Truluck 2007). Furthermore, while student retention has been extensively researched in the USA and the UK, the body of literature addressing student retention in the Australian context is much more limited (e.g., Athiyaman 1997; Watson, Johnson & Austin 2004).

Additionally, the framework developed by Cross (1981) and subsequently adapted by Gibson and Graff (1992) to explore the factors which impact on mature aged student retention did not account for students' attitudes towards satisfaction and perceptions of service quality, although these have been empirically demonstrated throughout the services marketing literature (e.g. Anderson & Sullivan 1993; Cronin, Brady & Hult 2000; Gustafsson, Johnson & Roos 2005; Pariseau & McDaniel 1997; Shin & Elliott 1998) to have a strong impact on customer and student retention.

The situational factors (Section 2.3.1), institutional factors (Section 2.3.2) and dispositional factors (Section 2.3.3) identified from the literature as having an impact on the retention of undergraduate distance education students may not be applicable to the retention and progression of postgraduate business distance education students due to contextual differences between these student groups. For example, in order to gain entry to a postgraduate academic program in the first place, students already have an undergraduate degree, considerable work experience in their chosen field, or both. Similarly, while it is assumed that some of the factors identified as impacting

upon the retention of undergraduate distance education students may also be applicable in the postgraduate business distance education context, there may be other factors not evident in the body of literature which are applicable to the retention and progression of postgraduate distance education business students.

This research will adopt an exploratory case study methodology (to be discussed in Chapter Three) to investigate these gaps, and will serve as a theory building stage for further quantitative research in this area. In the next section, a preliminary research framework to investigate the research question is presented.

2.5   Provisional research framework

A review of the literature has revealed a number of factors which have been empirically demonstrated to have an impact on student retention in the context of external undergraduate students. However, little research has been undertaken in the external postgraduate business student context. The purpose of this study is to investigate the factors which impact upon postgraduate business distance education student retention and to identify and explore any other factors contributing to postgraduate distance education students' retention which have not been identified in prior studies. Based on the literature, a provisional research framework (Figure 2.2) incorporating 14 factors was developed in order to investigate the impact of these factors on the retention and progression of students in the postgraduate business distance education context.

Figure 2.2: *Provisional research framework*

Situational Factors
- Employment status
- Financial pressures
- Family commitments
- The independent study context
- The health of the student

Institutional Factors
- Staff responsiveness
- Distance education program design
- Relevance of the program
- Student support systems
- Student orientation

Dispositional Factors
- Student motivation
- Realistic goals and intentions
- Self-efficacy
- Student satisfaction

Decision

Continue at normal rate of progression

Continue at delayed rate of progression

Exit from degree

Source: developed for this research

This provisional research framework indicates that factors categorised as situational, institutional and dispositional factors (Cross 1981; Gibson & Graff 1992) impact upon retention of external postgraduate students. It is postulated in this framework that students not only face the retention decision of whether to withdraw from their studies, but also if they should continue their studies at a normal/desired rate or at a delayed rate of progression in order to address the factors impacting their retention decision. Hence, this study endeavoured to investigate whether different factors contribute to student withdrawal and delayed progression.

2.6   Summary of Chapter Two

In Chapter Two, the various factors impacting on student retention in a distance education context were explored. First, the concepts of student and customer retention were explored (Section 2.1) and the context of this study was discussed (Section 2.2). Next, the factors identified from the literature as influencing student retention in the distance education context were explored and categorised as being situational factors (Section 2.3.1), institutional factors (Section 2.3.2) and dispositional factors (Section 2.3.3). Next, gaps in the student retention literature were acknowledged and two research issues were developed (Section 2.4). Finally, a provisional research framework (Figure 2.2) was presented.

A comprehensive discussion of the research methodology used in this research study is presented in Chapter Three.

Chapter Three

RESEARCH METHODOLOGY

3.1　Introduction

This chapter commences with a justification for the qualitative exploratory research design adopted for this study (Section 3.2). Next, an overview of the case study methodology used for this research is presented (Section 3.3), including a justification for case study research (Section 3.3.1) and a discussion of the interview protocol used for this study, pilot interviews, the embedded single case study design adopted for this study, semi-structured in-depth interviews, the potential for interviewer and interviewee bias, selection of interviewees, interview procedures and the data analysis method employed for this study (Section 3.3.2). Next, measures to improve the validity and reliability of this research are presented (Section 3.4) and limitations of case study research are acknowledged and addressed (Section 3.5). Finally, ethical considerations for this research are identified (Section 3.6) and a summary of Chapter Three is presented (Section 3.7). An outline of this chapter is presented in Figure 3.1 on the following page.

Figure 3.1: *Outline of Chapter Three*

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│                 │    3.2 Research design     │                 │
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│                 │   3.3 Case study research  │                 │
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│          ┌──────────────────┐   ┌──────────────────┐          │
│          │ 3.3.1 Justification │ │ 3.3.2 Case study │          │
│          │ for case study      │ │ methodology      │          │
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│                 │ 3.4 Validity and reliability │               │
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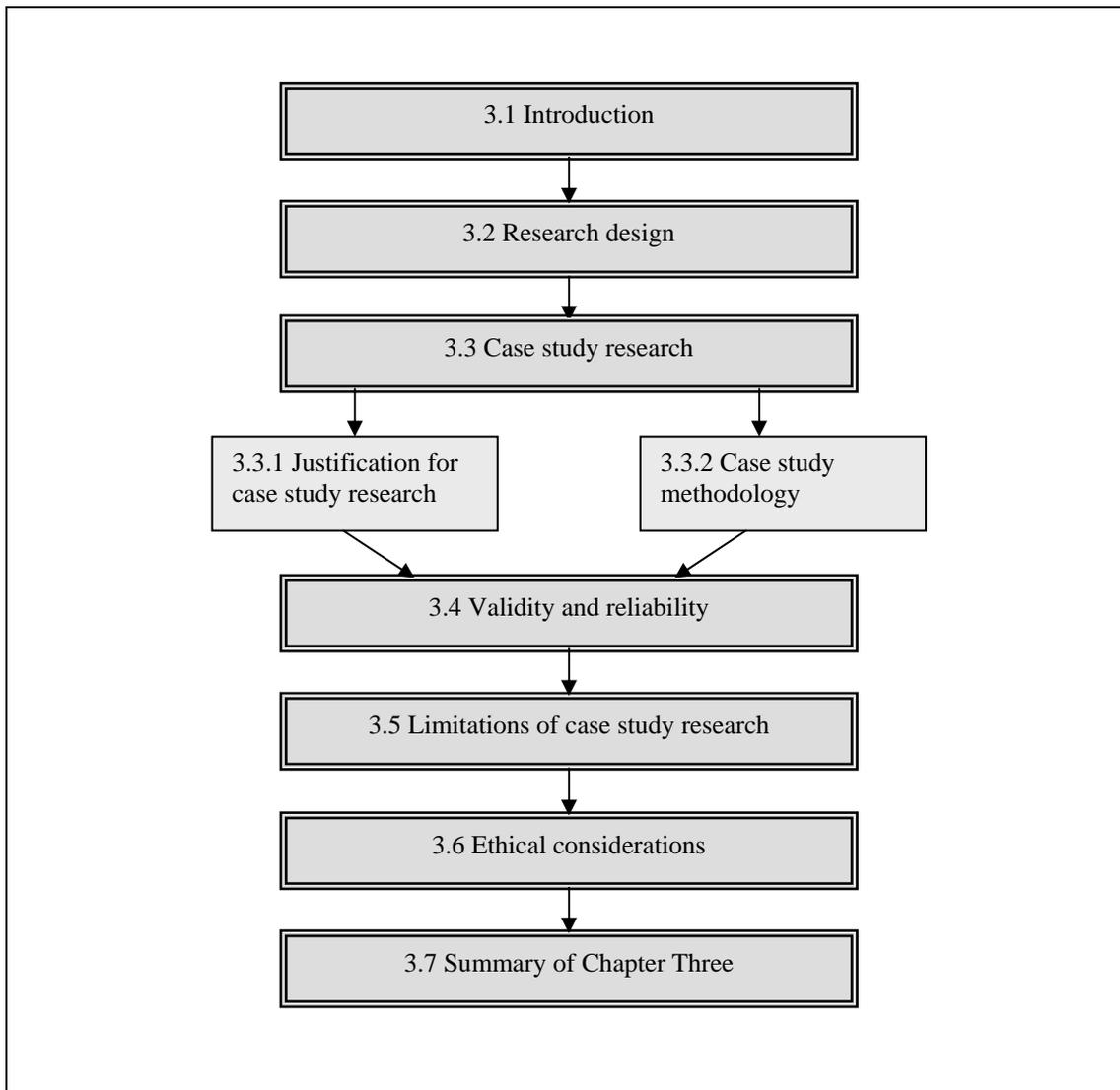
Source: developed for this research

3.2   Research design

This study explores the factors that impact upon the retention and progression of postgraduate business students undertaking their studies by distance education. A qualitative research design was adopted for this study, and is justified in this section.

Justification for qualitative research. A qualitative research methodology was selected to address this research question in this study because qualitative research 'seeks to answer questions by examining various social settings and the individuals who inhabit these settings' and allows researchers to discuss in detail the various social contours and processes human beings use to create and maintain their social realities (Berg 1995, p. 7; Yin 2003). This is achieved by focusing on phenomena that occur in a natural setting (Denzin & Lincoln 2003).

Qualitative inquiry involves studying phenomena in all their complexity, with no attempt made to simplify what is observed and allows for the gathering of rich data and thick descriptions of these phenomena, instead of the simply measuring them or examining them under experimental conditions (Denzin & Lincoln 2003; Leedy & Ormrod 2005). Qualitative research is appropriate when the researcher is seeking to gain a comprehensive understanding of factors impacting upon people's decision-making, because it captures the individual's point of view and secures rich descriptions reflecting the constraints of everyday life (Denzin & Lincoln 2005). Thus, a qualitative research design was appropriate for this study as this research sought to gain a comprehensive understanding of the factors which impacted upon the retention and progression of postgraduate business students undertaking their studies by distance education through obtaining rich descriptions of these factors from current and exited postgraduate distance education business students.

The nature of the research question being posed is a key determinant of the type of research design selected (Yin 2003). The research question and associated research issues for this study sought to explore the factors impacting on the retention and progression of postgraduate business distance education students and how these factors had an impact. Questions of *what* and *how* lend themselves to an exploratory research design that seek to develop pertinent hypotheses and propositions for further enquiry (Yin 2003). An exploratory research design is appropriate for this study as the research sought to gain a better understanding of the situation surrounding the retention and progression of postgraduate business distance education students and also provide adequate clarification of the research issues (Cooper & Emory 1995; Zikmund 1997). Moreover, an exploratory research design is appropriate in this research because of the lack of prior research in the postgraduate distance education business student context (Yin 1994). The findings of this research may provide a more informed basis for theory building, and can assist in developing appropriate further propositions which may subsequently be verified through additional qualitative and quantitative research (Amaratunga & Baldry 2001; Yin 2003). Through identifying the factors impacting upon the retention and progression of postgraduate business distance education students, the findings of this research can serve as a theoretical framework for further conclusive research that allows the findings to be generalised to the population of interest.

A justification for the adoption of a qualitative research design for this study was presented in this section. A discussion of the case study research methodology used for this research study is presented in Section 3.3.

3.3   Case study research

A case study is a detailed examination of an event or series of related events which the researcher believes exhibit the operation of some identified theoretical principle (Mitchell 1983). Case study research gives special attention to complexities in observation, reconstruction and analysis of the case under examination and is done in a way that it incorporates the views of the individuals in the case being studied (Zonabend 1992). This section commences with a justification for the adoption of a case study methodology for this research (Section 3.3.1). Next, the specific case study methodology used for this research study is discussed including the interview

protocol, pilot interviews, the embedded single case study design adopted for this study, semi-structured in-depth interviews including the potential for interviewer and interviewee bias, the stratified purposive sampling design used to select interviewees for the study, the interview procedures and the data analysis method.

3.3.1   Justification for case study research

The adoption of a case study methodology is justified on three bases: investigating complex phenomena, theory building and multiple sources of evidence. These three justifications for a case study methodology are discussed here in turn.

Investigating complex phenomena. A case study is a suitable methodology for learning more about a little known or poorly understood situation (Leedy & Ormrod 2005), especially when the phenomenon under investigation is complex and the context is both highly pertinent and difficult to separate from the phenomenon being investigated (Krathwohl 1998; Yin 2003). From the literature review presented in Chapter Two, student retention and progression appear to be complex phenomena which are impacted by a wide range of factors and differ depending on the context in which they are investigated (e.g., young students, mature students, distance education students, postgraduate students). Thus, a case study is an appropriate methodology for this research as it allowed interviewees to provide rich real-life accounts of the factors impacting upon their retention and progression in their studies.

Theory building. The purpose of this study is to explore the factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education which have not been previously identified through other studies into student retention conducted in different educational contexts. Case study research allows the researcher 'to determine whether a theory's propositions are correct or whether some alternative set of propositions might be more relevant' (Yin 2003, p. 40). Case study research provides a more informed basis for theory building than quantitative survey research, and is particularly suited to areas for which existing theory seems inadequate (Eisenhardt 1989; Patton 1990; Yin 1994). In this study, the purpose of the research is to determine if the factors identified impact upon student retention in other contexts are also relevant to postgraduate distance education business students and to identify any other factors which impact upon postgraduate distance education business students that have not been identified in prior studies. Hence, a case study methodology is appropriate for this research because the distance education business student context represents an area in which limited current literature exists.

Multiple sources of evidence. A major strength of the case study approach is 'the opportunity to use many different sources of evidence' (Yin 2003, p. 97). Multiple sources of evidence, including semi-structured in-depth interviews, a self-reflective personal narrative of the researcher, relevant internal documents and archival records will be collected in this research study. This will allow for triangulation of the data, thus leading to improved construct validity. This is achieved because 'multiple sources of evidence essentially provide multiple measures of the same phenomenon' (Riege 2003; Yin 2003 p. 99). Consequently, any findings or conclusions in case study research are likely to be more accurate if they are based on several different

sources of information following a corroboratory mode (Yin 2003) which serves to enhance the credibility of the case study findings (Lincoln & Guba 1985). Multiple sources of evidence also allow the researcher to address a broader range of historical, attitudinal and behavioural issues (Yin 2003) and help to protect against researcher bias (Riege 2003).

3.3.2 Case study methodology

The previous section justified the adoption of a case study methodology for this research study. Details of the specific case study methodology used in this study are presented in this section.

Interview protocol. An interview protocol serves three primary purposes. First, it clarifies the questions that should be asked in the interview in order to address the research problem (Yin 2003). Second, it helps to ensure a consistent pathway to analysing interview data (Alam 2005). Third, it serves to enhance the reliability of the interview findings (Yin 1994). The interview protocol in this study was based on the factors identified in the provisional research framework (Figure 2.2 on page 31).
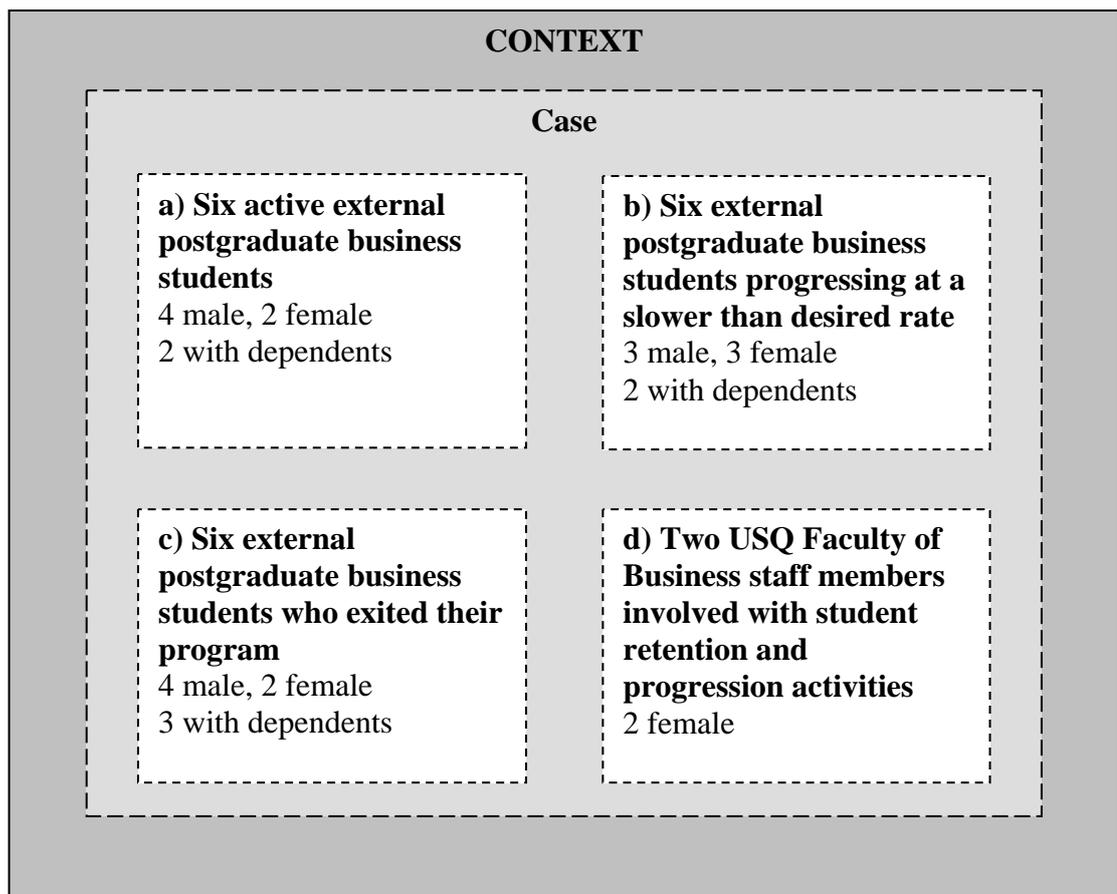
At the commencement of each interview the researcher read an interview preamble to the interviewee (Appendix C). This interview preamble served to explain the purpose of the interview and the anticipated benefits of the study and also assured the interviewee of complete confidentiality and anonymity. Interviewees in each student category (i.e., active students, delayed progression students and exited students) were then asked a different set of open-response questions specific to their particular situation. The opening question (i.e., question 1): '*May I ask, why did you originally decide to undertake a postgraduate business degree?*' was intended to put the interviewees at ease and gather background information related to their motivations or reasons for undertaking a postgraduate business degree. Question 2 for exited students and questions 2 to 5 for active and delayed progression students were intended to initiate an in-depth discussion regarding the factors which impacted upon the retention and progression of these students and how these factors had an impact, thus addressing the research issues for this study.

The last question (i.e., question 4 for exited students and question 7 for active and delayed progression students) was included to allow interviewees the opportunity to provide any further information that they may have had about the research topic prior to the conclusion of the interview. Questions 1 and 3 for the staff interviewees were intended to explore the retention and progression activities specifically targeting postgraduate distance education students currently in place within the USQ Faculty of Business. Question 2 was included to investigate the staff members' perspectives regarding the factors impacting upon the retention and progression of postgraduate business distance education students. As with student interviewees, the last question (i.e., question 4) was included to allow staff member interviewees the opportunity to provide any further information that they may have had about the research topic prior to the conclusion of the interview. The specific questions for each interviewee category are presented in Appendix B.

Pilot interviews. A pilot interview with one interviewee from each interviewee category was conducted in order to refine the interview protocol and procedures for this study 'with respect to both the content of the data and the procedures to be followed' (Yin 2003, p. 79). Further, the pilot study may be viewed as a full 'dress rehearsal', which may assist the researcher in developing a relevant line of questioning for future interviews (Yin 1994, p.79). Care was taken to ensure that the interviewees selected for these pilot interviews were representative of the populations under investigation (Stake 1995) and thus the interview data obtained from these pilot interviews was included in this case study. Based on the results of the pilot interviews, no corrections or refinements to the interview questions or interview protocol were required.

Embedded single case study design. As this case study involved examining four sub-units of analysis (i.e., active students, delayed progression students, exited students and staff members) in a single case (i.e., USQ), the design of this study is an embedded single case study (Yin 2003). The specific embedded single case study design adopted for this study is presented in Figure 3.2.

Figure 3.2: *Embedded single case study design*

CONTEXT
Case

a) Six active external postgraduate business students
4 male, 2 female
2 with dependents

b) Six external postgraduate business students progressing at a slower than desired rate
3 male, 3 female
2 with dependents

c) Six external postgraduate business students who exited their program
4 male, 2 female
3 with dependents

d) Two USQ Faculty of Business staff members involved with student retention and progression activities
2 female

Source: adapted from Yin 2003, p. 40

A single case design was adopted for this research study because it would allow the researcher to investigate the phenomena of student retention and progression in depth, thus enabling a rich description and revealing its deep structure (Yin 1994). A single case study of USQ was chosen for this research because USQ appears to be a representative case for Australian distance education providers (Yin 2003). First, USQ is a major provider of postgraduate business programs by distance education in Australia, ranked fourth in Australia in terms of external postgraduate business enrolments (DEST 2007). Second, other major Australian distance education providers, including USQ, all appear to offer a similar suite of postgraduate business academic programs by distance education. Thus, USQ is believed to be representative of other major Australian distance education providers (Yin 2003) and consequently is appropriate as a single case for this research.

In-depth interviews. An in-depth interview is a formal, structured process of asking a subject a set of semi-structured and probing questions, usually conducted in a face-to-face setting (Hair, Bush & Ortinau 2000; Jones 1993). These in-depth interviews had two key objectives which related to the research issues of this study. First, the in-depth interviews aimed to identify the specific factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education. This objective relates to the first research issue in this study:

> **RI1.** **What factors impact upon the retention and progression of postgraduate business distance education students?**

The second objective of the in-depth interviews was to explore the reasons why the factors identified in the first research issue have an impact on the retention and progression of postgraduate business students undertaking their studies by distance education. This objective relates to the second research issue in this study:

> **RI2.** **How do these factors impact upon the retention and progression of postgraduate business distance education students?**

Justification for semi-structured in-depth interviews. In-depth interviews can yield a great deal of useful information (Leedy & Ormrod 2005) and represent one of the most important sources of case study information (Yin 2003). In-depth interviews are a common technique for gathering data on a case-by-case basis in the study of real-world events involving people (Zikmund 2003). In-depth interviews were employed in this study as they allow for the course content of the interview (i.e., the factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education) to be explored in detail (Aaker, Kumar & Day 1998) as the interviewee is able to share as much information as possible in an unconstrained environment (Cooper & Schindler 1998).

Face-to-face in-depth interviews allow the researcher to use verbal and non-verbal cues to adapt their questions as necessary, clarify doubts and ensure that the interviewee's responses are clearly understood by repeating or rephrasing their answers to questions (Leedy & Ormrod 2005). Further, 'any discomfort, stress or problems that the interviewee experiences can be detected through frowns, nervous tapping and other body language unconsciously exhibited by the interviewee' (Leedy

& Ormrod 2005, p. 150) and this is only possible in face-to-face interviews. Hence, during the interviews for this study, the researcher was able to clarify ambiguous points with the interviewees and confirm his understanding of their responses by rephrasing their responses back to them.

A semi-structured interview technique was employed in this study. Semi-structured interviews may be the most important form of interviewing for case studies as they yield the richest single source of data (Gillam 2000). In semi-structured interviews the interviewer endeavours to cover a specific list of topics or sub-topics, with the timing, exact wording and time allocated to each question area left to the interviewer's discretion (Aaker, Kumar & Day 1998) and thus allows for interviewees to make open-ended responses (Krathwohl 1998). As a result, 'the interviews will appear to be guided conversations rather than structured queries' (Yin 2003, p. 89) and will be characterised by a stream of questions which are likely to be fluid rather than rigid (Rubin & Rubin 1995). Hence, semi-structured interviewing ensured that the research question and issues for this study were addressed, while remaining flexible enough to allow pertinent issues, themes and factors regarding student retention and progression to emerge from the discussion.

Interviewer bias. One of the limitations of the interview method is interviewer bias (Cavana, Delahaye & Sekaran 2001). The researcher should approach the study with scholarly disinterest, so that they can avoid biasing the findings by setting out to find what they expected to find (Yin 2003). The researcher in this study, in addition to having considerable knowledge and experience of the issues facing the tertiary education sector through his employment at USQ, was also a current external postgraduate business student at USQ. Therefore, the researcher had a set of pre-conceived beliefs and attitudes regarding the factors which impact upon the progression and retention of external postgraduate business students.

The impact of these beliefs and attitudes on the way the interviews are conducted, the analysis of interview data and the presentation of case study findings, must be acknowledged and made explicit. This has been addressed in this study through the use of a self-reflective personal narrative which involved the researcher providing his own thoughts and beliefs about the research question and issues. This allows the researcher's subjectivity to be acknowledged and made explicit, allowing it to be brought forward for scrutiny (Burnett 2003). This self-reflective personal narrative is discussed further in Section 3.4.1 as a means of improving the construct validity of this study through triangulation of data.

It may be misleading for researchers to claim to be neutral, because they have ultimate control over the interview process and the way the findings are presented (Rapley 2004). Hence, it is important to recognise and acknowledge one's own subjectivity, whilst being as scrupulous and unbiased as possible when interpreting the interview data. Indeed, the ability of interviewees to answer questions adequately 'is often distorted by questions whose content is biased by what is included or omitted' (Cooper & Schindler 1998, p. 331). Hence, interviewees should be permitted to choose their own way of expressing their thoughts. This ensures that their responses are true and accurate representations of their thoughts, beliefs and understandings and are not unduly influenced by the thoughts, beliefs and understandings of the researcher (Leedy & Ormrod 2005). This can be aided by

recording all interview responses verbatim. This way, responses can be read or played back to interviewees, so that the researcher can confirm whether or not their responses accurately reflect their thoughts (Leedy & Ormrod 2005). This was achieved in this study by digitally recording each interview, as this provided a verbatim account of all interview responses free of interviewer bias.

In a face-to-face interview, the body language and non-verbal cues of the interviewer have the potential to influence the responses of the interviewee (Leedy & Ormrod 2005). Hence, it is important that the researcher must facilitate the open discussion of questions and issues which are relevant to the research, but not to predetermine the interviewee's response through how the questions and prompts are structured and sequenced. Moreover, the researcher remained conscious of his body language throughout the interview so as to ensure that his body language and other non-verbal cues did not unduly influence the interviewee (Boyce & Neale 2006).

Interviewee bias. As confident and convincing as some of the interviewees may be, the researcher must be aware that their responses represent their perceptions rather than absolute facts (Leedy & Ormrod 2005). Perception is defined as the 'process by which people select, organise and interpret stimuli into a meaningful and coherent picture' (Summers et al. 2003, p. 51). Because perception is an internal process, people may perceive the same set of stimuli differently. Hence, interviewees are seldom ever able to give full explanations of their actions or intentions; all they can offer are accounts or stories about what they did and why (Denzin & Lincoln 2003). Moreover, interviewees can also unintentionally provide inaccurate information due to poor recall (Yin 2003). Consequently, it is acknowledged that the results of the case study are based on interviewee's perceptions and beliefs rather than absolute facts (Leedy & Ormrod 2005).

Selection of interviewees. The goal when selecting interviewees for a research study is to ensure that they are representative of the populations of interest (Denzin & Lincoln 2003). The population of interest in this study included current and former external USQ postgraduate business students and USQ staff members involved in student retention activities. Some informants are 'richer' than others in terms of the information they can provide about a particular phenomenon and thus these people are more likely to provide insight and understanding for the researcher (Marshall 1996, p. 523). Hence, a sampling design based on purposive (or judgement) sampling was utilised for this study. In purposive sampling, the researcher actively selects the most productive sample to address the research question based on the researcher's judgement about the necessary characteristics of sample members (Marshall 1996; Zikmund 2003).

The researcher purposively selected a total of 18 interviewees in each of the three student categories (i.e., six active students, six delayed progression students and six exited students) from USQ's student enrolment records in order to investigate whether the factors impacting upon retention and progression differ between these categories. A sample of male and female students was selected so that any gender effect impacting upon students' retention and progression decisions could be identified. Further, when selecting interviewees an effort was made to ensure that a balance of students with and without dependent children was obtained so that the impact of dependents on student retention and progression could be investigated in

this study as family commitments have been demonstrated in a number of studies to be a barrier to mature student retention (e.g., Christie, Munro & Fisher 2004; Gibson & Graff 1992; Pompper 2006; Simpson 2004; Truluck 2007). Current active external postgraduate business students were interviewed in order to explore the factors leading to student retention and normal progression as a basis for comparison with exited students and students progressing at slower than desirable rate. Two staff members involved in student retention activities were selected by the researcher in order to gain information about retention strategies at USQ and the extent to which these initiatives have been successful. These staff members were selected based on an understanding of the roles and responsibilities of USQ staff members. The staff members selected to participate in this research were senior academics within the USQ Faculty of Business, both of whom had many years of experience instructing and supporting postgraduate distance education students.

Because interviewees in this case were drawn from a number of different categories (i.e., active students, students progressing at a less than desired rate, exited students and USQ staff), the sampling design may be best described as stratified purposive sampling (Patton 1990). The interviewees in this study are summarised in Figure 3.2 on page 38 and are profiled in Appendix D.

There are no rules for appropriate samples sizes in qualitative research (Patton 1990), with Marshall (1996 p. 523) observing that 'an appropriate sample size for a qualitative study is one that adequately answers the research question.' Because in-depth interviews are both costly and time-consuming to administer (Cavana, Delahaye & Sekaran 2001), the number of interviews for this study was limited to 18 students and two USQ staff members (Figure 3.2 on page 38). Four to fifteen in-depth interviews are adequate to meet minimum data requirements in qualitative research (Eisenhardt 1989; Zikmund 1997), so the twenty interviews conducted were appropriate for this study. Furthermore, as there was little variance in interviewees' responses and no substantially different issues forthcoming after conducting the 20 interviews it was determined that a state of theoretical saturation had been reached (Johnson 2002). Consequently, it was decided that no additional interviews were needed and the interview process was halted (Driedger et al. 2006).

Interview procedures. The researcher personally contacted potential interviewees by telephone in order to seek their participation in the study. Once potential interviewees had given their consent to participate in the study, a suitable location, date and time for the interview were arranged with the interviewee. In all cases, the location for the interviews was a mutually convenient place agreed upon by the potential interviewee and the researcher. Care was taken by the researcher to ensure that it was a quiet place, free from distractions and the potential for interruption (Leedy & Ormrod 2005). Most of the interviews were conducted in the interviewees' homes or offices; however several interviews, including the staff member interviews, were conducted at USQ in a private meeting room.

Although face-to-face interviews typically yield the highest response rates (Leedy & Ormrod 2005), student interviewees were offered an incentive to the value of 30 dollars to encourage their participation in the research. The interviews typically lasted approximately 30 minutes, although the maximum duration of several interview was approximately 45 minutes. An incentive to the value of 30 dollars was considered to be fair compensation for an interviewee providing up to three-quarters of an hour of their time to participate in the interview, as it did not appear disproportionate to the task required of the interviewee (Cooper & Schindler 1998).

The researcher endeavoured to establish rapport with the interviewee at the commencement of each interview, which involved the researcher establishing a relationship of confidence and understanding between the interviewee and himself, thus allowing the interviewee to be open with the researcher without pressure being exerted on them (Cooper & Schindler 1998). The researcher began to establish a sense of rapport with the interviewee by 'chatting' with interviewees about non-study related topics prior to commencing the interview (Berg 1995, p. 35) and sought to maintain this rapport throughout the interview by being courteous and respectful at all times and showing genuine interest in what the interviewee had to say (Leedy & Ormrod 2005).

At the commencement of each interview the researcher read an interview preamble to the interviewee (Appendix C). This preamble served to explain the purpose of the interview and the anticipated benefits of the study and assure the interviewee of complete confidentiality and anonymity. After the interview preamble was read to the interviewee, their informed consent to participate in the study was obtained (Cooper & Schindler 1998). Once informed consent had been obtained from the interviewee, digital audio recordings of the interview session were made in order to obtain an accurate rendition of the interview for subsequent transcription and analysis (Yin 2003). The findings from this analysis are presented in Chapter Four.

Data analysis method. The data analysis for this case study involved the identification of key themes and issues and was guided by the key factors outlined in the provisional research framework, presented in Figure 2.2 on page 31. This framework was provisional and under construction, thus care was taken when analysing the sources of case study evidence to ensure that appropriate modifications were made to the provisional research framework as they became apparent, instead of attempting to confirm the pre-conceived structure of the provisional research framework. The provisional framework was based on factors identified from other studies related to student retention, as discussed in Chapter Two.

The first stage in the data analysis for this case involves categorisation of the data (Leedy & Ormrod 2005). NVivo 7 software was used to assist with the organisation (coding and categorisation) of the transcribed interview data. The numerous factors raised during the interviews were coded to the relevant node (representing the factor). These nodes were then categorised pertaining to the situational, institutional and dispositional categories identified from the literature and included in the provisional research framework. For example, if the interviewee identified workload pressures as a factor contributing to their delayed progression, this was coded to a node called 'workload pressures.' Then, the 'workload pressures', along with all other situational factors (e.g., 'family commitments') were classified as situational

factors. Moreover, different interviewees identified certain factors as having potentially improved their retention and progression (i.e., enablers) while others identified these factors as having negatively impacted on their retention and progression (i.e., obstacles). Consequently, within the three categories, factors were coded as either 'enablers' or 'obstacles' to student retention and progression. For example, if an interviewee identified the support provided by USQ allowed them to continue with their studies, this would be coded as an 'institutional enabler.' In contrast, if an interviewee believed that a lack of support from USQ led to their delayed progression, this would be coded as an 'institutional obstacle.'

Next, the interview data was analysed to determine whether the situational, institutional and dispositional factors that had been uncovered in the literature were also evident in the interview data. This analytical technique can be described as 'pattern matching', in that an empirically based-pattern is compared with a predicted one, in the form of the provisional research framework in this case (Yin 2003, p. 116). Furthermore, the data was analysed to determine if there were any other factors that have not been identified in the literature that impact upon the retention and progression of postgraduate business students undertaking their studies by distance education (Yin 2003). The survey data obtained from departing postgraduate external business students was also analysed using the pattern matching technique, allowing the factors identified from this data to be compared with both the provisional research framework and the student interview data. The student interview data was also analysed to determine if there were any differences between student groups (i.e., active students, delayed progression students and exited students) in terms of the factors impacting upon their retention and progression. For example, Gibson and Graff (1992) found differences between completers (retained students) and non-completers (departed students) in terms of their perceptions of situational, dispositional and independent study barriers.

In addition, tables were developed to assist in illustrating the student interview data through the use of counting and clustering to achieve a consistent and meaningful interpretation of these data (Miles & Huberman 1994). These data tables (Tables 4.2, 4.3 and 4.4) provide the foundation of the data analysis and presentation in Chapter Four. Furthermore, narrative text and quotations from the semi-structured in-depth interviews were used to enhance the credibility of the data analysis and also to add rich qualitative research insights to the research issues (Patton 1990).

The case study methodology used in this research was discussed in this section, including the interview protocol, pilot interviews, the embedded single case study design adopted for this study, semi-structured in-depth interviews including the potential for interviewer and interviewee bias, the stratified purposive sampling design used to select interviewees for the study, the interview procedures and the data analysis method. Techniques to enhance the validity and reliability of this research study are discussed in the following section.

3.4 Validity and reliability

A research study can only be considered to be valid if it conforms to certain design tests regarding various levels of research validity (Amaratunga & Baldry 2001; Yin 1994). This also helps to demonstrate the reliability and transparency of the results, allowing the case study findings to be trusted (Carson et al. 2001). The four tests are construct validity, internal validity, external validity and reliability (Yin 2003). This section describes the measures used to enhance the validity and reliability of this research study including construct validity (Section 3.3.1), internal validity (Section 3.3.2), external validity (Section 3.3.3) and reliability (Section 3.3.4).

3.4.1 Construct validity

Construct validity deals with 'establishing correct operational measures for the concepts being studied' (Amaratunga & Baldry 2001; Yin 1994) and ensures that the phenomenon being measured is what the researcher intended to measure (Cooper & Schindler 1998). The construct validity of this study was enhanced by establishing a chain of evidence in the data collection phase (Amaratunga & Baldry 2001; Riege 2003; Yin 1994). This was achieved by using verbatim interview transcripts which allow for the 'supply of sufficient citations and cross checks of particular sources of evidence' (Riege 2003, p. 82).

As discussed in Section 3.3.1, collection and analysis of multiple sources of case study data or evidence allow for data triangulation, thus improving construct validity. Multiple sources of evidence also allow the development of converging lines of inquiry, further enhancing the credibility and accuracy of the case study findings (Yin 2003) and protecting against researcher bias (Riege 2003). This was achieved in this study by triangulating the in-depth interview data with other sources of data, including a self-reflective personal narrative of the researcher, relevant documents and archival records. Each of these data sources are described in this section.

Self-reflective personal narrative. The goal of narrative research is to unearth the manner in which individuals and groups 'construct their experiences of the world' (Gough 1993b, p. 175) by moving beyond empirical analytical conventions and examining the specific experiences of individuals through their narratives or stories of these experiences. This is because language is central to understanding how humans make meaning of their world (Burnett 2003). It is on this basis that narrative research is suitably grounded in experience as both a research methodology which seeks to yield an innovative form of data and also a way of presenting this data (Burnett 2003; Gough 1993a).

The researcher in this study was himself an external postgraduate business student at USQ and therefore had valid experiences and perspectives regarding the factors which impact upon the retention and progression of this type of student. While the researcher was enrolled as a higher degree research student, these reflections relate to the coursework component of his degree. Hence, in addition to the semi-structured

in-depth interviews with current and former students, the researcher constructed and subsequently analysed a self-reflective personal narrative based on the interview questions administered to the active student interviewee group. Undertaking this self-reflective personal narrative:

- allowed the researcher to acknowledge his own subjectivity, or by making explicit his experiences and perspectives regarding the research topic (Burnett 2003) and also
- provided an additional source of evidence, further enhancing the credibility and accuracy of the case study findings through triangulation of various sources of information (Yin 2003).

The information obtained from this self-reflective personal narrative is presented along with the discussion of the results of the analysis of the information obtained from the in-depth interviews and archival records, presented in Chapter Four. To ensure that the reflections of the researcher remain distinct from the information collected from the interviewees in this study, these reflections will be presented in Chapter Four as 'discrete textboxes… outside the main body of the academic text', as illustrated in Figure 3.3:

Figure 3.3: *Example of textbox used to present the researcher's reflections*

> *Like some of the students interviewed, I still did not consider withdrawing from my studies even at times when I was dissatisfied with the service provided to me by USQ, because I believed that the advantages of completing the degree outweighed my feelings of dissatisfaction.*

Source: adapted from Burnett (2003, p.437)

Document analysis. Documents can take many forms, including written communiqués, written reports of events, administrative documents, 'formal studies of the same 'site' under study' and articles from the mass media (Yin 2003, p. 86). Documents are 'social facts, in that they are produced, shared and used in socially organised ways' (Atkinson & Coffey 2004, p. 58). Document analysis is a useful evidence collection method in case study research because documents can be reviewed repeatedly, are unobtrusive, contain exact details of an event and may cover a long span of time as well as many events and settings (Yin 2003).

In spite of their usefulness as an evidence collection method, documents are not always accurate and may not be lacking in bias and should be carefully interpreted and not accepted at face value as literal recordings of events that have taken place (Yin 2003). Hence, the researcher must be critical in interpreting the contents of documentary evidence and should attempt to identify the objectives of the original author of the document in order to critically analyse its credibility. Because of the issues of credibility and bias inherent in documentary evidence, the most important use of document analysis in case study research is to 'corroborate and augment evidence from other sources' (Yin 2003, p. 87), which was how documentary research was utilised in this study.

Internal USQ documents regarding student retention and progression initiatives were examined and analysed. This allowed the researcher to gain an understanding of current and planned future retention initiatives at USQ, as well as any strategic direction or institutional policies regarding retention and progression management (USQ 2007c) and also to corroborate information from staff interviews regarding student retention and progression initiatives at USQ. This data was used to gain an insight into the retention and progression strategies, policies and initiatives within the USQ Faculty of Business and how successful these have been at improving postgraduate business student retention and progression.

Archival records. Archival records may include institutional records, lists of names, survey data including 'data previously collected about a 'site'' and personal records (Yin 2003, p. 89). Like documentary evidence, archival records are not necessarily accurate and the researcher must approach them critically to determine their accuracy and credibility. Moreover, as with documentary evidence, archival records are produced for a specific purpose and for a specific audience. Hence, the original purpose and target audience of the archival records must be fully appreciated when interpreting the usefulness and accuracy of these records (Yin 2003).

USQ enrolment and student load data were analysed in order to provide further background to the study as previously discussed in Sections 1.1 and 1.2. Qualitative data from the USQ student Exit Survey were also analysed to further corroborate the findings emerging from the semi-structured in-depth interview data. The USQ student Exit Survey is a personally administered web survey which all students withdrawing from study at USQ are invited by email to complete. A total of 11 students from the population of interest in this study (i.e., postgraduate business distance education students) provided qualitative feedback in this survey as to why they chose to withdraw from their studies at USQ. This qualitative data is included in the discussion of findings presented in Chapter Four.

Methods of improving the construct validity of this study were discussed in this section, including the establishment of a chain of evidence and the triangulation of multiple sources of case study evidence. Methods of enhancing the internal validity of this study are discussed next.

3.4.2 Internal validity

Internal validity refers to the extent to which the design of a study and the data it yields allows the researcher to draw accurate conclusions about causal relationships within the data and that extraneous factors are not causing the observed relationships (Leedy & Ormrod 2005; Yin 1994). While internal validity is more applicable to explanatory or descriptive cases than exploratory cases, internal validity may be extended to the broader issue of the researcher making inferences based on interview and documentary evidence (Yin 2003). As this case is based on a provisional research framework developed from prior theory, adopting a pattern matching approach in the data analysis phase (i.e., determining whether the various retention and progression factors uncovered in the literature were also evident in the interview data), enhanced the internal validity of this study (Riege 2003; Yin 2003). Methods of improving the external validity of this study are discussed next.

3.4.3 External validity

External validity is concerned with establishing the extent to which the results of a research study are applicable to situations beyond the study itself; that is, the generalisability of the findings (Leedy & Ormrod 2005; Yin 1994). The goal of case study research is not statistical generalisation, but rather analytical generalisation of case findings to some broader theory (Yin 2003). The analytical generalisation of this study was enhanced through the clear definition of the scope and boundaries of the study as presented in Section 1.6 (Marshall & Rossman 1989; Riege 2003) and by comparing the case study evidence with the provisional research framework during the data analysis phase process (Riege 2003). This allowed for the theoretical contributions of this research to be clearly outlined and generalised within the scope and boundaries of the research (i.e., postgraduate business students undertaking their studies by distance education). These theoretical contributions are discussed in Section 5.5. Methods of improving the reliability of this study are discussed in the following section.

3.4.4 Reliability

Reliability refers to the ability of a study to be repeated and the same results achieved (Amaratunga & Baldry 2001). Yin (2003, p. 39) suggests reliability can be enhanced by carefully documenting the procedures used in the case study and to make 'as many steps as operational as possible'. This was achieved for this study by closely adhering to an interview protocol (Yin 1994) and by using a case study database to 'provide a characteristic way of organising and documenting the mass of collected data' (Riege 2003, p. 83). Other methods of enhancing reliability utilised for this study included making audio recording of interviews (Nair & Riege 1995), careful and accurate transcription of the interview data (Peräkylä 2004) and having a peer review of the completed case study report (LeCompte & Goetz 1982) to ensure that the entire case study process was clearly described with adequate detail provided.

In Section 3.4, the issues of construct validity (Section 3.4.1), internal validity (Section 3.4.2), external validity (Section 3.4.3) and reliability (Section 3.4.4) of the case study methodology were discussed and methods of improving the validity and reliability of this study were presented. In Section 3.5, the limitations of case study research are acknowledged and addressed.

3.5 Limitations of case study research

This study utilised a single case study design, which was exploratory in nature and incorporated various embedded units of analysis; a rationale and justification for which was provided in Section 3.1. However, case study research has also received some criticism as a research method. These limitations of case study research are acknowledged and addressed in this section.

First, case study research has been criticised because of issues regarding the external validity, or generalisability, of the findings (Amaratunga & Baldry 2001; Woodside & Wilson 2003; Yin 2003), particularly when undertaking an exploratory single case

study. As discussed in Section 3.2.7, the analytical generalisability of this study was enhanced through clear definition of the scope and boundaries of the study (Marshall & Rossman 1989; Riege 2003) and by comparing the case study evidence with prior theory during the data analysis process (Riege 2003). External validity can also be enhanced by replicating the case study in different settings (Yin 2003) which, while not incorporated into the design of this study, is recommended for further research.

Second, case studies have been criticised as being difficult and time consuming to conduct (Eisenhardt 1989; Parkhe 1993; Yin 2003). However, an appropriate data collection and analysis design can minimise these issues, as was the case in this research study. Further, the logistics of acquiring documents and archival records was made easier due to the researcher being employed by the case institution.

Third, case study research has the potential to lead to overly complex theories (Eisenhardt 1989). In order to address this limitation, theories and specific research questions and issues have been developed prior to conducting the research. In addition, this research is based on a well-structured interview protocol (Section 3.3.2) and research questions and issues developed from relevant literature.

Finally, the resulting theory from the case study research may be narrow and idiosyncratic which influences the direction of the findings and conclusions while providing little basis for scientific generalisation (Eisenhardt 1989; Hammersley & Gromm 2000; Yin 1994). Thus, this research should not be considered to be final theory regarding the factors impacting upon the retention and progression of postgraduate students undertaking their studies by distance education. Rather, it should be considered to be an exploratory investigation which may be validated through subsequent empirical research.

In this section, four limitations of the case study method were acknowledged and addressed. In Section 3.6, ethical considerations for this study, including risk to interviewees, explaining the expected benefits of the research, obtaining informed consent and the need for confidentiality are discussed.

3.6   Ethical considerations

Permission to conduct this research study was obtained from USQ management prior to the commencement of any data collection. Additionally, ethical clearance was obtained from USQ prior to the commencement of research interviews with students and staff members. The following ethical issues needed to be considered when undertaking this research study:

- ensuring that interviewees are not put at any undue risk;
- ensuring that interviewees understand the expected benefits of the research;
- the need to obtain informed consent; and
- the need to ensure interviewees' anonymity and confidentiality.

(Cooper & Schindler 1998; Leedy & Ormrod 2005)

As this study only required interviewees to discuss their experiences, it can be considered a low risk study because the risk involved in participating in the study is not 'appreciably greater than the normal risk of day-to-day living' (Leedy & Ormrod 2005, p. 101).

At the commencement of each interview, the purpose and expected benefits of the research was explained to the interviewee. The researcher was careful to not overstate or understate these benefits, so the interviewee should not have been inclined to exaggerate their answers (Cooper & Schindler 1998). Full disclosure of the nature of the research was made to each interview interviewee, eliminating the possibility of deception and any associated risk (Cooper & Schindler 1998). An information sheet containing a summary of the research project was given to each participant (Appendix E) and each interviewee was required to sign an informed consent form prior to the commencement of the interview (Appendix F).

All interviewees were assured of complete anonymity and confidentiality. Only the researcher, his research supervisors and his research assistant had access to the original interview recordings and de-identified interview transcripts. All electronic records were stored on a password protected computer, with the interview data and the file identifying individual interviewees stored in separate locations on the computer (Cooper & Schindler 1998). Additionally, all printed materials and hard-copy documents generated throughout the course of this research study were stored in a locked filing cabinet in the researcher's home. In order to maintain interviewees' rights to privacy, this dissertation does not identify individual interviewees. Further, care was taken to ensure that individual interviewees cannot be identified when direct quotes from their interview transcripts were used in the construction of the case study report.

In Section 3.6, ethical considerations when conducting this research, including risk to interviewees, explaining the expected benefits of the research, obtaining informed consent and the need for confidentiality were identified. A summary of this chapter is presented in Section 3.7.

3.7   Summary of Chapter Three

In Chapter Three, the research methodology for this study was described in detail. This chapter commenced with a justification for a qualitative exploratory research design (Section 3.2). Next, an overview of the case study methodology used for this research was presented (Section 3.3) including a justification for a case study research design and a detailed discussion of the interview protocol used for this study, pilot interviews, embedded single case study design, semi-structured in-depth interviews, interviewer and interviewee bias, selection of interviewees, interview procedures and the data analysis method. Next, measures to improve the validity and reliability of this research were presented (Section 3.4) and limitations of case study research were acknowledged and addressed (Section 3.5). Finally, ethical considerations for this research were identified (Section 3.6).

The findings of this research are presented in Chapter Four.

Chapter Four

RESEARCH FINDINGS

4.1 Introduction

In the previous chapter, the research methodology used to explore the research question was presented. In this chapter, the factors identified through this research as impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education at USQ are discussed. This chapter commences with a description of the interviewees in this study (Section 4.2). Next, the impact of situational factors (Section 4.3), institutional factors (Section 4.4) and dispositional factors (Section 4.5) on the retention and progression of postgraduate business students undertaking their studies by distance education are analysed and discussed. Finally, a summary of this chapter is presented (Section 4.6). An outline of this chapter is presented in Figure 4.1 on the following page.

Figure 4.1: *Outline of Chapter Four*
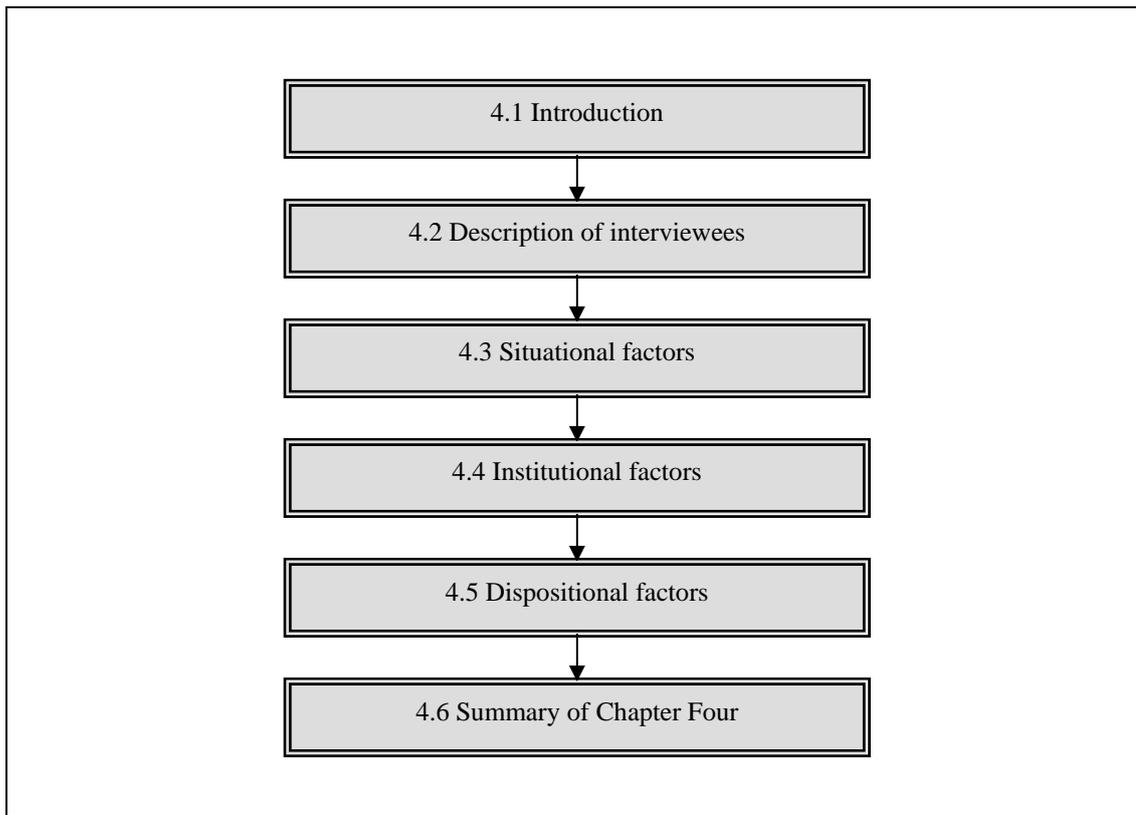
Source: *developed for this research*

4.2 Description of interviewees

The primary source of information used to address the research question was obtained from a series of semi-structured, in-depth interviews conducted with six active external postgraduate students progressing at a normal rate, six students progressing at a slower than desired rate and six students who have withdrawn from study at USQ. For the purposes of reporting in this study, these students will be referred to as 'active students', 'delayed progression students' and 'exited students' respectively. When the verbatim responses of specific interviewees are given in this chapter, each interviewee is identified by a reference code that corresponds to the profile of interviewees presented in Appendix D. This allows each interviewee to be identified for the purposes of reporting whilst maintaining their anonymity.

In order to easily identify the particular characteristics of each interviewee at a glance, interviewees have been coded *M* for male and *F* for female, and interviewees with dependent children have been marked with an asterisk (*). Active students are coded A1 through A6, delayed progression students D1 through D6 and exited students E1 through E6. USQ staff members are coded S1 and S2 for reporting purposes. For example, a particular quote may be attributed to interviewee *A1M** which refers to an active male student with dependent children.

The student sample included eleven males and seven females. Of these interviewees, seven had dependent children living at home while the remaining eleven had no dependent children. All of these interviewees were in full-time employment when they were undertaking their postgraduate business distance education studies. A sample of male and female students was selected so that any potential gender effect impacting upon students' retention and progression decisions could be identified. Moreover, in order to explore the potential impact of gender and dependent children on student retention and progression in this context, students of both genders and also with and without dependent children were included in this research. While it appeared from the data analysis that few differences existed between groups in terms of the factors impacting upon their retention and progression, instances in this study where differences between groups were apparent have been identified and discussed in the findings.

In this section, the interviewees in this study were described. In the following section, a discussion of the institutional factors impacting upon postgraduate distance education student retention and progression is presented.

4.3   Situational factors

The situational factors revealed in the literature to have an impact upon student retention were identified and discussed in Section 2.3.1. The impact of each of these situational factors on the retention and progression of interviewees in this study are discussed in the following sections:

- Students' employment status and workload (Section 4.3.1)
- Student's family commitments (Section 4.3.2)
- The health of the student (Section 4.3.3)
- Financial pressures (Section 4.3.4)
- The independent study context (Section 4.3.5)

The impact of these situational factors is summarised in Table 4.1 on the following page and then discussed in turn, commencing with a discussion of the impact of employment status and workload on postgraduate distance education student retention and progression. As discussed in Section 3.3.2, the impact of each factor is categorised as being an enabler (i.e., improves student retention or progression) or an obstacle (i.e., has a negative impact on student retention or progression).

Table 4.1: *Summary of situational factors identified by interviewees*

Factor	Impact	*A1M**	*A2M**	*A3M*	*A4M*	*A5F*	*A6F*	*D1M**	*D2M*	*D3M*	*D4F**	*D5F*	*D6F*	*E1M**	*E2M*	*E3M*	*E4M*	*E5F**	*E6F*	*Total*
		Active (A)						*Delayed progression (D)*						*Exited (E)*						
Students' employment status and workload	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	12
The student's family commitments	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	✓	✓	x	✓	x	x	✓	x	x	x	✓	x	5
Financial pressures	*Enabler*	✓	✓	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
The health of the student	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	x	✓	x	x	x	1
The independent study context	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Total	*Enabler*	1	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2
	Obstacle	x	x	x	x	x	x	2	2	1	2	1	1	2	1	2	1	2	1	18

Note: a tick (✓) in each column indicates that the respective situational factor was identified by the interviewee as having impacted upon their retention or progression whilst a cross (x) indicates the factor was not relevant to their retention or progression.

Source: analysis of interview data

4.3.1 Students' employment status and workload

Employment and workload were identified by a total of 12 interviewees (six delayed progression students and six exited students) as the most critical obstacle to their retention and progression (as shown in the total column in Table 4.1). Furthermore, both staff members (interviewees S1 and S2) believed that workload was the most critical factor impacting upon student retention and progression. Interviewees believed that their employment status (i.e., working full-time) and the associated workload had a detrimental impact on their retention and progression in their postgraduate business studies. Often, there was a minimal performance expectation from their employers and the dedications needed on work related tasks and activities could easily take priority over their studies. One interviewee (E4M) revealed that he withdrew from his studies primarily because he '*was starting a new job in the public service, so I wanted to make sure that I dedicated myself to that*'. This was further supported by interviewee E1M*, who indicated that the main reason for his withdrawing from his studies was that '*I couldn't handle all the work, as the situation in my working environment was difficult at the time*'. In addition, heavy or unexpected increase in workload could also impact on the rate of progression and possibly the withdrawal from the studies. One interviewee (E2M*) stated that '*I just got busier with work and I basically didn't have the time in the day to dedicate to my studies.*' Interviewee D1M* also agreed that his workload was a key factor impacting upon his rate of progression, suggesting that he was '*only doing one subject this semester due to workload commitments at work.*'

The findings from the in-depth interviews revealed that employment pressures had a major impact on the retention and progression of postgraduate business students undertaking his studies by distance education was further supported by data from the USQ Exit Survey (n=11). For example, one exited student in the survey indicated that he withdrew from his studies because '*I moved to being self-employed and could no longer spend the amount of time required*', while another revealed that he was forced to withdraw from his studies primarily because '*I was working full-time and had a part time job.*' These findings were in line with a number of prior studies (e.g., Mason 2001; Mason & Weller 2000; Powers & Mitchell 1997) which concluded that student employment and its impact on the time available for students to study was one of the primary reasons for student withdrawals in tertiary education.

On the other hand, being fully employed did not necessarily lead to student withdrawal or delayed progression as all six of the active students interviewed indicated that they had been able to successfully balance their employment with their studies. This could be attributed to their ability to better manage their time and the extra efforts and sacrifices that they had made, in order to continue with their studies. Interviewee A1M* mentioned that '*I successfully completed my entire MBA by dedicating my lunch time for study*', while another interviewee (A3M) found that scheduling a few hours every night for study helped him balance his study with his employment. This is in line with prior research, which proposed that students whose academic lives are well-integrated with their extra-institutional lives are less likely to withdraw from their studies (Tresman 2002).

Although the impact of this factor differed between active students and delayed progression and exited students, which may be due to individuals' ability to integrate their academic and extra-institutional lives, the findings of this research did not reveal any clear pattern in responses by gender or dependent status.

> *As with the majority of interviewees in this study, I believe that the major factor impacting upon my progression was the high workload in my professional career, as this effectively limited the amount of time which I could dedicate to my studies. I was eventually able to successfully balance my workload with my study by scheduling several hours of 'dissertation time' every evening and taking periods of recreational leave from work in order to concentrate on my studies.*

4.3.2   Students' family commitments

Family commitments were identified by five interviewees (three delayed progression students and two exited students) as being a factor which had a detrimental impact upon their retention and progression, and was considered by interviewees to be the second-most critical situational factor after employment and workload (as shown in the total column in Table 4.1). Four of these five interviewees identified that having dependent children at home, who require a great deal of attention, resulted in them not having adequate free time in which to undertake their postgraduate business studies. One interviewee with dependent children (E5F*) revealed that she withdrew from her studies primarily because she '*had to go back to work and couldn't provide for my kids and study as well*' and added that '*all of the home life, work and study added up.*' This was further supported by another interviewee with dependent children (D1M*) who indicated that he was '*only doing one subject this semester because of my family responsibilities.*' The findings from the in-depth interviews suggested that a lack of study time resulting from family commitments had a major impact on the retention and progression of postgraduate business students undertaking their studies by distance education was further supported by data from the USQ Exit Survey (n=11). For example, one survey respondent indicated that he withdrew from his studies because he '*could no longer spend the required amount of study time without it affecting [his] family life.*'

The findings of this research also suggested that having dependent children was not the only family commitment which could have a negative impact on student retention and progression. One interviewee who had no dependent children (D2M) indicated that he was progressing at a slow rate in his studies because he was '*getting married this semester, which has been taking up a lot of my time.*' The negative impact of family commitments on student retention and progression is supported by previous research which proposed that a lack of study time due to the presence of family commitments may impact on student retention and progression (e.g., Ashby 2004; Christie, Munro & Fisher 2004; Gibson & Graf 1992; Packham et al. 2004; Truluck 2007).

In contrast to these findings, 13 interviewees (six active students, three delayed progression students and four exited students) believed that family commitments had no major impact on their retention and progression. The majority of interviewees believed this to be the result of not having dependent children living at home. Interviewee A4M revealed that '*my kids are both grown up so they really didn't have an impact on my retention or progression.*' Furthermore, scheduling regular study time and family time allowed the two active student interviewees (interviewees A1M* and A2M*) with dependent children to persevere with their studies without neglecting their families. Interviewee A2M* revealed that he was able to persevere with his studies by '*allocating a couple of hours every night after the kids had gone to bed to study. Having that routine really helped me get through it*', while interviewee A1M* mentioned that he '*only studied during my lunchtimes at work so I could spend all of my time at home with my family.*' This is supported by the results of one prior study which found that students whose academic lives are well-integrated with their extra-institutional lives are less likely to withdraw from their studies (Tresman 2002).

> *As with the majority of interviewees in this research study, I do not believe that family commitments had an impact on my retention or progression because I do not have any dependent children.*

Hence, the impact of family commitments differed between interviewee categories in this research because active students appeared to be better at managing their time and integrating their academic and extra-institutional lives than their delayed progression and exited counterparts. Furthermore, the findings of this research suggested that interviewees who had dependent children were more likely to identify family commitments as an obstacle to their retention and progression than those who did not have dependent children. However, the findings of this research did not reveal any clear pattern in responses related to the gender of interviewees in regards to the impact of this factor on the retention and progression of postgraduate business students undertaking their studies by distance education.

4.3.3   The health of the student

The health of the student was identified by one exited student as having had an impact on his retention. The interviewee (E3M) revealed that an injury that he sustained was a major contributor in his decision to withdraw from his studies because he '*severely injured my back and ended up in hospital for an extended period of time*' and '*was simply physically unable to continue with my studies and had to drop out.*' Document analysis revealed that students enrolled with the case institution are able to defer assessment items due to poor health (USQ 2008a; 2008b; 2008c). When asked about why he did not defer his studies instead of withdrawing outright, the interviewee (E3M) indicated that he believed that his illness was too serious to continue with his studies because '*even with a deferment I was just going to be out of action too long [several months] to pay enough attention to my studies.*' The interview findings which indicated that poor health might have a negative impact on student retention and progression was further supported by information obtained from the Exit Survey (n=11), with one survey respondent indicating that he '*reluctantly withdrew from the course due to a heart-related illness.*'

This is in line with prior research which proposed that students in poor health may be unable to continue with their studies (Christie, Munro & Fischer 2004; Simpson 2004).

> *I was unable to study for approximately four weeks whilst undertaking my postgraduate business studies due to a period of hospitalisation. In contrast to the exited student interviewed in this study, I was able to defer my assessment tasks until such time that my health had improved. I believe that allowing me to defer my assessments had a positive impact on my retention and progression. I would have otherwise been required to withdraw from the course due to my inability to study as a result of my ill health.*

Although the 17 remaining interviewees in this study believed that their health had not had an impact on their retention and progression, it appeared from this research that these interviewees held this particular belief because they had not experienced an illness severe enough to serve as an obstacle to their retention or progression. Interviewee A4M indicated that her health had not impacted upon her retention and progression because she '*never really got that sick while I was studying*' while interviewee E1M* revealed that he '*was only ever sick for days at a time...never long enough to impact on my studies.*' Because only one interviewee indicated that health problems contributed to his withdrawal, it appeared that there is no pattern in responses regarding the impact of this factor based on interviewee category, gender or dependent status.

4.3.4   Financial pressures

None of the interviewees in this study identified financial pressures as having impacted upon their retention and progression. Often, this appeared to be due to the fact that all interviewees in this study were employed full time whilst studying part time and were thus had no issues with paying their course fees upfront. Interviewee D2M indicated that '*finances have never been a problem because I'm working full-time while I'm studying.*' In some cases, this appeared to be due to the fact that students were undertaking their studies as Commonwealth supported students who were able to defer their course fees. For example, interviewee D5F revealed that '*cost was never an issue for me because I have been deferring my course fees through HECS [Higher Education Contribution Scheme].*'

> *Financial pressures did not have any impact on my retention or progression because, as with the interviewees in this research, I was working full time in a professional position whilst undertaking my postgraduate business studies.*

For some interviewees financial pressures did not have an impact upon student retention and progression because their employer was paying for them to undertake their postgraduate business distance education studies. Interviewee A2M* revealed that '*financial pressures never really had an impact on me because my work paid for me to do the study.*' This finding suggests that financial support from an employer can serve as an enabler to postgraduate business student retention and progression. These findings supported prior research (e.g., Ashby 2004; Christie, Munro & Fisher

2004) which proposed that financial issues do not have as great an impact on student retention as other obstacles and that provision of student financial assistance in the form of grants or scholarships, in this case a grant from the students' employer, can have a positive impact on student retention (e.g., Bettinger 2004; DesJardins, Ahlburg & McCall 2002). However, these findings are in contrast to other prior studies (e.g., Palmer 2001; Yorke 1999; Yorke et al. 1997) which proposed that financial pressures are a major obstacle to student retention. It should be noted, however, that the majority of research proposing a link between financial pressures and withdrawal were not conducted in a distance education postgraduate context, which may account for the differences in these findings.

It appeared from these findings that there was no clear pattern in responses based on interviewee category, gender or dependent status in regards to the impact of this factor on student retention and progression.

4.3.5   The independent study context

The independent study context was not identified by any interviewees in this study as having impacted on their retention or progression. This appeared to be largely the result of the fact that, as postgraduate students, the majority of interviewees had successfully undertaken prior studies by distance education in the past and hence had no difficulties studying postgraduate courses by distance education. Interviewee E1M* revealed that '*I undertook most of my undergraduate studies by distance education so I am quite comfortable studying off campus*', while interviewee A2M* suggested that '*I don't have a problem studying by distance as I completed some undergraduate subjects through USQ a few years ago.*' Furthermore, some interviewees believed that the high quality of the distance education materials provided by the case institution enhanced their ability to study independently. In regards to his ability to study independently, interviewee A5F revealed that '*all that I had to do was follow the instructions provided in the introductory book and read the appropriate readings and I was able to pass the course.*' This was supported by interviewee D4F* who revealed that '*the [teaching] materials were all I needed to study, because all of the information was there and it was really clearly set out.*'

> *The independent study context did not pose a barrier to my retention or progression because I had successfully undertaken distance education studies in the past and was comfortable in my ability to study independently.*

These findings were in contrast to one prior research study (Gibson & Graff 1992) which proposed that the independent study method presented a major obstacle to distance education student retention.

There were no clear response patterns regarding the impact of this factor on student retention and progression due to interviewee category, gender or dependent status.

4.3.6   Summary of situational factors

This section addressed three situational factors identified by interviewees as having an impact on their retention and progression, including the employment status of the student (Section 4.3.1), family commitments (Section 4.3.2) and the health of the student (Section 4.3.3). Two other situational factors were identified as having little or no impact on student retention and progression, including financial pressures (Section 4.3.4) and the independent study context (Section 4.3.5). Employment pressures emerged as a key factor impacting upon student retention and progression as the majority of interviewees indicated that employment pressures contributed to their withdrawal or delayed progression. However, effective time management allowed the majority of active students to successfully balance their professional and academic lives. Family commitments also emerged as having an impact on student retention and progression due to students not having adequate time to complete their studies. However, the findings of this research indicated that the impact of family commitments on retention and progression could be minimised through effective time management. The health of the student was also identified as a factor which might have a negative impact on student retention and progression in this context, although financial pressures and the independent study context did not appear to have an impact on the retention and progression of the interviewees in this study.

Furthermore, the findings of this research suggested that students who withdrew from their studies based on situational factors might return to study once their personal issues have been resolved or addressed, as two students in the USQ Exit Survey (n=11) indicated that they intended to return to study when they had been able to address the situational factors which had impacted negatively on their retention. For example, one exited student suggested that she withdrew from her studies because she was required to travel extensively for work and could not find the time to study. However, she indicated that '*I would love to start doing some units again if I get to a point when I'm in town more*.' Similarly, another exited student indicated that she intended to return to study when his/her situation at work becomes less hectic, which is in line with prior research (Pompper 2006).

In the following section, the impact of institutional factors on the retention and progression of postgraduate business students undertaking their studies by distance education is discussed.

4.4   Institutional factors

The institutional factors revealed in the literature to have an impact upon student retention were identified and discussed in Section 2.3.2. The impact of each of these institutional factors on the retention and progression of interviewees in this study are discussed in the following sections:

- Distance education program design (Section 4.4.1)
- Relevance of the program (Section 4.4.2)
- Student support systems (Section 4.4.3)
- Face-to-face student orientation programs (Section 4.4.4)
- The responsiveness of academic staff (Section 4.4.5)

The impact of these institutional factors is summarised in Table 4.2 on the following page, and discussed in turn in the following section commencing with distance education program design.

Table 4.2: *Summary of institutional factors identified by interviewees*

Factor	Impact	Active (A)						Delayed progression (D)						Exited (E)						Total
		A1M*	*A2M**	*A3M*	*A4M*	*A5F*	*A6F*	*D1M**	*D2M*	*D3M*	*D4F**	*D5F*	*D6F*	*E1M**	*E2M*	*E3M*	*E4M*	*E5F**	*E6F*	
Program design: opportunities for student interaction	*Enabler*	x	✓	✓	x	✓	✓	✓	✓	x	x	x	✓	x	✓	x	x	x	✓	9
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Program design: course delivery methods	*Enabler*	x	✓	x	✓	x	x	x	✓	x	x	x	x	x	x	x	x	x	✓	4
	Obstacle	x	x	x	x	x	x	x	x	✓	✓	x	x	✓	x	x	x	x	x	3
Program design: inflexibility in student assessment	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	x	x	✓	x	x	x	✓	x	✓	x	✓	x	4
Relevance of the program	*Enabler*	✓	✓	✓	✓	✓	✓	x	x	x	x	x	x	x	x	x	x	x	x	6
	Obstacle	x	x	x	x	x	x	x	x	x	✓	x	✓	x	✓	x	✓	✓	x	5
Student support systems	*Enabler*	x	✓	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	1
	Obstacle	x	x	x	x	x	x	✓	x	x	✓	✓	x	x	x	x	x	✓	x	4
Face-to-face student orientation programs	*Enabler*	x	✓	x	x	x	x	x	✓	✓	x	x	x	✓	x	x	x	x	x	4
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
The responsiveness of academic staff	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	✓	x	x	x	x	x	x	x	x	x	x	x	1
Total	*Enabler*	**1**	**5**	**2**	**2**	**2**	**2**	**1**	**3**	**1**	**x**	**x**	**1**	**1**	**1**	**x**	**x**	**x**	**2**	**29**
	Obstacle	**x**	**x**	**x**	**x**	**x**	**x**	**2**	**x**	**2**	**3**	**1**	**1**	**2**	**1**	**1**	**1**	**3**	**x**	**17**

Note: a tick (✓) in each column indicates that the respective institutional factor was identified by the interviewee as having impacted upon their retention or progression whilst a cross (x) indicates the factor was not relevant to their retention or progression.

Source: analysis of interview data

4.4.1　Distance education program design

Aspects of the design of the distance education program were identified by 12 interviewees (five active students, four delayed progression students and three exited students) as having had an impact, either positive or negative, on their retention towards their academic program. Three themes related to the impact of the distance education program design on student retention and progression emerged from this research including (1) opportunities for student interaction, (2) course delivery methods (3) inflexibility in student assessment. These key themes are discussed in the following section, commencing with a discussion of the impact of providing opportunities for student interaction.

Opportunities for student interaction. Opportunities for interaction with other students and academic staff members was identified by nine interviewees (four active students, three delayed progression students and two exited students) as having had a positive impact on their retention and progression. The majority of interviewees believed that forming a study group in their local region helped to improve their retention and progression because these study groups allowed students to study together and help each other with their understanding of the course content. One interviewee (D1M*) explained that interacting with his fellow students improved his retention because '*it really helped us understand the course content, being able to throw ideas around.*' In addition, establishing a sense of camaraderie between students could also serve to improve student retention and progression in distance education courses. One interviewee (A6F) stated that '*it's important that you build a friendship with the people that you're studying with.*' This was further supported by another interviewee (A2M*) who indicated that forming a study group with his fellow students '*helped me persevere because I learned a lot and it was good to have the comradeship as well.*'

These interviewees indicated that they did not want the distance education provider to actively create these learning communities. Rather, they believed that the distance education provider should provide a service showing areas where distance education students are located, which would allow students to informally establish learning communities. One interviewee (E6F) suggested that '*it would be good if we could get the email addresses of the other students in my area so we could possibly get a study group together.*' In addition to informal study groups, attendance at voluntary residential schools also appeared to have a positive impact on student retention and progression. One interviewee (A3M) indicated that '*successfully completing my Economics course can be credited to the input from the lecturers at the residential school.*' Residential schools might help students persevere or progress in their studies because they provided an opportunity to clarify academic issues with teaching staff. One interviewee (A6F) indicated that residential schools benefited her retention and progression because she was '*able to get feedback and information from the lecturers as to what was expected in the course.*' This was supported by another interviewee (E6F) who indicated that she was able to persevere with her studies as long as she did because '*the residential schools filled in a lot of the blanks about the units.*'

Providing distance education students with the opportunity to attend on-campus lectures also appeared to have a positive impact on their retention and progression because, like study groups and residential schools, it allowed them to build relationships with fellow students and teaching staff and clarify any issues they had with the course content. One interviewee (A2M*) believed that attending on-campus lectures had a positive impact on his retention and progression because '*it was helpful for me, getting to know the other students*', while another interviewee (A5F) indicated that '*going on campus gave me a chance to make bonds with the other students, which I found helped me stick with my studies.*' Interaction with fellow students and lecturers also had a positive impact on student retention and progression when it was online interaction via electronic course discussion boards. One interviewee (D2M) believed that interacting with fellow students on course discussion boards helped him persevere with his studies because '*it eliminated the feeling that I was alone and helped me to continue with my degree.*' Another interviewee (D1M*) revealed that participating in online discussions was beneficial for him because '*they were a great way to form a study group with your fellow students.*' These findings were consistent with a number of prior studies (e.g., Gibson & Graff 1992; Lesht & Shaik 2005; Mabrito 2004; Moller 1998; Vines 1998; Wang, Sierra & Folger 2003; Witt & Wayne 1998) which proposed that activities designed to minimise the perceived distance between teachers and classmates inherent in distance education and encourage interaction might improve student retention.

In contrast, the remaining 10 interviewees (three active students, three delayed progression students and four exited students) did not believe that interaction with other students or academic staff had any impact on their retention and progression. All of these interviewees considered themselves to be independent learners and hence did not believe that they needed interaction with other students, or in many cases their lecturers, to be successful in their studies. One interviewee (A4M) indicated that '*I didn't need to study with other people to get through because the study materials provided to me were really comprehensive.*' This was supported by another interviewee (E1M*) who believed that '*I prefer to just study on my own, in my own time and at my own pace.*'

Furthermore, some of these interviewees did not believe that interaction via electronic course discussion boards had any impact on their retention and progression because they felt that the lecturer did not play an active role in online discussions. One interviewee (A4M) believed that '*the discussion boards had no impact [on his retention and progression] because not many lecturers use them.*' This was supported by another interviewee (D5F) who stated that '*I don't want to participate in discussions that are going up the wrong path. I think there needs to be more guidance from lecturers.*' A USQ staff member (S1) indicated that the Faculty of Business does have a documented policy which specifies that academic staff must actively participate in course discussion boards, they must post messages at least three times every week throughout the semester and must respond to questions and issues from students within 48 hours of receiving them. However, the interviewee acknowledged that '*a lot of course leaders don't participate in discussion boards*'

The findings of this research did not reveal any clear pattern in responses based on interviewee category, gender or dependent status in relation to this factor. Rather, it appeared that the impact of this factor on student retention and progression was related to the individual learning style of each interviewee. Thus, learning style may be a new dispositional factor which impacts upon student retention and progression in the postgraduate business distance education student context. This is in contrast with a prior study (Gibson & Graff 1992) which concluded that learning styles did not differentiate degree program completers from non-completers.

> *Like some of my fellow postgraduate business students, I did not find any value in participating in study groups, nor was I an active participant on the course discussion boards in any of the coursework units which I was required to undertake for my Master of Business Research degree. I consider myself to be an independent learner and hence studying by myself at my own pace was preferable and hence I did not actively seek out contact with my classmates.*

Course delivery methods. The specific course delivery methods employed in the distance education program they were undertaking was identified by three interviewees (two delayed progression students and one exited student) as having had a negative impact on their retention and progression. For each of these interviewees, it appeared that the impact of a situational factor (e.g., inadequate time to study due to employment and/or workload pressures or family commitments) was exacerbated by a distance education delivery method that did not fit with the way that the interviewee would like to study. One interviewee (E1M*) indicated that a contributing factor to her withdrawal was that she '*spent all day reading at work, so when I get home the last thing I want to do is pick up a study book and read.*' This was supported by interviewee D3M who believed that '*the way the content was provided [in study books] had an impact on my ability to continue with my studies.*'

Four interviewees (two active students, one delayed progression student and one exited student) believed that the course delivery methods employed had a positive impact on their retention and progression because the delivery methods fitted well with the way they liked to study. Interviewee A4M mentioned that '*the structure of the study program helped me persevere with my studies because I study best by reading and writing.*' This was supported by another interviewee (D2M) who believed that his retention was improved because '*the [distance education] program was provided in the way that I prefer to study.*' These findings suggested that there was no optimal course delivery method for all distance education students and hence the flexibility of having a number of different study material options might be required in order to improve student retention and progression. This was in line with the findings of one previous study which suggested that flexibility was necessary in the structure of a distance education program to facilitate student retention and progression (Lesht & Shaik 2005). Document analysis revealed that senior leadership at USQ had considered flexibility to be the 'driving force for USQ's future' and has acknowledged that USQ's leadership in distance education had decreased over time. In response to this, senior leadership indicated a commitment to deliver additional flexibility by developing and delivering external teaching and learning materials which are more responsive to individual student needs (USQ 2007d, p. 38) although it is not clear what form these flexible services will take.

On the other hand, 12 interviewees (five active students, three delayed progression students and four exited students) did not believe that course delivery methods employed in the distance education program had any impact on their retention and progression. These interviewees indicated that while they found that the course delivery methods to be suitable for their study needs, they believed that a range of other factors not related to the course delivery methods had a greater impact on their retention and progression. Interviewee A1M* indicated that '*the program was fine, but I don't think it really had an impact either way*' while interviewee D1M* believed that '*my workload at time was the problem and I don't think that the way the program was delivered could have changed that.*'

The findings of this research did not reveal any clear pattern in responses by interviewee category, gender or dependent status in relation to this factor. It appeared that the impact of this factor was related to the particular learning style of each interviewee, which may represent a new dispositional factor impacting upon student retention and progression in this context.

Inflexibility in student assessment. Four interviewees (one delayed progression student and three exited students) identified inflexibility in student assessment as having a negative impact on their retention and progression (as shown in table 4.1). Many of these interviewees believed that they would fail their course if they were unable to complete an assessment item by the due date, which often occurred due to work pressures or family commitments. These interviewees chose to withdraw from their studies instead of failing a course and still having to pay tuition fees for it. One interviewee (D3M) revealed that his progression was negatively impacted because '*assignments and exams have to be done by a particular time, which has made things difficult when I have been busy at work.*' This was supported by another interviewee (E5F*) who indicated that '*the biggest hassle for me was the inflexible timeframes for assignments.*' The findings from the in-depth interviews suggested that inflexibility in student assessment deadlines had an impact on the retention and progression of postgraduate business students undertaking their studies by distance education and this was further supported by data from the USQ Exit Survey (n=11). One exited student in the survey indicated that he withdrew from his studies primarily because he '*couldn't get an assignment finished due to a death in the family*', while another exited student indicated that '*due to work commitments I could write neither of the assignments in time, so [I] had to fail.*'

An interview with interviewee S1 revealed that there is flexibility in assessment for students at the case institution who were unable to complete assessment items due to time pressures, stating that '*course leaders were encouraged to grant extensions for students who couldn't get their assignments in due to work-related reasons.*' This was supported by a section in several introductory books issued to postgraduate business distance education students, which stated that students who were unable to complete an assignment or examination due to medical, family/personal, or employment-related reasons could apply to defer their assessment (USQ 2008a; 2008b; 2008c). However, because inflexibility in assessment was identified by a number of interviewees in this research, it would appear that this message is not being received or comprehended by all of the interviewees.

> *I believe that my ability to persevere with my studies was largely due to the willingness of academic staff to grant assignment extensions. For example, in my second semester, I was extremely busy at work and was unable to complete my research proposal by the due date. Thankfully, the course leader was sympathetic of my situation and granted me a three month extension which allowed me to successfully complete the assessment task. I believe that this was a key factor influencing my retention, as I would have been forced to withdraw from the course if I was not granted this extension.*

In addition to inflexibility in assessment deadlines, the findings also suggested that inflexibility in the type of assessment items in a postgraduate business distance education program might also have an impact on student retention or progression. One interviewee (E1M*) indicated that he withdrew from his studies he believed that '*exams are unnecessary stressors. If the goal is to educate, I tend to learn by doing.*' This was supported by another interviewee (E5F*) who indicated that she withdrew from her studies because she does not '*necessarily perform as well when I'm under pressure due to the time constraints imposed in an exam.*' These findings were consistent with prior research findings which proposed that some students who withdrew from study typically demonstrate an inability to cope well with examinations (Heinmann 1984) and that flexibility would be required in a distance education environment in order to facilitate student retention (Lesht & Shaik 2005).

On the other hand, the remaining 13 interviewees (five active students, five delayed progression students and three exited students) believed that student assessment did not have an impact on their retention and progression. Each of these interviewees indicated that they were generally satisfied with the student assessment scheme in their respective courses, but instead believed that other factors had a greater impact on their retention and progression. For example, interviewee E6F indicated that student assessment did not have an impact on her retention or progression because she '*doesn't have a problem sitting for exams*' and '*it was more how busy I was with work that caused me to drop out.*'

The findings of this research did not reveal any clear response patterns regarding the impact of this factor on the retention and progression of postgraduate business distance education students by interviewee category, gender or dependent status.

4.4.2   Relevance of the program

A lack of perceived relevance of their studies to their career objectives was identified by six interviewees (two delayed progression students and three exited students) as having impacted negatively on their retention and progression in their postgraduate business studies. Often, interviewees withdrew or progressed at a slower than desired rate in their studies because they believed that the academic programs which they were undertaking did not help them to fulfil their career goals or provided them with useful knowledge and skills to benefit them in their present employment. One interviewee (E2M*) revealed that he '*probably would have continued with my studies if I thought that it would help me run my business.*' This was supported by interviewee D4F* who indicated that '*if I found that the course was irrelevant, it would make me consider leaving.*'

In some cases, it appeared that enrolling in an academic program that interviewees did not find relevant to their careers or employment might have been the result of inadequate pre-enrolment guidance on the part of the case institution to match the interviewee with the academic program most suited to their individual career goals and objectives. Interviewee E2M* revealed that '*I probably would have remained enrolled if USQ could have given me some career counselling to help me enrol in the right program for my needs.*' Similarly, interviewee E4M indicated that he withdrew from his studies partly because '*[USQ] didn't provide guidance as to the best subjects to choose that would help me with my business.*' This was in line with prior research which proposed that matching students to specific academic programs so as to best meet their individual needs may result in improved student retention (Gibson & Graff 1992). Interviewee S1 acknowledged this, indicating that '*we started understanding that students need much more counselling in terms of career decisions after working with students who repeatedly failed courses.*'

The findings of this research also suggested that a lack of career relevance in assessment items also had a negative impact on retention and progression. One interviewee (E4M) revealed that he '*would have been more motivated to continue if I had the chance to use my own organisation as a case for the assignment instead of just working on a case from the textbook.*' A similar view was shared by interviewee D6F, who revealed that '*having practical assessment items based on my organisation would have certainly motivated to get through my degree faster.*' These findings were in line with prior research which proposed that students were looking for experiences in their studies that would help them with their profession (Voss & Gruber 2006) and that a lack of comprehensive pre-enrolment information might lead to student withdrawal (e.g., Ashby 2004; McGivney 2003; Ozga & Sukhnandan 1998; Palmer & Trotter 2003).

On the other hand, six interviewees (all active students) specifically identified the relevance of their academic program to their career objectives as a factor which had a positive impact on their retention and progression because they believed that their studies would allow them to achieve a career goal for which they required a postgraduate business degree. One interviewee (A4M) revealed that he persevered with his studies primarily because '*the degree will help me to move to a higher position in the company.*' This was supported by interviewee A1M* who indicated that he '*needed this degree to become an accountant so I pressed on with it.*'

> *I believe that the importance of my postgraduate studies to my career objectives was a key factor in my retention and hence the relevance of the course content was an important retention factor. The Master of Business Research is a good example of a postgraduate business program which is customised to the individual career goals of each student, as it is structured as a major piece of organisational research which each student may undertake in their own organisation or industry sector. Hence, the study was highly relevant to my career.*

In contrast, seven interviewees (four delayed progression students and three exited students) did not believe that the relevance of the academic program had a major impact on their retention and progression. This appeared to be the result of a belief that other factors (typically situational factors) had a greater impact on their retention and progression than the relevance of their academic program. Interviewee D5F revealed that the relevance of the program did not have an impact on her retention and progression because '*the program was relevant, but I still had trouble coping with the workload*', while D1M* indicated his progression was delayed in spite of the relevance of the academic program because his '*family takes up a lot of my time regardless.*'

From these findings it is clear that the impact of this factor differed between active students and delayed progression and exited students because active students generally believed that their studies would have a beneficial impact on their employment. However, the findings of this research did not reveal any clear pattern in responses by gender or dependent status in relation to this factor.

4.4.3   Student support systems

Inadequate support systems for postgraduate business students undertaking their studies by distance education was identified by four interviewees (three delayed progression students and one exited student) as having a negative impact upon their retention and progression towards their academic program. This appeared to be due to a lack of proactive support systems in place within the case institution to provide assistance to students when they encountered difficulties with their studies. One interviewee (D5F) indicated that '*if the university had contacted me and asked me why I hadn't continued with my studies lately, then offered suggestions to help, then I might be more inclined continue study.*' This was supported by interviewee D4F* who stated that he was '*having troubles and did not enrol in courses for a couple of semesters, but USQ never tried to find out what the problem was.*'

The nature of the support provided also appeared to have an impact on the effectiveness of student support systems, with interviewees suggesting that impersonal approaches to student support (e.g., email, letters) failed to have a positive impact on their retention and progression. One interviewee (D5F) related that when he was having troubles with his studies and not enrolling in courses, he '*really didn't hear from USQ, apart from those letters that you constantly get which are just annoying.*' This was supported by interviewee E5F*, who stated that '*when I was having problems it would have helped if someone would have talked to me. Not through an email or a letter – I mean actually talked to me.*'

> *As with these interviewees, USQ never actively offered support to me as a postgraduate distance education student. However I understood the support services offered by USQ and would have approached USQ if I felt that I could have benefited from any of these services.*

One interviewee (A2M*) revealed that proactive personal support provided to him by the case institution had a positive impact on his retention and progression. He stated that '*I got a call from an administrative staff member in the first week of semester, which really put me back on track with my studies.*' It appeared that the impact of this factor was dependent on the level of personal and proactive student support provided to the interviewee by the case institution. These findings were in line with prior research (e.g., Gibson & Graff 1992; Simpson 2004) which proposed that early support and intervention were critical in terms of preventing student withdrawal and ensuring that students who were retained subsequently go on to successfully complete their course of study.

On the other hand, the 13 remaining interviewees (five active students, three delayed progression students and five exited students) did not believe that student support systems had a major impact on their retention or progression. Some interviewees suggested that this was because they considered themselves to be independent learners who did not require support. Interviewee A1M* believed that student support did not have an impact on his retention or progression because '*I found that I didn't really need any additional support to succeed with my studies because I'm a fairly independent student.*' Other interviewees indicated that student support did not have a major impact on their retention or progression due to a belief that the factors impacting upon their retention and progression could not be addressed by support from the distance education provider. When asked to clarify why she did not believe that student support had a major impact on her retention and progression, interviewee E5F* indicated that '*I mainly had to drop out because of the amount of work I had on while I was studying, which USQ really can't do much about.*' The findings of this research did not reveal any clear pattern in responses in relation to this factor based on interviewee category, gender or dependent status.

4.4.4   Face-to-face student orientation programs

Student orientation programs conducted face-to-face were identified by four interviewees (one active student, two delayed progression students and one exited student) as having a positive impact on retention and progression. Although there is currently no face-to-face orientation program for postgraduate business distance education students at the case institution (USQ 2007c, p. 8), interviewees expressed a belief that a face-to-face orientation program would have a positive impact on their retention and progression because it would allow them to meet other students and hence reduce the feelings that they were alone in their studies. One interviewee (A2M*) indicated that '*orientation would have been valuable for me because it would have allowed me to meet and get to know other students in the course.*' This was supported by interviewee D2M who stated that an orientation would be beneficial for his retention and progression because '*it's helpful to know that there are a lot of other people out there doing the same degree as me.*' These findings were in line with prior research which proposed that distance education students make lasting friendships through face-to-face orientation programs which helped to improve their retention (Lesht & Shaik 2005).

Furthermore, a face-to-face orientation program might have a positive impact on student retention and progression because it could encourage students to begin studying early in the semester and not get behind in their studies. Interviewee E1M* believed that orientation would have had a positive impact on his retention because '*it would have allowed me to get into the material right away and not get behind.*' In addition, an orientation program could also improve student retention and progression because it could provide an introduction to the course material and allow students to clarify issues with their lecturers. One interviewee (D3M) indicated that '*orientation would have been useful to get an overview of the course and possibly identify the assistance I would need in order to cope.*' This was supported by interviewee D3M, who believed that '*having the lecturer provide an introduction to the course material at the beginning of the semester would be helpful for me.*'

On the other hand, 14 interviewees (one active student, two delayed progression student and one exited student) did not believe that a face-to-face orientation program would have any impact on their retention or progression. Often, this was because interviewees did not see any value in meeting their classmates. Interviewee A4M, who identified himself as being an independent learner, indicated that '*I really have no need to meet the other students because I prefer to study by myself.*' Also, some of these interviewees believed that orientation would be unnecessary because of the detailed introductory materials provided to them, with interviewee D4F* suggesting that '*everything you need to get going is in the introductory materials.*'

These findings were in line with prior research which proposed that orientation programs for distance education students had a positive impact on their retention (e.g., Chander, Levin & Levin 2002; Derby & Smith 2004; Lesht & Shaik 2005) since effective student orientation programs could assist with establishing rapport between students and university staff, reinforcing the value of the learning community and establishing a sense of belonging to the university. However, orientation as a means of giving students a head-start with the academic aspect of their degree programs was not addressed in any of the literature reviewed for this study. The findings of this research did not reveal any pattern in responses regarding the impact of this factor by interviewee category, gender or dependent status.

4.4.5   The responsiveness of academic staff

A lack of responsiveness on the part of academic staff was identified by a single interviewee (D1M*) as having had a negative impact on his retention and progression because academic staff members were not available to provide assistance when he required it. The interviewee (D1M*) stated that '*sometimes it was weeks before the lecturer got back to me, which was a problem for me because I needed help with my course.*' This was supported by two exited students who completed the USQ Exit Survey (n=11). One student stated that she withdrew from her studies primarily because she '*was less than pleased with the support I received from my tutor*', while the other indicated that she withdrew primarily because '*the teacher finally got assessment out, four weeks after students were told that they would be available.*'

The remaining 17 interviewees (six active students, five delayed progression students and six exited students) did not believe that staff responsiveness had a major impact on their retention and progression. While most of these interviewees indicated that poor staff responsiveness did reduce the perceived quality of their educational experience, other factors (e.g., employment pressures, family commitments, irrelevance of the academic program) had a more critical impact on their retention and progression. One interviewee (E3M) revealed that '*not getting back to me quickly was frustrating but it didn't really have anything to do with me dropping out. That was mainly from being too busy at work.*' This was supported by another interviewee (D4F*) who stated that poor staff responsiveness '*was an annoyance, yes... but my employment workload and family commitments was what really delayed my studies.*' Interviewees who considered themselves to be independent learners also did not appear to consider staff responsiveness to be a major factor impacting upon their retention and progression. Interviewee A4M indicated that '*I've never needed to communicate with my lecturer so I wouldn't consider their responsiveness to have an impact.*' Furthermore, a career-based motivation to complete an academic program also seemed to have the potential to negate the impact of poor staff responsiveness on student retention and progression. Interviewee D2M indicated that he persevered with his studies in spite of poor staff responsiveness because he '*wouldn't become a CPA if I didn't finish my studies.*'

Prompt and responsive feedback from academic staff did not guarantee student retention and progression, as seven interviewees who believed that they generally received prompt and responsive feedback from academic staff at the case institution still withdrew from their studies or progressed at a slower than desired rate. One interviewee (D2M) revealed that '*I really can't blame my progress on staff responsiveness. My lecturers have been timely with their responses.*' A similar view was expressed by interviewee E2M* who indicated that academic staff responsiveness '*wasn't an issue because I don't think I ever spoke with a [lecturer] who wasn't fantastic.*' Rather, interviewees attributed their delayed progression and withdrawal to other factors, which were typically situational factors. Interviewee E2M* attributed his withdrawal to employment pressures, stating that he '*basically didn't have the time in the day to dedicate to my studies.*' This was supported by another interviewee (E3M) who indicated that '*I was forced to withdraw just because I got too busy at work to give my studies the attention they needed.*'

> *As with the majority of the respondents, I was largely satisfied with the responsiveness of the academic staff I encountered throughout my postgraduate business studies. On occasion I felt that some academic staff could have been more prompt at addressing my questions and concerns. However, like the students interviewed, I do not believe that this contributed in a major way to my delayed progression, nor do I believe that it ever made me seriously consider withdrawing from my studies.*

The findings from this research were generally in contrast to prior research (presented in Section 2.3.2) which proposed that a lack of responsiveness on the part of university staff was a key factor impacting upon student retention and progression (e.g., Johnson 1997; Helgesen & Nesset 2007; Lesht & Shaik 2005; Smith 2004; Vines 1998). Moreover, it would appear from these findings that staff responsiveness could be considered to be a *dissatisfier* in relation to Hertzberg's two-factor theory (DeShields, Kara & Kaynak 2005), in that prompt and efficient staff responsiveness did not prevent students from withdrawing from their studies, however poor staff responsiveness could potentially lead to student withdrawal and delayed progression.

These research findings did not reveal any clear patterns regarding the impact of this factor based on interviewee category, gender or dependent status.

4.4.6 Summary of institutional factors

In this section, a range of institutional factors that impact on the retention and progression of postgraduate external business students at USQ were discussed. These included distance education program design (Section 4.4.1), relevance of the program (Section 4.4.2), student support systems (Section 4.4.3), student orientation (Section 4.4.4) and the responsiveness of academic staff (Section 4.4.5).

Distance education program design emerged as a key factor impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education. A program design that minimises the perceived distance between staff and students while still retaining the inherent flexibility of distance education was considered to be optimal by interviewees in all three categories.

It appeared that the relevance of the program to students' career goals was a key factor in student retention and progression, as interviewees were more likely to withdraw from their studies or progress at a slower rate if they believed that the academic program in which they were enrolled would not provide them with an education experience which would be beneficial to their career. Interviewees believed that pre-admission career counselling would have assisted them with choosing a program that was appropriate for their career goals. Student support systems appeared to have an impact on student retention and progression in this context as a number of interviewees believed that the support offered to them was insufficient and could have contributed to their withdrawal and delayed progression. Student orientation also seemed to have a positive impact on student retention and progression as it facilitated contact with academic staff and fellow students and also provided a 'head start' with the course content at the commencement of the semester.

In contrast to the literature, staff responsiveness did not appear to impact directly on student retention or progression in this context, as interviewees who were satisfied with staff responsiveness still withdrew from their studies or progressed at a delayed rate while other students who were dissatisfied with responsiveness of academic staff at the case institution persevered with their studies regardless. In the next section, dispositional factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education are discussed.

4.5   Dispositional factors

The dispositional factors revealed in the literature to have an impact upon student retention were identified and discussed in Section 2.3.3. The impact of each of these dispositional factors on the retention and progression of interviewees in this study are discussed in the following sections:

- Student motivation to continue study (Section 4.5.1)
- Having clear and realistic goals and intentions (Section 4.5.2)
- Students' self-efficacy as learners (Section 4.5.3)
- Students' levels of satisfaction (Section 4.5.4)

The impact of these dispositional factors on the retention and progression of the interviewees in this study are summarised in Table 4.3 on the following page and then discussed in turn, commencing with a discussion of the impact of student motivation to continue study.

Table 4.3: *Summary of dispositional factors identified by interviewees*

Factor	Impact	Active (A)						Delayed progression (D)						Exited (E)						Total
		A1M*	A2M*	A3M	A4M	A5F	A6F	D1M*	D2M	D3M	D4F*	D5F	D6F	E1M*	E2M	E3M	E4M	E5F*	E6F	
Student motivation to continue study	*Enabler*	✓	✓	✓	✓	✓	✓	x	x	x	x	x	x	x	x	x	x	x	x	6
	Obstacle	x	x	x	x	x	x	x	✓	x	x	x	✓	✓	✓	✓	✓	x	✓	7
Having clear and realistic goals and intentions	*Enabler*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	x	x	x	x	x	x	12
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	✓	x	✓	x	✓	3
Students' self-efficacy as learners	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Students' levels of satisfaction	*Enabler*	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Obstacle	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Total	**Enabler**	2	2	2	2	2	2	1	1	1	1	1	1	x	x	x	x	x	x	**18**
	Obstacle	x	x	x	x	x	x	x	1	x	x	x	1	1	2	1	2	x	2	**10**

Note: a tick (✓) in each column indicates that the respective dispositional factor was identified by the interviewee as having impacted upon their retention or progression whilst a cross (x) indicates the factor was not relevant to their retention or progression.

Source: analysis of interview data

4.5.1 Student motivation to continue study

A lack of motivation to continue study was identified by seven interviewees (two delayed progression students and five exited students) as having had a negative impact on their retention and progression towards their degree program. Some of these interviewees believed that their de-motivation was due to a belief that their studies would not help them in their employment or allow them to further their career (as previously discussed in Section 4.4.2). Interviewee (D6F) attributed her delayed progression to the fact that '*the courses I'm doing now aren't related to anything that I do in my job, and as a result I'm not that interested in studying.*' This was supported by interviewee E3M, who stated that '*I really didn't think that the study would help me in my business, so I dropped out – simple as that.*' Other interviewees believed that their de-motivation was exacerbated by the fact that they commenced their postgraduate business degree without a clear goal or reason for undertaking these studies in the first place (discussed in Section 4.5.2 on the following page).

Six active student interviewees indicated that they remained motivated to continue with their studies, often in spite of other obstacles, because they believed that their studies would provide them with useful skills for their current employment and also benefit their long-term career progression. Interviewee (A5F) revealed that '*I did feel like throwing in the towel occasionally, but I continued because I believed that the benefits of having the degree outweighed the inconvenience of having to study.*' Similarly, another interviewee (A2M*) believed that he remained motivated to continue with his studies so '*I could get a higher paying job so that I might be able to provide my family with a higher standard of living.*'

The remaining five interviewees (four delayed progression students and one exited student) believed that motivation did not have a major impact on their retention and progression because other seemingly insurmountable factors (e.g., employment pressures, family commitments) resulted in their delayed progression or withdrawal in spite of their motivation to continue study. Interviewee D5F revealed that she '*really wanted to study more but I was just finding it hard to fit everything in because of the amount of work I had on.*' These findings were in line with prior research (Houle 1961; Lauer 2002) which proposed that achieving outcomes such as more desired employment and similar key economic motives were key motivating factors in tertiary education participation.

> *I believe that I remained motivated due to a perception that having a postgraduate degree in business research would benefit my current employment and my future career prospects. I feel that this goal-related motivation encouraged me to persevere with my studies even when other factors such as workload pressures and dissatisfaction with the service provided by USQ made the prospect of studying increasingly difficult.*

The impact of this factor differed between active students and delayed progression and exited students, which appeared to be largely attributable to individually-held beliefs about the value of an academic program to interviewees' employment and career goals. No clear patterns were attributable to gender or dependent status in regards to the impact of this factor on retention and progression in this context.

4.5.2　Having clear and realistic goals and intentions

Not having clear and realistic goals and intentions for commencing their postgraduate business studies was identified by three interviewees (all exited students) as having been an obstacle to their retention and progression. This appeared to be the result of interviewees embarking on their postgraduate business degree without a clear goal or intention for why they were undertaking these studies, which in turn lead to them becoming de-motivated to continue with their studies (as discussed in Section 4.5.1). Interviewee E2M* revealed that '*I didn't need to progress in my job, I just thought it would be good to put some brain work in*', while interviewee E6F indicated that '*I wanted something to do while I was stuck at home while my kids were young.*'

Twelve interviewees (six active students and six delayed progression students) believed that having clear and realistic goals and intentions had a positive impact on their retention and progression. Interviewees generally believed that embarking on their studies with a clear goal, which was typically a specific career-related goal, resulted in them remaining motivated to continue with their studies. Interviewee A1M* indicated that his goal in undertaking a postgraduate business degree was '*to add a formal qualification to my experience so I can move ahead in the company*' while another interviewee (D2M) revealed that his goal was '*to go from being a bookkeeper to an accountant, which I needed a [Master of Professional Accounting] to do.*'

The remaining three interviewees (all exited students) believed that having a clear and realistic goal for undertaking a postgraduate business degree did not have an impact on their retention because other factors (typically situational factors) had a stronger negative impact on their retention. Interviewee E1M* revealed that '*I wanted the degree to improve my project management skills at work, but my workload meant that I wasn't able to continue.*'

These findings suggested that interviewees who did not have a clear and realistic goal for undertaking a postgraduate business program by distance education were more likely to withdraw from their studies than the interviewees who embarked upon their studies with a clear and specific career-related goal, as students with a clear and specific career goal appeared to be more likely to remain motivated to continue with their studies. Thus, it appeared that having clear and realistic goals and intentions for undertaking a degree could be considered an antecedent to student motivation in the postgraduate business distance education context.

> *As with the majority of interviewees, I embarked on my postgraduate business studies with a clear career-focused goal. I believe that this career goal, for which I required a postgraduate business degree, allowed me to remain motivated to continue with my studies and thus had a positive impact on my retention and progression.*

These findings were consistent with prior research (e.g., Seidman 2005; Voss & Gruber 2006; Watson, Johnson & Austin 2004) which proposed that having clear and realistic career goals and intentions was an important factor for student retention at university and also that students who were undertaking study to achieve specific career goals are more likely to persevere with their studies.

These findings revealed that exited students were more likely than their active or delayed progression counterparts to embark on their postgraduate business studies without a clear goal in mind. However, no patterns in the interview responses in relation to this factor appeared to be attributable to gender or dependent status.

4.5.3 Students' self-efficacy as learners

Self-efficacy (self-confidence) as a learner was not identified by any of the interviewees in this study as having had an impact on their retention or progression. It appeared that this was due to the fact that, as postgraduate students, the majority of the interviewees in this study had successfully undertaken tertiary studies in the past (as discussed previously in Section 4.3.5). Interviewee A3M revealed that '*I didn't have any worries about studying because I'd already completed my undergraduate studies by distance education*' while interviewee D1M* indicated that '*I was quite comfortable with my ability to study because I had done well in the course I took last semester.*'

> *I had no lack of self-confidence in my abilities to study a postgraduate business degree by distance education as I had successfully undertaken undergraduate business studies previously.*

In contrast to these findings, one exited student who completed the USQ Exit Survey (n=11) indicated that he chose to withdraw from his studies because he believed that his age negatively impacted his ability to successfully complete his studies. He remarked that '*I am getting older and my cognitive abilities have waned, and as a consequence of this I believe that it is time for me to withdraw.*' This finding was consistent with prior research (Cross 1981; Gibson & Graff 1992) which proposed that a students' self-efficacy can be affected by a belief that they are too old to be students, thus resulting in their withdrawal from the program.

These research findings did not reveal any clear response patterns regarding the impact of this factor by interviewee category, gender or dependent status.

4.5.4 Students' levels of satisfaction

Although nine interviewees (four active students, three delayed progression students and two exited students) expressed some level of dissatisfaction with the educational service provided to them by the case institution, these interviewees unanimously indicated that these feelings of dissatisfaction had not led them to consider withdrawing from their studies or contributed to their delayed progression. This appeared to be due to interviewees persevering with their studies, in spite of being dissatisfied, in order to achieve a particular career goal which required them to have

a postgraduate business degree. Interviewee D2M, who was dissatisfied with academic staff responsiveness, explained that he persevered with his studies in spite being dissatisfied because he '*wouldn't become a CPA if I didn't finish the studies that I started.*' Another interviewee (A4M) who was dissatisfied with the quality of the study materials indicated that he persevered with his studies because '*the degree was useful as far as gaining employment.*' These findings suggested that in some cases, the motivation to achieve a career goal could potentially overcome feelings of dissatisfaction with the level of service delivered by a distance education provider. This finding suggested an order of factors, with career-related motivation to undertake a postgraduate business degree representing a higher-order factor than student satisfaction in terms of impacting upon student retention and progression.

Conversely, the remaining nine interviewees (two active students, three delayed progression students and four exited students) indicated that they were generally satisfied with the service provided to them by the case institution. It appeared from the findings of this study that, in spite of being satisfied, some interviewees believed that they were forced to withdraw from their studies or progress at a slower than desired rate due to factors other than satisfaction (e.g., employment pressures and family commitments). One satisfied interviewee (E6F) revealed that '*I was completely satisfied with the service provided by USQ, but dropping out was the best option for me because all my time was taken up with the business.*' This finding suggested that ensuring student satisfaction might not be sufficient to ensure student retention and progression, as the impact of other factors could result in an otherwise satisfied student withdrawing from their studies.

> *Like some of the students interviewed, I still did not consider withdrawing from my studies even at times when I was dissatisfied with the service provided to me by USQ. I believe that this was because I felt that the advantages of completing the degree (e.g., achieving my career goals) outweighed my feelings of dissatisfaction with the service that I received.*

These research findings were in contrast to a range of studies in the student retention and services marketing literature (e.g., Athiyaman 1997; DeShields, Kara & Kaynak 2005; Douglas, Douglas & Barnes 2006; Longden 2002; Petruzzellis, D'Uggento & Romanazzi 2006; Seidman 2005; Taylor 2005) which proposed that differing levels of student satisfaction had a strong impact on their retention.

These research findings did not reveal any clear response patterns regarding the impact of this factor by interviewee category, gender or dependent status.

4.5.5 Summary of dispositional factors

This section addressed the dispositional factors identified by interviewees as having an impact on retention and progression of postgraduate business students undertaking their studies by distance education at USQ. These factors included student motivation (Section 4.5.1), having clear goals and intentions (Section 4.5.2), students' self-efficacy (Section 4.5.3). However, students' level of satisfaction (Section 4.5.4) was identified by interviewees as not having an impact on their retention or progression. Student motivation emerged as a key factor impacting upon

student retention and progression in this context. The perception that their studies would not have a positive impact on their career appeared to lead interviewees to become de-motivated with their studies, while interviewees who believed that their studies would help them achieve their career goals were more likely to remain motivated to persevere with their studies.

Having clear goals also appeared to be a factor which had a positive impact on the retention of postgraduate business students, as students who embarked on their studies with a clear goal, typically a career goal which required a postgraduate business degree to achieve, were more likely to remain motivated to continue with their studies. Self-efficacy was not identified as a factor by any of the interviewees in this study. However, one exit survey respondent indicated that the factor had impacted upon his retention. This indicated that self-efficacy might have the potential to impact on student retention and progression in this context.

The findings of this research indicated that feelings of dissatisfaction with the service delivered did not have an impact on student retention and progression. Interviewees generally believed that they persevered with their studies due to their having career goals which required them to have a postgraduate business degree in spite of being dissatisfied with their educational experience. Findings also suggested that the impact of situational factors (e.g., workload pressures and family commitments) could result in otherwise satisfied students being forced to withdraw from their studies. These findings appeared to suggest an order of factors, with goal-based motivation to undertake a degree and situational obstacles representing higher-order factors than student satisfaction in terms of influencing postgraduate business distance education student retention and progression.

In addition to the dispositional factors identified in the provisional research framework (Figure 2.2) as having an impact on student retention and progression, the research findings in regards to the impact of distance education program design (Section 4.4.1) have suggested that students' individual learning styles may also have an impact on student retention and progression in this context.

A summary of this chapter is presented in the following section.

4.6   Summary of Chapter Four

This chapter commenced with a summary of the interviewees for this study (Section 4.2). Then, the factors identified by interviewees as impacting upon their retention and progression were explored in depth, including situational factors (Section 4.3), institutional factors (Section 4.4) and dispositional factors (Section 4.5).

In Chapter Five, conclusions from these research findings are presented, the theoretical and practical implications of these findings are discussed, limitations of this study are addressed and directions for further research are outlined.

Chapter Five

CONCLUSIONS AND IMPLICATIONS

5.1 Introduction

The purpose of this research was to investigate the factors which affect the retention and progression of postgraduate business students undertaking their studies by distance education. Conclusions and implications based on the outcomes of this research are presented in this chapter.

In Chapter One, the background to this research was discussed. The research question was defined and the research issues were identified. The research was then justified based on a lack of prior research into postgraduate business distance education student retention and the increasing importance of student retention. Next, an overview of the research methodology was given, definitions of key terms used throughout the study were identified and delimitations of the scope of the research were identified.

In Chapter Two, the literature relevant to the research question was reviewed and gaps in the theory were identified. Based on the existing literature, a provisional research framework was developed (Figure 2.2 on page 31). Based on the gaps in the student retention literature, two research issues were developed to investigate the research question. These research issues were:

> **RI1.**   *What factors impact upon the retention and progression of postgraduate business distance education students?*
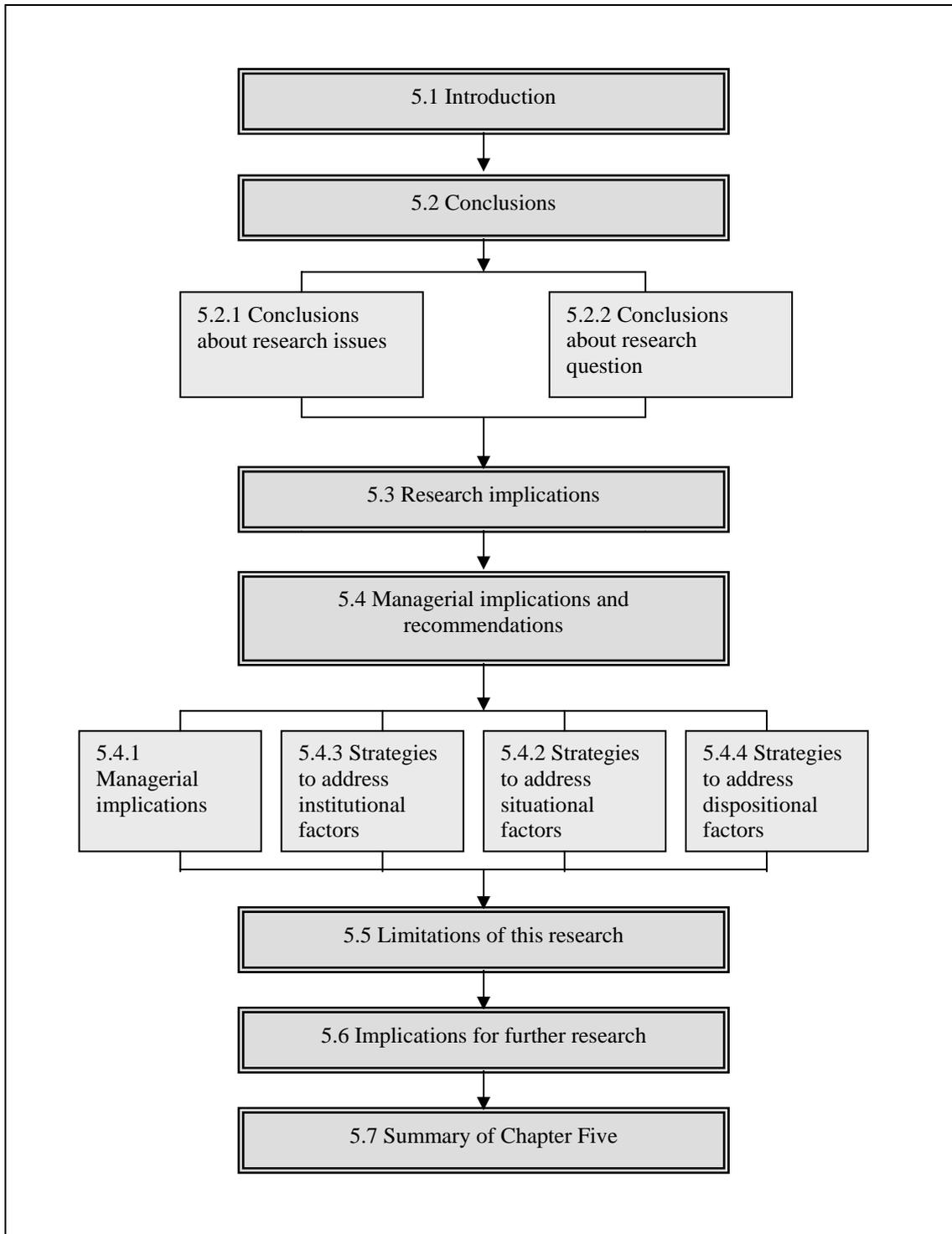
> **RI2.**   *How do these factors impact upon the retention and progression of postgraduate business distance education students?*

A discussion of the research methodology for this study was presented in Chapter Three. In this chapter, the qualitative exploratory case study research design was described and justified. This included a discussion of the interview protocol, pilot interviews, the embedded single case study design adopted for this study, semi-structured in-depth interviews including the potential for interviewer and interviewee bias, the stratified purposive sampling design used to select interviewees for the study, the interview procedures and the data analysis method. In addition, methods to enhance the validity and reliability of the findings, limitations of case study research and ethical issues were outlined.

In Chapter Four, an analysis of the case study data was presented including 20 in-depth semi-structured interviews, USQ Exit Survey data, documents relevant to the research issues and the researcher's reflections on the topic. This case study data was analysed according to the provisional research framework presented in Figure 2.2 on page 31 with factors identified as having an impact on postgraduate business distance education student retention and progression categorised as situational, institutional or dispositional factors. This allowed for factors to be identified, their effect on student retention and progression to be explored, and any differences between groups identified (i.e., interviewee category, gender or dependent status).

Chapter Five consists of six sections, outlined in Figure 5.1 on the following page. This chapter commences with conclusions about the research issues and the research question including a revised research framework based on the research findings (Section 5.2). Second, research implications arising from this study are discussed (Section 5.3). Third, managerial implications and recommendations for providers of postgraduate business degrees by distance education are presented (Section 5.4). Next, limitations of this research are acknowledged (Section 5.5) and implications for further research are presented (Section 5.6). Finally, a summary of Chapter Five is presented and conclusions regarding this research are drawn (Section 5.7).

Figure 5.1: *Outline of Chapter Five*


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                    │      5.1 Introduction        │
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                    ┌─────────────────────────────┐
                    │      5.2 Conclusions         │
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   ┌────────────────────┐        ┌────────────────────┐
   │ 5.2.1 Conclusions  │        │ 5.2.2 Conclusions  │
   │ about research     │        │ about research     │
   │ issues             │        │ question           │
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              └───────────────┬───────────────┘
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                    │  5.3 Research implications   │
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                    ┌─────────────────────────────┐
                    │ 5.4 Managerial implications  │
                    │    and recommendations       │
                    └─────────────────────────────┘
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5.4.1 Managerial implications

5.4.3 Strategies to address institutional factors

5.4.2 Strategies to address situational factors

5.4.4 Strategies to address dispositional factors

5.5 Limitations of this research

5.6 Implications for further research

5.7 Summary of Chapter Five

Source: developed for this research

5.2 Conclusions

This section highlights the contributions of this research to the student retention literature. In addition, the research findings presented in Chapter Four are compared and contrasted to the existing student retention literature discussed in Chapter Two to highlight similarities and differences.

5.2.1 Conclusions about research issues

The first research issue, '***What factors impact upon the retention and progression of postgraduate business distance education students?***' sought to identify and investigate the factors which impacted upon the retention and progression of postgraduate distance education business students. The second research issue, '***How do these factors impact upon the retention and progression of postgraduate business distance education students?***' sought to investigate the rationale behind these influencing factors and their relative impact on postgraduate distance education business student retention and progression. The findings in relation to these research issues will be discussed in accordance with the categories identified in the provisional research framework (Figure 2.2 on page 31) including situational factors, institutional factors and dispositional factors. Each of these is discussed in turn.

Situational factors. The findings of this research identified three situational factors which had an impact on the retention and progression of postgraduate business students undertaking their studies by distance education, including (1) students' employment status and workload, (2) family commitments, (3) health of the student and (4) financial pressures. Of these factors, employment status and workload was identified by interviewees as being the most critical situational factor while the health of the student was identified as being the least critical situational factor. The situational factors which appeared to have an impact on the retention and progression of external postgraduate business students were similar to the factors impacting upon mature aged student retention in other contexts addressed in the literature. These included employment pressures, family commitments and the health of the student (e.g., Ashby 2004; Kevern, Ricketts & Webb 1999; Packham et al. 2004; Simpson 2004; Tresman 2002; Yorke et al. 1997).

However, a key finding of this research was two of the situational factors identified in the literature (i.e., financial pressures and the independent study context) did not appear to have a major negative impact on the retention and progression of postgraduate business distance education students. It was proposed that students in this context did not find independent study to be a concern because the majority had successfully completed courses by distance education in the past. Financial pressures did not appear to have a negative impact in this context because all of the students interviewed in this study were studying part-time while in full-time employment, although employee-subsidised study emerged as a financial enabler in this context. The impact of work pressures emerged as a much stronger theme than it appeared in the literature, with exited and delayed progression students indicating that employment pressures had a major impact on their withdrawal or delayed progression. This appeared to stem from the fact that the majority of postgraduate

business students were engaged in full-time employment while they were undertaking their studies, which was reflected in the research sample for this study. This finding could allow distance education providers to develop programs and support systems which address the needs of busy professionals such as flexible assessment schedules (refer to Section 5.4.2) and workplace-based learning and assessment schemes (refer to Section 5.4.3).

Institutional factors. The findings of this research identified five institutional factors which had an impact on the retention and progression of postgraduate business students undertaking their studies by distance education, including (1) distance education program design, (2) relevance of the course content to students' careers, (3) student support systems, (4) face-to-face student orientation programs and (5) academic staff responsiveness. Of these factors, distance education program design emerged as the most important enabler (i.e., had a positive impact on student retention and progression), while academic staff responsiveness emerged as the least important enabling factor. Conversely, perceived irrelevance of the course emerged as the most critical institutional obstacle while academic staff responsiveness emerged as the least critical institutional obstacle. Generally, the institutional factors identified in this research appeared to be similar to those factors investigated in prior studies (e.g., Ashby 2004; Gibson & Graff 1992; Hall 2001; Lesht & Shaik 2005; McGivney 2003; Parmar & Trotter 2005; Trotter 2003) as having an impact on the retention of distance education students.

The findings of this research suggested that a well-designed distance education program was the single most critical enabling factor in terms of student retention and progression. A key finding of this research was that the appropriateness of the academic program to students' career goals and employment emerged as a much stronger theme in this context than was observed in the literature, as the majority of interviewees believed that they withdrew from their studies or progressed at a delayed rate because they did not believe that their studies would benefit their employment or career opportunities.

Dispositional factors. The findings of this research identified three dispositional factors which had an impact on the retention and progression of postgraduate business students undertaking their studies by distance education, including (1) student motivation to continue study, (2) having clear and realistic goals and intentions and (3) students' self-efficacy as learners. Of these factors, student motivation emerged as both the most critical dispositional enabler and obstacle, while student satisfaction emerged as the least critical enabler and obstacle. Interviewees appeared to remain motivated to persevere with their studies if they believed that their studies would lead to enhanced career opportunities or would allow them to do their current jobs better, which mirrors similar findings in the student retention literature.

Moreover, the findings of this study suggested that interviewees, who did not embark on their studies with a clear goal, typically a career or goal which required a postgraduate business qualification to achieve, were more likely to withdraw from their studies. This expanded upon findings in the literature which proposed that student retention was positively related to students' having realistic goals and intentions for their studies. In contrast to the literature, students' self-efficacy did not

appear to have a major impact on their retention or progression, with no interviewees believing self-efficacy to have had an impact on their retention and progression. This appeared to be due to the fact that, as postgraduate students, the majority of interviewees had successfully undertaken tertiary study in the past.

In contrast to much of the student retention and services marketing literature, it appeared that student satisfaction and retention were not strongly related in this context. A number of dissatisfied interviewees in this study persevered with their studies because they believed that the value of having the degree outweighed their feelings of dissatisfaction, while other students who were entirely satisfied with the service provided to them by the case organisation still withdrew from their studies or progressed at a slower than desired rate due to the impact of situational obstacles. Hence, in this case it would appear that student satisfaction is a lower-order factor in comparison to situational factors and dispositional factors, in that satisfaction would not ensure students remain enrolled and progress at a normal rate through their studies if they were confronted with situational obstacles, nor would dissatisfaction necessarily lead to student withdrawal or delayed progression if interviewees felt that their studies were required in order to achieve their career objectives. Additionally, the impact of students' individual learning styles emerged in the analysis of the impact of distance education program design (Section 4.1.1) as a possible new dispositional factor impacting upon the retention and progression of postgraduate business distance education students.

In summary, this research concluded that while the factors impacting upon postgraduate business distance education student retention might still be categorised as being situational, institutional and dispositional in nature, the level and nature of the impact that these factors had on student retention and progression could be different to other contexts. In fact, some of the factors identified from the literature appeared to have no appreciable on student retention and progression in this context. Thus, this research has contributed to the student retention body of knowledge, particularly in the postgraduate business distance education student context.

### 5.2.2   Conclusions about the research question

Conclusions based on the research issues were discussed in the previous section. In this section, conclusions based on the research question will be discussed. The research question in this study is:

> *What affects the retention and progression of postgraduate business students undertaking their studies by distance education?*

It was concluded in Section 2.4 that there was a gap in the student retention literature regarding the factors specifically impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education. Based on this gap in the literature, a provisional research framework was developed (Figure 2.2 on page 31). Based on the research findings presented in Chapter Four, a revised research framework was developed and is presented in Figure 5.2 on the following page.

This framework indicates that a combination of situational, institutional and dispositional factors have an impact on the retention and progression of postgraduate business students undertaking their studies by distance education.

Figure 5.2: *Revised research framework*
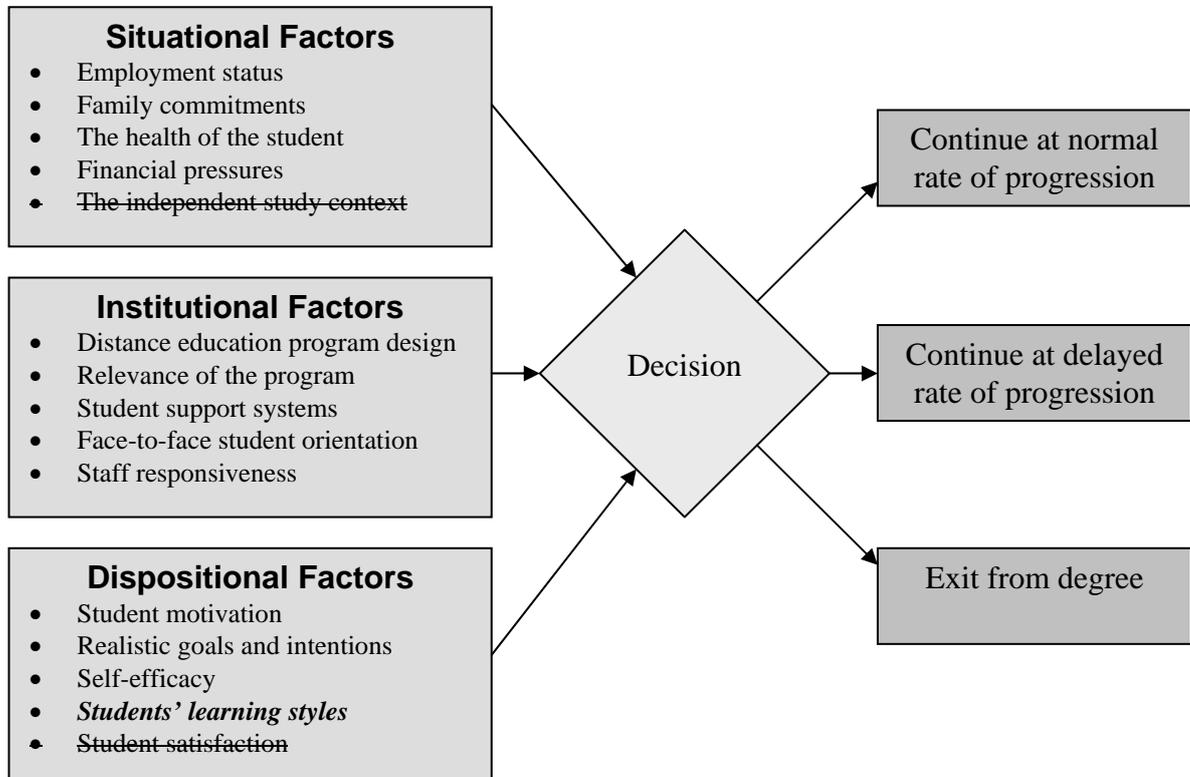
Note: situational, institutional and dispositional factors which have been crossed out appeared to have no impact on retention and progression of postgraduate business distance education students based on the findings of this research. However, these factors may be retained in this theoretical model for further investigation in order to validate these findings.

Source: adapted from Figure 2.2 based on research findings

As there was a general lack of prior research regarding the specific factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education, the 14 factors categorised as being situational (Section 2.3.1), institutional (Section 2.3.2) or dispositional (Section 2.3.3) were identified from prior research conducted into student retention in different contexts (e.g., Gibson & Graff 1992; Lesht & Shaik 2005; Lorenzetti 2003; Tresman 2002).

This exploratory research has revealed that of these 14 factors, 12 appeared to have an impact on the retention and progression of postgraduate business students undertaking their studies by distance education (as shown in Figure 5.2 above) with two factors appearing to have no impact on student retention and progression in this context. Additionally, the analysis of distance education program design has suggested that students' learning styles may be a new dispositional factor which has an impact on student retention and progression in the postgraduate business distance education student context, in spite of the fact that prior research (e.g., Gibson &

Graff 1992) concluded that students' individual learning styles does not differentiate completers and non-completers in distance education programs. Thus, this research has concluded that 13 factors in total appeared to have an impact on student retention and progression in this context.

This research also concluded that there were few differences in the factors impacting different interviewee categories, which suggested that the factors resulting in withdrawal and delayed progression were largely the same in this context. The major distinction appeared to be that active students were generally better at balancing their extra-institutional lives with their studies in comparison to their delayed progression and exited counterparts. Additionally, there did not appear to be any differences in the factors impacting interviewees of different gender, while interviewees with dependent children only appeared to differ from interviewees without dependent children in regards to the impact of family commitments, with all other factors appearing to have similar impact.

The outcomes of this research have provided a framework to assist distance education providers in improving the retention and progression of their postgraduate business students, thus contributing to an area of student retention and progression theory where little prior research has been conducted. While this research has suggested that two factors (i.e. the independent study context and student satisfaction) have not had a major impact in this context, these factors may be retained in the theoretical model for further investigation or replication in order to validate these research findings. Conclusions about the research question and issues have been presented in this section. Implications for theory based on the findings of this research are presented in the following section (Section 5.3).

5.3 Research implications

This research provides three major new insights into student retention and progression. First, while numerous studies have been conducted in order to address the factors which impact upon student retention, these studies have been largely focused on undergraduate students studying on-campus, with only a limited number of studies (e.g., Geri, Mendelson & Gefen 2007; Smith 2004; Truluck 2007) concentrating on postgraduate students undertaking their studies by distance education. Hence, the findings of this research will add to the student retention literature and also provide a theoretical framework (Figure 5.2 on page 87) for the retention and progression of postgraduate business distance education students.

Second, none of the extant literature conducted into the retention of postgraduate students was from the perspective of Australian distance education providers. Thus, this research contributes to the student retention and progression literature from the Australian perspective. Finally, previous studies regarding student retention have not typically made a distinction between students who withdrew from their studies (i.e., exited students) and those students who remained enrolled but progressed through their studies at a slower than desired rate (i.e., delayed progression students). Thus, this research has demonstrated that, in this context, the factors impacting upon student retention and progression are largely similar, therefore adding new insight into the student retention and progression literature.

The research implications for student retention and progression were discussed in this section. In Section 5.4, the managerial implications of this research for providers of postgraduate business degrees by distance education are presented.

5.4   Managerial implications and recommendations

In this section, key managerial implications of this research are discussed (Section 5.4.1) and a range of strategies based on the findings of this research which may assist distance education providers to improve the retention and progression of their students are presented. These strategies are categorised as relating to situational factors (Section 5.4.2), institutional factors (Section 5.4.3) and dispositional factors (Section 5.4.4). This section commences with a discussion of the managerial implications of this research.

5.4.1   Managerial implications

Three key managerial implications for postgraduate distance education providers emerged from the findings of this research. Each of these implications are addressed in turn.

Combination of impacting factors. The first managerial implication is that a combination of situational, institutional and dispositional factors impact on the retention and progression of postgraduate business students undertaking their studies by distance education. As such, any retention and progression strategies developed by distance education providers should ideally be able to address a range of different factors and not concentrate on any single factor or category. However, while some distance education providers may have the necessary funding to strategically address all of the impacting factors, others may need to prioritise due to a lack of sufficient funding for retention and progression initiatives. The findings of this research can also assist distance education providers to prioritise these factors as the relative importance of these situational, institutional and dispositional factors in regards to their impact on the retention and progression of postgraduate business students undertaking their studies by distance education are presented in Tables 4.1 (page 54), 4.2 (page 61) and 4.3 (page 75) respectively in the previous chapter.

Relevant academic programs. The second managerial implication for distance education providers is that interviewees in this study placed a great deal of value on an educational experience which is highly relevant to their employment and provides practical 'real world' knowledge and skills which may benefit their career progression. The findings of this research suggested that a perception that their studies will enhance their career prospects may result in otherwise dissatisfied students persevering with their studies, while conversely a perception that their studies will not have any tangible benefit to their employment has the potential to cause otherwise satisfied students to withdraw from their studies or progress at a slower than desired rate. Thus, the perceived relevance of postgraduate business studies to a student's career represents a higher-order factor impacting upon student retention and progression in this context. Therefore, distance education providers

have a responsibility to offer students a practically relevant education which can benefit their employment and career progression because if this factor is not addressed, any efforts to address the other impacting factors may still not be sufficient to ensure retention and normal rates of progression.

Satisfaction is not sufficient to ensure student retention and progression. The third managerial implication for distance education providers is that ensuring students are satisfied with the service they receive will not necessarily ensure that they are retained or progress at a desired rate through their academic program. The findings of this research suggested that students who are satisfied with the services provided to them by their distance education provider may still withdraw from their studies if they are confronted by other critical obstacles (e.g., work pressures, family commitments). Thus, distance education providers must assist students in addressing all of the factors impacting upon their retention and progression rather than focusing exclusively on their levels of satisfaction.

The key managerial implications for distance education providers emerging from this research were addressed in this section. A range of strategies to address the factors identified in this research are now presented, commencing with a discussion of several strategies intended to address situational factors.

5.4.2   Strategies to address situational factors

Three strategies designed to allow distance education providers to address the situational factors impacting upon the retention and progression of postgraduate business distance education students are presented in this section.

Providing flexibility in student assessment. A major theme emerging from interviewees was that inflexibility in student assessment has the potential of leading to student withdrawal and delayed progression. With the majority of interviewees, this was due to inflexible assignment deadlines. This resulted in interviewees believing that they were forced to withdraw from the course because they were unable to complete an assignment task by the due date as a result of time constraints (e.g., employment pressures and family commitments). Hence, it is recommended that distance education providers provide flexible assessment deadlines to postgraduate business distance education students (e.g., granting extensions to students who are too busy in their professional careers to successfully complete an assessment task by the due date) and communicate this flexibility to students by a range of means to ensure that they receive and comprehend it (e.g., study materials, online course discussion boards, personal telephone call to each student).

Providing advice to students. The findings of this study suggested that students whose academic lives are well-integrated with their extra-institutional lives (e.g., employment and family commitments) are less likely to withdraw from their studies or progress through their studies at a delayed rate. Hence, it is recommended that distance education providers promote methods and techniques of successfully integrating students' academic and extra-institutional lives (e.g., scheduling daily study time, studying at work during meal breaks) to students. These methods and techniques could be communicated to students at orientation, on course discussion

boards, in course introductory materials issued to every student or through personal contact (e.g., telephone) throughout each semester.

Maintaining an ongoing relationship with exited students. The findings of this study suggested that students who withdraw from their studies due to situational obstacles are more likely to return to study once these situational obstacles (e.g., employment pressures, family commitments, ill health) are resolved or addressed. Hence, it is recommended that even if distance education providers cannot immediately help students address their situational obstacles, they should strive to maintain an ongoing relationship with students who have withdrawn from study due to situational obstacles to ensure that if the students decide that they can return to study once their personal issues have been resolved or addressed they do not return to study at a competing distance education provider. This may take the form of personal contact with students who have not enrolled in courses in a particular semester or through periodic invitations to return to study which could be sent to students who have cancelled their enrolment.

Recommended strategies to address the situational factors identified in this research were presented in this section. A range of recommended strategies to address the institutional factors identified in this research are presented in Section 5.4.3.

5.4.3   Strategies to address institutional factors

Eight recommended strategies designed to allow distance education providers to address the institutional factors impacting upon the retention and progression of postgraduate business distance education students are presented in this section.

Facilitating learning communities. The research findings indicated that interviewees believed that their retention and progression in their respective academic programs was aided through face-to-face study groups with other distance education students undertaking the same courses within their local region (i.e., learning communities). Interviewees believed that these study groups assisted them with their understanding of the course contents and also fostered a sense of comradeship with their fellow students which in turn helped them to realise that they were not alone. However, the majority of these interviewees also believed that they did not want the university to actively create these study groups. Hence, it is recommended that distance education providers facilitate the creation of learning communities for postgraduate business distance education students. This may take the form of a searchable online database of students enrolled in postgraduate business courses which would allow students to locate and contact other students within their local region enrolled in the same courses. Because the findings of this study also revealed that an equally large body of interviewees were not interested in participating in face-to-face study groups, this service would need to be on an 'opt-in' basis, whereby students who would like to participate in face-to-face study groups could register themselves with the distance education provider in order to participate in the service.

Providing more opportunities for on-campus participation. The findings of this study revealed that approximately one-third of the interviewees believed that their retention and progression was improved by having opportunities to participate in face-to-face educational activities held at a physical university campus, including voluntary residential schools and attending on-campus lectures when their schedules permitted. Interviewees believed that these activities were beneficial because it allowed them to obtain feedback about the expectations of the lecturer and receive additional guidance with the study material. Hence, it is recommended that distance education providers provide face-to-face residential schools for a wide range of postgraduate business courses in geographic areas with a large concentration of postgraduate business students. Also, distance education providers may consider providing distance education students with on-campus lecture timetables along with an invitation to attend these if they are able. Caution must be taken with this, however, as it may serve to alienate those distance education students who are unable to attend on-campus lectures due to geographical distance, workload or other factors.

Investigating more flexible course delivery modes. The findings of this study revealed that the course delivery modes were not optimal in terms of fitting with the professional and family lives of postgraduate business students. Half of the exited and delayed progression students believed that having to read large volumes of study materials did not fit with the way that they liked to study, largely because they spend their days at work reading and therefore had little motivation to read study materials after work. However, as the majority of students perceived that the current delivery mode (i.e., printed study materials) fit well with the way that they would like to study, alternative delivery modes should not be adopted in place of the current mode. Rather, new delivery modes should be investigated in order to provide students with additional flexibility.

Providing practically-focused assessment. The findings of this research suggested that having an end of semester formal examination as a compulsory assessment item may also contribute to student withdrawal or delayed progression. The findings of this study and the literature suggested that this is because some students do not cope well with examinations (Heinmann 1984) while other students believe that examinations do not fit with the way that they prefer to learn. Because none of the interviewees in this study indicated a preference for examinations, it is recommended that providers of postgraduate business degrees by distance education can consider implementing an assessment scheme focused on practical, possibly even workplace-based assignment tasks with reduced emphasis on end of semester examinations, thus enabling a greater level of integration between students' postgraduate business distance education studies and their professional careers.

Offering programs that address students' career goals and objectives. The majority of interviewees in this study believed that if they considered the course content of the academic program to be irrelevant to their career goals they would be more likely to withdraw from their studies. While most interviewees considered the course content to be relevant to their career goals, three interviewees across the delayed progression and exited categories indicated that the overly theoretical nature of the courses and the perceived lack of relevance to their professional career contributed to their withdrawal and delayed progression. Hence it is recommended that providers of postgraduate business degrees by distance education regularly review their academic

portfolio, possibly in conjunction with students and industry bodies, to ensure that their programs and courses are designed to provide educational experiences that assist students in achieving their individual career goals and objectives and also address specific industry needs for knowledge and skills of graduates.

Ensuring a match between student and program. The findings of this study indicated that a major factor impacting upon retention and progression of external postgraduate business students is the perceived benefits that the study will provide to their career goals and objectives. Hence, it is critical that students enrol in an academic program which is appropriate for their specific career goals and objectives, as if students do not believe that their study will benefit them professionally they are more likely to withdraw from their studies or progress at a slower than normal rate. Therefore, it is recommended that distance education providers offer career counselling to each prospective postgraduate business student when they initially enquire about studying in order to match them to the specific academic program which will best meet their individual needs.

Offering student orientation programs. Approximately one-third of interviewees believed that a face-to-face orientation would provide an opportunity to meet other students in their local area, help them to realise that they are not alone in their studies and give them the opportunity to form study groups. In addition to orientation as a chance to meet other students enrolled in the course, interviewees also believed that academic orientation sessions could also be used as a way of getting students to begin studying early in the semester and provide a useful introduction to the course content. Hence, it is recommended that distance education providers offer on-campus orientations for commencing postgraduate business students. Moreover, face-to-face orientations may also be offered in regions with a high concentration of distance education students geographically distant from the physical university campus by having academic staff travel to these regions.

Developing proactive student support mechanisms. The findings of this research revealed that not providing students with proactive support at times when they are encountering problems with their studies may lead them to withdraw from their studies or progress through their studies at a delayed rate, as students do not necessarily seek help when they are encountering problems. Hence, it is recommended that postgraduate distance education providers personally contact all enrolled students throughout each semester to enquire about their progress and offer assistance (e.g., academic support, managing workload) if necessary.

Strategies to address the situational factors identified in this research were presented in this section. Two recommended strategies to help address the dispositional factors identified in this research are presented in Section 5.4.4.

5.4.4 Strategies to address dispositional factors

Two recommended strategies designed to allow distance education providers to address the dispositional factors impacting upon the retention and progression of postgraduate business distance education students are presented in this section.

Ensuring that students remain motivated. The findings of this study suggested that students can become de-motivated and thus withdraw or progress slowly in their studies if they fail to integrate their academic lives and their extra-institutional lives (e.g., employment and family commitments). In other words, situational obstacles may have a considerable negative impact on student motivation. Hence, it is recommended that distance education providers assist students to address situational barriers impacting on them so that they can remain motivated to persevere with their studies. As discussed in Section 5.4.2, distance education providers may assist students to overcome situational obstacles by promoting flexibility in assessment deadlines and providing students with suggestions and advice about how best to balance their employment, family and study commitments.

Helping students produce clear study goals. The findings of this research suggested that students who do not have clearly defined goals for undertaking postgraduate study are more likely to withdraw from their studies than students who hold a clear and realistic goal. While a lack of clear and realistic goals does not directly result in student withdrawal, it would appear from the findings of this study that students who do not have clear and realistic goals are more likely to become de-motivated. Hence, in order to improve student retention in cases where students do not have a clear and realistic goal for studying, it is recommended that distance education providers introduce activities that help students to produce clear goals (Seidman 2005). This could be undertaken as part of any career counselling offered to prospective postgraduate business students or alternately could be undertaken as an assessment task in the first course undertaken by postgraduate business students.

In this section, key managerial implications of this research were discussed (Section 5.4.1) and a range of strategies designed to assist distance education providers to improve the retention and progression of their students was presented (Sections 5.4.2 to 5.4.4). In the next section, the limitations of this research are acknowledged.

5.5 Limitations of this research

The limitations of the research are acknowledged in this section. First, this research used an exploratory case study design and therefore the findings of this research cannot be generalised to a wider population (Amaratunga & Baldry 2001; Woodside & Wilson 2003; Yin 2003). However, as discussed previously in Section 3.4.3, the findings of this research are analytically generalisable to the broader theory of student retention (Yin 2003). In addition, the findings from this exploratory research can be used as the basis for further quantitative investigation which will allow the findings to be generalisable to the population at large.

Second, this research was confined to a single case study of Australian postgraduate business students at USQ. Due to contextual issues such as distance education program design, the level of student support and the cultural background of the students, factors that impact upon postgraduate business distance education student retention and progression at USQ may differ from those factors impacting students at other distance education providers elsewhere in Australia and overseas.

Finally, the interviewees for this study were drawn exclusively from the USQ Faculty of Business. This was because postgraduate business students represent the largest distance education student cohort at USQ, constituting approximately 65 percent of all postgraduate distance education student enrolments (USQ 2007e) and hence represents the most valuable to USQ in terms of student load. However, factors impacting upon the retention of postgraduate business students may differ from those impacting students enrolled in other fields of study, which may limit the generalisability of these findings to other fields.

In summary, this research had three limitations. Every effort was made to overcome these limitations in order to enhance the validity and reliability of the research findings (previously discussed in Section 3.5). Implications for further research are discussed in the following section.

5.6   Implications for further research

In this section there are three implications for further research. Each of these is addressed in turn. First, because the findings of this exploratory case study are not statistically generalisable to a wider population, further quantitative research based on the revised research framework (Figure 5.2 on page 87) may be conducted to test the theory presented proposed in this study. This may provide a more generalisable model of the factors impacting upon the retention and progression of postgraduate business distance education students in Australia.

Second, replication of this research into students enrolled through other overseas distance education providers could be conducted in order to determine if the factors identified through this case study of USQ as having an impact on retention and progression of postgraduate business distance education students are applicable to other providers overseas. This would have important practical implications for distance education providers as it would allow them to better manage the retention and progression of their respective student cohorts. Replicating this research in other contexts would also have key theoretical implications, as it would provide additional insights to the body of student retention and progression literature.

Third, only students undertaking postgraduate business degrees were investigated in this research. Therefore, it is recommended that this research be replicated to investigate the factors impacting upon the retention and progression of distance education students undertaking postgraduate degrees in other fields of study. Also, further analysis may be conducted within the postgraduate business context by examining whether program type (i.e. professional-type degrees such as postgraduate degrees in accounting versus generalist management degrees such as the MBA) has an impact on the factors impacting upon student retention and progression.

Finally, mature students in this research study were treated as a single homogenous group. Therefore, it is recommended that any future research in regards to this topic delve into specific strata within this mature student group, such as different generational subgroups (e.g. Baby Boomers, Generation X and Generation Y). Further investigation of these generational sub-groups would allow for even more individualised approaches to improving student retention and progression to be developed, as separate approaches could be tailored to each subgroup if differences are found to exist between them in terms of the factors impacting upon their retention and progression.

This section has discussed the implications for further research arising from this study. A summary of Chapter Five is provided in the following section.

5.7   Summary of Chapter Five

In this final chapter, conclusions about the research issues (Section 5.2.1) and the research question (Section 5.2.2) were presented and a revised research framework based on the findings of this study was presented (Figure 5.2 on page 87). Second, the research implications of this study were identified and discussed (Section 5.3). Next, key managerial implications of this research were identified (Section 5.4.1) and recommendations for postgraduate distance education providers (Sections 5.4.2 to 5.4.4) were presented. Finally, limitations of this research were acknowledged (Section 5.5) and implications for further research were presented (Section 5.6).

In conclusion, this research has provided an understanding of the factors which impact upon the retention and progression of postgraduate business students undertaking their studies by distance education. It has shown that postgraduate business distance education student retention and progression are complex phenomena which are affected by combination of factors (including situational, institutional and dispositional factors). These factors appear to be different to the factors which impact upon student retention in other contexts. The revised research framework developed from the findings of this research (Figure 5.2 on page 87) may also be used as a foundation for further research in this field.

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APPENDICES

APPENDIX A: *Summary of Relevant Student Retention Literature*

This table provides a summary of the student retention literature reviewed to develop the provisional research framework (Figure 2.2).

Author / year	Paper type	Context	Sample	Research methodology
Ashby 2004	Research paper	UK	• Undergraduate distance education students (n=not reported)	Descriptive statistical analysis of secondary data collected by the case institution regarding reasons for student departure.
Athiyaman 1997	Research paper	Australia	• First year on-campus undergraduate students (n=496) • Convenience sampling design	Data collected utilising self-completed mail survey based on a scale developed by Oliver (1980). Data analysed using correlations and regression techniques to test a proposed theoretical model of student quality perceptions in higher education.
Banwet & Datta 2003	Research paper	India	• Current university students (n=168) • Convenience sampling design	Quantitative data collected through self-completed survey. Proposed theoretical model of the impact of student satisfaction on post-lecture intentions tested using structural equation modelling technique.
Bennett 2004	Research paper	UK	• On-campus domestic undergraduate first-year business students (n=254) • Second-year students enrolled in UK further education colleges (n=139) • Stratified random sampling design	Data collected through self-completed questionnaire. Data analysed using factor analysis to create composite variables. Correlation procedures utilised to explore associations between variables in order to validate a proposed theoretical model.

Author / year	Paper type	Context	Sample	Research methodology
Braunstein, Lesser & Pescatrice 2006	Research paper	USA	• First-year on-campus undergraduate students (n=1,591)	Secondary data analysis of institutional enrolment data. Logistic regression analysis utilised to assess the impact of first year experience course enrolment on student retention.
Cabrera, Stampen & Hansen 1990	Research paper	USA	• Matched sample of on-campus undergraduate students (n=1,375) surveyed three times in a six year period • Comprehensive random sampling design	Secondary data drawn from National Longitudinal Senior Cohort 1980 database. Logistic analysis of secondary data conducted to test several proposed models of student retention.
Chandler, Levin & Levin 2002	Case study	USA	N/A	Descriptive case study of the establishment of an online distance education system.
Christie, Munro & Fisher 2004	Research paper	UK	• Undergraduate continuing students from two contrasting UK universities (n=169) • Quota-based sampling design	Data collected using a postal questionnaire and analysed using descriptive statistics.
Cross 1981	Book	USA	N/A	Analysis of previous research (e.g., Carp, Peterson & Roelfs (1974) used to propose a theoretical framework into barriers to mature students' participation higher education.
Derby & Smith 2004	Research paper	USA	• Undergraduate community college students (n=7,466)	Analysis of institutional enrolment data using Pearson chi-square to identify relationships between orientation course participation and retention.
DeShields, Kara & Kaynak 2005	Research paper	USA	• On-campus undergraduate business students (n=143) • Convenience sampling design	Data collected through use of self-completed questionnaire. Quantitative data analysed using factor analysis and path analysis.

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Author / year	Paper type	Context	Sample	Research methodology
DesJardins, Ahlburg & McCall 2002	Research paper	USA	• On-campus undergraduate domestic students (n=2,373)	Secondary data analysis of institutional enrolment data and entrance exam scores. Data analysed using descriptive statistics and by applying an event history ("survival") regression model to the data.
Devenport & Lane 2006	Research paper	UK	• On-campus undergraduate students enrolled in sports degrees (n=173) • Convenience sampling design	• Items to measure efficacy developed through open-response questions. • Quantitative data subsequently collected through self-completed questionnaire and analysed using factor analysis and standard multiple regression procedures.
Douglas, Douglas & Barnes 2006	Research paper	UK	• On-campus undergraduate students (n=865) • Convenience sampling design	• Quantitative data collected through self-completed survey and analysed using Quadrant Analysis using the SPSS package • Respondent focus groups were utilised to clarify issues not addressed in the survey
Geri, Mendelson & Geffen 2007	Research paper	Israel	• Online MBA students (n=520) • Census-style sampling design	Data collected through self-completed online survey with email invitations sent to potential research participants. Data analysed using MANOVA to test a proposed model of online student retention.
Gibson & Graff 1992	Research paper	USA	• Mature on-campus completers and non-completers from undergraduate degree programs (n=210) • Stratified random sampling design	Data collected through self-completed questionnaire based on the "barriers instrument" developed by Schmidt (1983). Between-group differences identified using chi-square, t-tests and stepwise discriminant analysis.
Hall 2001	Literature review	UK	N/A	Synthesis of findings from previous research into student retention and drop-out.
Helgesen & Nesset 2007	Research paper	Norway	• On-campus undergraduate students across several university faculties (n=364)	Data collected through survey research. Data analysed using structural equation modelling technique to test a proposed theoretical model.

Author / year	Paper type	Context	Sample	Research methodology
Hill, Lomas & MacGregor 2003	Research paper	UK	• Current university students across several faculties (n=not reported) • Convenience sampling design	Qualitative data collected through nine student focus groups. Data analysed based on a grounded theory approach using a constant comparative method in order to generate theory.
Kevern, Ricketts & Webb 1999	Research paper	UK	• On-campus undergraduate nursing students (n=355)	Secondary analysis of pre-collected institutional enrolment data. Associations between variables tested using chi-square tests and differences tested using one way ANOVA. Classification trees utilised for predicting course completion and regression trees for predicting mean scores (grades).
Lesht & Shaik 2005	Literature review	USA	N/A	Synthesis of findings from previous research into distance education student retention.
Longden 2002	Case study	UK	N/A	Synthesis of findings from previous research into distance education student retention, with propositions for improving retention advanced based on these findings.
Lorenzetti 2003	Article	USA	N/A	Synthesis of findings from previous research into successful progression of adult learners.
Mabrito 2004	Case study	USA	N/A	Self-reflective personal narrative regarding the establishment of interactivity in online courses.
Mackie 2001	Research paper	UK	• Currently enrolled on-campus undergraduate business students (n=69) • Students encountering problems with their studies (n=7); purposive sampling • Students who have left their studies (n=9); purposive sampling	Perceptions of current students gathered through self-completed questionnaires. Perceptions of students encountering problems and departed students gathered through interviews. Qualitative data analysed using thematic and Force Field Analysis to determine differences in perceptions between leavers and completers.
Manthei & Gilmore 2005	Research paper	New Zealand	• On-campus undergraduate students completing arts degrees (n=83) • Convenience sampling design	Data collected using self-completed survey. Quantitative data analysed using descriptive statistics and correlations.

Author / year	Paper type	Context	Sample	Research methodology
Mason & Weller 2000	Case study	UK	• Distance education course leader (n=1) • Purposive sampling design	Descriptive case study of an innovative web-based distance education course at a UK university based on an interview with the course leader.
Moller 1998	Article	USA	N/A	Synthesis of findings from previous research addressing distance education communities.
Ozga & Sukhnandan 1998	Research paper	UK	• On-campus students who had withdrawn from a degree program (n=169) • Academic staff members (n=14) • Simple random sampling design	• Qualitative data collected through self-completed mail questionnaires, telephone interviews and face-to-face interviews. • Secondary data analysis of institutional enrolment data utilising descriptive statistics.
Packham et al. 2004	Research paper	UK	• Mature undergraduate students currently enrolled in and withdrawn from online distance education programs (n=44) • Online tutors (n=not reported)	• Descriptive statistics utilised to provide a demographic profile of research participants • Semi-structured telephone interviewing utilised to gather data regarding withdrawal motivation • Staff perceptions of withdrawal motivation gathered through a focus group discussion
Palmer 2001	Case study	UK	N/A	Synthesis of findings from previous research into factors influencing student retention, with propositions regarding improving retention advanced based on these findings.
Pariseau & McDaniel 1997	Research paper	USA	• On-campus undergraduate business students and academic staff at two USA universities (n=498) • Convenience sampling design	Data collected through use of self-completed questionnaire based on adapted SERVQUAL scale administered to students and staff. Data analysed using ANOVA, regression and descriptive statistics.
Parmar & Trotter 2005	Case study	UK	N/A	Descriptive case study of student retention research undertaken at two UK universities.

Author / year	Paper type	Context	Sample	Research methodology
Petruzzellis, D'Uggento & Romanazzi 2006	Research paper	Italy	• On-campus undergraduate students (n=1,147) • Stratified random sampling design	Quantitative data regarding student satisfaction collected through personally-administered surveys. Data analysed using descriptive statistics and chi-square procedures and MDS technique.
Pompper 2006	Research paper	USA	• Full-time university staff (n=36) • City residents (n=112) • On-campus university students (n=25) • Simple random sampling design	• Self-completed mail survey sent to city residents and university staff. • Focus groups conducted with students. • Content analysis conducted with university promotional materials.
Powers & Mitchell 1997	Research paper	USA	• Postgraduate students enrolled in an information technology course (n=10) • Purposive sampling design	Qualitative data collection utilising inductive interviewing conducted in a naturalistic setting. Data analysed using thematic analysis technique.
Rowley 2003	Conceptual paper	UK	N/A	Propositions regarding the use of a relationship management approach to improve student retention advanced by the author based on analysis of previous services marketing research.
Seidman 2005	Literature review	USA	N/A	Synthesis of findings from previous research addressing minority student retention.
Simpson 2004	Case study	UK	• Undergraduate distance education students (n=not reported)	Analysis of institutional enrolment data to explore distance education student retention patterns and the effectiveness of institutional interventions in terms of improving student retention rates.
Smith 2004	Research paper	New Zealand	• Off-campus postgraduate education management students (n=49) • Census-style sampling design	• Data was collected through a self-completed mail survey. • Quantitative data was analysed using descriptive statistics (frequencies). • Content analysis was used to categorise open response items into themes.
Taylor 2005	Case study	UK	N/A	Synthesis of findings of prior research to produce a case study of nursing student retention.

Author / year	Paper type	Context	Sample	Research methodology
Tresman 2002	Case study	UK	N/A	Descriptive case study of the initiatives developed to improve student retention at the case institution.
Trotter 2003	Case study	UK	• On-campus undergraduate students in academic programs with extreme (high and low) retention rates (n=202) • Program managers in programs with high and low retention rates (n=10)	• Secondary data analysis of institutional retention data • Ten focus groups conducted with students and university academic staff
Truluck 2007	Case study	USA	N/A	Descriptive case study regarding the establishment of a mentoring program for mature distance education students.
Vines 1998	Case study	USA	N/A	Self-reflective personal narrative regarding the creation of a large scale-distance learning initiative.
Voss & Gruber 2006	Research paper	Germany	• On-campus undergraduate students enrolled in a business course (n=53) • Convenience sampling design	Means-end analysis of qualitative data. Data collected through a self-completed semi-standardised laddering questionnaire.
Wang, Sierra & Folger 2003	Research paper	USA	• Mature students enrolled in an online instructional design course (n=21) • Purposive sampling design	• Observational study of students using online learning tools; qualitative and quantitative analysis of online chat transcripts • Self-completed quantitative survey administered to research participants
Watson, Johnson & Austin 2004	Research paper	Australia	• Survey of on-campus undergraduate teacher education students (n=598) • Focus groups conducted with on-campus undergraduate education students (n=170) • Random sampling design	• Qualitative and quantitative data collected by self-completed survey and focus groups. • Data analysis involved content analysis for open response items and descriptive statistics for quantitative data.

Author / year	Paper type	Context	Sample	Research methodology
Witte & Waynne 1998	Case study	USA	• Postgraduate research students (n=6) • Purposive sampling design	Observational study of postgraduate research students to determine if forming cohort partnerships helped them to succeed in their studies.
Yorke et al. 1997	Research report	UK	• Undergraduate non-completers (n=1,478)	Data collected utilising a self-administered mail survey and analysed using factor analysis.

Source: developed for this research

APPENDIX B: *Semi-Structured In-Depth Interview Questions*

EXITED STUDENTS

1. May I ask, why did you originally decide to undertake a postgraduate business degree? What were your main motivations or reasons?

2. Why did you drop your postgraduate business degree at USQ? Can you please describe what happened? How did this affect you? Was it this one thing, or was it a combination of things which led you to consider doing this? What, if anything, could have been done to change your decision?

   - *Institutional factors* (staff responsiveness, program design, wrong course choice based on a lack of pre-enrolment information and guidance, complaints handling process, student support systems, orientation programs [face-to-face or conducted remotely by telephone/online])
   - *Situational factors* (employment status, financial pressures, family commitments, support of family and friends, independent study)
   - *Dispositional factors* (motivation, having realistic goals and intentions, intention to complete a degree, self-efficacy as a learner, satisfaction with various aspects of the total student experience)
   - Any other factors?

3. Do you mind if I ask you if you are married? Do you have children? Are you working full time? Did you marital status or number of dependents have any impact on your decision to drop?

4. Before we conclude, do you have any further comments that you would like to make? Do you have any further questions about the study?

ACTIVE AND DELAYED PROGRESSION STUDENTS

1. May I ask, why did you originally decide to undertake a postgraduate business degree at USQ? What were your main motivations or reasons?

2. How are your studies going at USQ? Are you progressing through your studies as well as you would like?
   - If no: I'm sorry to hear that. May I ask why do you believe that you're not progressing as well as you would like? What has contributed to this? Can you please describe it for me? How has it affected you?

3. Have you ever considered dropping your studies at USQ? At what point of your program did you consider doing this?
   - If no, skip to question (5)

4. What made you consider dropping your studies? Was it this one thing, or was it a combination of things which led you to consider doing this? Can you please describe what happened for me? How did this affect you? What do you think could have been done to change it?

   Prompts
   - *Institutional factors* (staff responsiveness, program design, wrong course choice based on a lack of pre-enrolment information and guidance, complaints handling process, student support systems, orientation programs [face-to-face or conducted remotely by telephone/online])
   - *Situational factors* (employment status, financial pressures, family commitments, support of family and friends, independent study)
   - *Dispositional factors* (motivation, having realistic goals and intentions, intention to complete a degree, self-efficacy as a learner, satisfaction with various aspects of the total student experience)
   - Any other factors?

5. So then, what made you decide to continue with your studies? Did USQ do anything specific that influenced your decision to continue?

6. May I ask; are you married? Do you have children? Are you working full time? Has your marital status or dependency status impact on your progression?

7. Before we conclude, do you have any further comments that you would like to make? Do you have any further questions about the study?

USQ FACULTY OF BUSINESS STAFF MEMBERS

1. What initiatives, strategies and support systems are you aware of that are presently in place at USQ to address student retention and progression issues in the postgraduate business distance education student cohort?
   - Can you please provide details of these?
   - From your experience, how successful have these been?

2. Why do you believe that students withdraw from their studies, or progress at a slower than desired rate?

   Prompts
   - *Institutional factors* (staff responsiveness, program design, wrong course choice based on a lack of pre-enrolment information and guidance, complaints handling process, student support systems, orientation programs [face-to-face or conducted remotely by telephone/online])
   - *Situational factors* (employment status, financial pressures, family commitments, support of family and friends, independent study)
   - *Dispositional factors* (motivation, having realistic goals and intentions, intention to complete a degree, self-efficacy as a learner, satisfaction with various aspects of the total student experience)
   - Any other factors?

3. Are you aware of any minimum service standards for the service provided to students in place at USQ, such as responding to their questions and issues? Can you please provide me with any details you have about these?

4. Before we conclude, do you have any further comments that you would like to make? Do you have any further questions about the study?

APPENDIX C: *Interview Preamble*

EXITED STUDENTS

Thank you for agreeing to participate in this study. I am conducting this research project for my Master of Business Research through USQ. The purpose of this study is to gain a comprehensive understanding of the factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education and how the retention of these students may be improved. The purpose of this interview is to identify which factors impacted upon your decision to withdraw from your studies and what, if anything, could have been done to allow you to continue your studies. I am also interested in your motivation for originally deciding to undertake a postgraduate business degree.

Following the completion of this research project, I will be presenting my findings to USQ management in order to provide them with a comprehensive understanding of the factors which impact upon the retention and progression of external postgraduate students. It is my hope that this will allow for a more strategic approach to student retention and progression management at USQ and a more rewarding educational experience for students. If you would like to receive a summary of the findings of this study, I would be happy to provide it for you.

Would you mind if I recorded the interview so that I can focus on what you are telling me? Everything that we discuss today will remain completely confidential and your anonymity will be maintained at all times. Transcripts of the interviews will be de-identified to ensure that you cannot be specifically identified. If and when I need to use a direct quote in my report, I will ensure that this quote does not contain anything that might allow you to be identified. Do you have any questions for me at this stage?

Before we commence the interview, could you please sign this informed consent form? Please be aware that participation in this study is entirely voluntary and you may withdraw at any time without any fear of the consequences.

ACTIVE AND DELAYED PROGRESSION STUDENTS

Thank you for agreeing to participate in this study. I am conducting this research project for my Master of Business Research through USQ. The purpose of this study is to gain a comprehensive understanding of the factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education and how the retention of these students may be improved. The purpose of this interview is to determine if you have ever considered dropping your studies at USQ and, if you have, what made you decide to persevere with your studies. I am also interested in your motivation for originally deciding to undertake a postgraduate business degree.

Following the completion of this research project, I will be presenting my findings to USQ management in order to provide them with a comprehensive understanding of the factors which impact upon the retention and progression of external postgraduate students. It is my hope that this will allow for a more strategic approach to student retention and progression management at USQ and a more rewarding educational experience for students. If you would like to receive a summary of the findings of this study, I would be happy to provide it for you.

Would you mind if I recorded the interview so that I can focus on what you are telling me? Everything that we discuss today will remain completely confidential and your anonymity will be maintained at all times. Transcripts of the interviews will be de-identified to ensure that you cannot be specifically identified. If and when I need to use a direct quote in my report, I will ensure that this quote does not contain anything that might allow you to be identified. Do you have any questions for me at this stage?

Before we commence the interview, could you please sign this informed consent form? Please be aware that participation in this study is entirely voluntary and you may withdraw at any time without any fear of the consequences.

USQ FACULTY OF BUSINESS STAFF MEMBERS

Thank you for agreeing to participate in this study. I am conducting this research project for my Master of Business Research through USQ. The purpose of this study is to gain a comprehensive understanding of the factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education and how the retention of these students may be improved. The main purpose of this interview is to identify the retention and progression initiatives already in place at USQ.

Following the completion of this research project, I will be presenting my findings to USQ management in order to provide them with a comprehensive understanding of the factors which impact upon the retention and progression of external postgraduate students. It is my hope that this will allow for a more strategic approach to student retention and progression management at USQ and a more rewarding educational experience for students. If you would like to receive a summary of the findings of this study, I would be happy to provide it for you.

Would you mind if I recorded the interview so that I can focus on what you are telling me? Everything that we discuss today will remain completely confidential and your anonymity will be maintained at all times. Transcripts of the interviews will be de-identified to ensure that you cannot be specifically identified. If and when I need to use a direct quote in my report, I will ensure that this quote does not contain anything that might allow you to be identified. Do you have any questions for me at this stage?

Before we commence the interview, could you please sign this informed consent form? Please be aware that participation in this study is entirely voluntary and you may withdraw at any time without any fear of the consequences.

APPENDIX D: *Profile of Interviewees*

This table presents a summary of interviewees (n=20) by category, gender and number and type of dependents. The reference code has been used to identify individual interviewees in the discussion of results presented in Chapter Four.

Reference	*Interviewee category*	*Gender*	*Dependents*
A1M*	Active student (normal progression)	Male	Two dependent children
A2M*	Active student (normal progression)	Male	Two dependent children
A3M	Active student (normal progression)	Male	None
A4M	Active student (normal progression)	Male	None
A5F	Active student (normal progression)	Female	None
A6F	Active student (normal progression)	Female	None
D1M*	Delayed progression student	Male	Two dependent children
D2M	Delayed progression student	Male	None
D3M	Delayed progression student	Male	None
D4F*	Delayed progression student	Female	Two dependent children
D5F	Delayed progression student	Female	None
D6F	Delayed progression student	Female	None
E1M*	Exited student	Male	Two dependent children
E2M*	Exited student	Male	Two dependent children
E3M	Exited student	Male	None
E4M	Exited student	Male	None
E5F*	Exited student	Female	Two dependent children
E6F	Exited student	Female	None
S1	USQ Faculty of Business staff member	Female	N/A
S2	USQ Faculty of Business staff member	Female	N/A

Source: developed for this research

APPENDIX E: *Participant Information Sheet*

USQ Letterhead

Participant Information Sheet

Research topic: Factors impacting upon the retention and progression of postgraduate business students undertaking their studies by distance education.

Master's candidate: David Carroll, University of Southern Queensland
            Phone: 0407 375 859
            Email: carroll@usq.edu.au

Principal supervisor: Dawn Birch, University of Southern Queensland

Associate supervisor: Dr Eric Ng, University of Southern Queensland

Overview
This study is being undertaken as part of a Master of Business Research program by David Carroll. The purpose of this study is to explore the factors impacting upon the retention and progression of postgraduate business students undertaking their studies through USQ's distance education programme and to recommend strategies for improving retention based on an understanding of these factors.

Your involvement
Your involvement in this research project will involve an interview lasting approximately 30 to 45 minutes. A summary of the research findings from this study will be made available to you on request.

Expected benefits of this research
This research is expected to uncover important managerial implications for USQ in terms of how retention and progression of postgraduate distance education students is managed. An understanding of the factors impacting upon the retention and progression of postgraduate distance education students will allow the university to develop intervention programs to address student retention and progression, establish service standards to govern the service provided to students and, where possible, structure its distance education courses in a way that maximises the likelihood of completion within a normal timeframe. Further, it is expected that this research will make a valuable contribution to student retention and progression theory, as it investigates the factors impacting upon student retention and progression in the under-researched postgraduate distance education student context.

Risks

There are no anticipated risks associated with your participation in this research.

Confidentiality

All comments and responses collected for this research are completely anonymous and will be treated confidentially. Individuals will not be identified in the case study report and all interview data will be de-identified to ensure that individual interviewees cannot be identified. Access to this interview data will be limited to the candidate and his research supervisors.

Voluntary participation

Your participation in this research project is entirely voluntary. You are free to withdraw from participating at any time without any consequences to you and may retain any previously provided information regarding this research project.

Questions or further information

Please contact the researcher if you have any questions or require further information about this research project.

Concerns

Any concerns or complaints you may have about the ethical conduct of this research project can be directed to the *Secretary, USQ Human Research Ethics Committee* on 07 4631 1438.

APPENDIX F: *Consent Form*

USQ Letterhead

Consent Form

Research topic: Factors impacting upon the retention of postgraduate business students undertaking their studies by distance education.

Master's candidate: David Carroll, University of Southern Queensland
                                          Phone: 0407 375 859
                                          Email: carroll@usq.edu.au

Principal supervisor: Dawn Birch, University of Southern Queensland

Associate supervisor: Dr Eric Ng, University of Southern Queensland

Statement of consent

By signing below, you are indicating that you:

- Have read and understood the attached information sheet;

- Understand that any questions that you have regarding this research project or your participation may be directed to the researcher;

- Understand that you are free to withdraw from participating at any time without any consequences to you;

- Understand that you may contact the *Secretary, USQ Human Research Ethics Committee* on 07 4631 1438 if you have any concerns about the ethical conduct of this research project; and

- Agree to participate in this research project.

Name (please print) _____

Signature   _____

Date   _____ / _____ / _____