SUCCESSFUL COMPLETION OF UNDERGRADUATE STUDY: KEY INFLUENCES

by

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I would like to dedicate this dissertation to my husband Gray; his belief in me and his wonderful support whilst he was able, gave me the ability and the direction to achieve this result.

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ABSTRACT

The rate at which university students discontinue their studies is high, particularly in their first year of study. The main purpose of this study was to investigate factors that influence undergraduate students across two disciplines (both on-campus and distance mode) to withdraw from undergraduate study within their first year of tertiary study. The study also investigates whether different factors relate to students who have come directly from the school environment compared to those commencing as mature age students.

The dissertation looks at such data based from an investigation undertaken at Charles Sturt University (a regional university in Australia), within two specific faculties (the Faculty of Business and the Faculty of Education) involving both on-campus and distance modes of delivery. Within each Faculty there were different cohorts of students commencing study:

Faculty of Business: consisted of two cohorts, those who had recently completed their school studies, and also mature age students who were already working and perhaps had embarked on a career.

Faculty of Education: were mainly mature age students who were already working and perhaps had embarked on a career, although there were also a very small number of younger students undertaking a teaching degree and chose to study this subject as part of the course.

The study began by reviewing the literature on withdrawal and concluded that each university must understand the experiences of its own students if it is to address student attrition. Both qualitative and quantitative research were conducted to identify the key factors that influence a student to withdraw from study during the first year. Of particular interest were findings with respect to mode of entry, interaction whilst studying, dependents, workload, and age at entry. Examples of the challenges students face during the first year of study were also provided. The analysis provides evidence of an association between student performance and the factors examined in the study. An analysis of Tinto's theory of Student Departure was undertaken and consideration of some of the theories of Motivation, including Maslow's motivation theory and Herzberg's theory of motivation as well as some more recent theories of motivation, were examined to identify any relevance these theories have to successful completion of study.

Whilst various factors such as the background characteristics of students impacted on attrition rates, there were also issues that the institution may be able to address in order to reduce attrition. If the rate of discontinuation were to be reduced by changing the method of student selection, the type of courses offered, the teaching methods employed and additional support facilities available, then the university might be guided by the study's outcomes.

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CERTIFICATION OF AUTHORSHIP

I, Dawn Edwards hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgment is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged.

I agree that the thesis be accessible for the purpose of study and research in accordance with the normal conditions established by the University Librarian for the care, loan and reproduction of the thesis.*

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CHAPTER 1: Introduction

Introduction

The rate at which university students discontinue their study is high, particularly in their first year of study. This dissertation considers factors which may impact on attrition rates and looks at data based on an investigation undertaken at Charles Sturt University (a regional university in Australia), within two faculties (the Faculty of Business and the Faculty of Education) involving both on-campus and distance modes of delivery. The study begins by reviewing the literature on withdrawal and concludes by outlining results from the research conducted, and offering a number of recommendations. Both qualitative and quantitative research were conducted to identify the key factors that influence a student to withdraw from study during their first year. An analysis of two theories of motivation is also undertaken, in particular Maslow's motivation theory and Herzberg's theory of motivation to identify any relevance to successful completion of study. Examples of the challenges students face during the first year of study are also provided.

This chapter presents the context of the study. First it begins with a discussion of the background and the problem, including a reflection of my own experience in this area and the impact this had on the study. The aim of this study is to determine the impact of selected features on the attrition rate of groups of undergraduate students and whether the performance of these undergraduate students is associated with selected features that reflect student diversity (eg. age, background, previous study). In particular, the study will focus on gaining knowledge about persistence of students who study by distance mode and those who are undertaking on-campus study; it will involve both mature age students (who generally study part-time), and students who have recently left school studies (these are generally full time students).

The four main questions to be addressed are outlined, then the purpose of the study, and finally the importance of the topic.

Background and problem

Australian tertiary education participation has expanded rapidly over the last 30 years. The gross enrolment ratio for the ***entire tertiary education sector*** (including Technical and Further Education colleges) grew from 24 percent in 1975 to 72 percent in 1995, and by 1997, 50 percent of 20 to 24 year olds took part in some form of higher education. There was also a further increase of around 50 percent in student enrolments between 1996 and 2004. In 2004 places were delivered for 944,977 students (those that were eligible to access all grants available to higher education providers under the new Higher Education Support Act of 2003) including 716,422 domestic and 228,555 overseas students (Commonwealth of Australia, 2005: 18).

This increase can be primarily linked to the Dawkins' (1987) green paper *Higher Education: A Policy Discussion Paper* published in 1987 and announced in *Higher Education: A Policy Statement* ('the white paper' published in July 1988) which argued that the number of higher education graduates should be increased from 80,000 to 125,000 annually by the year 2001. The reforms were aimed at improving the efficiency and international competitiveness of Australian universities. This opened the way for the HECS (Higher Education Contribution Scheme), where students have to pay part of the cost of higher education, and the Commonwealth pays the remainder, and nurtured selected fee-charging for international students and postgraduate students. The objective was to increase the number of internationally competitive universities and earn foreign exchange by providing educational services to overseas students.

Whilst these figures represent the entire tertiary sector, this trend has also included universities. In fact, recent statistics involving commencing undergraduate university students show a continuing trend in enrolments with a 7.7% increase recorded in 2007 compared with those of 2006 (DEEWR, 2008). A media release by the Hon Julia Gillard in March 2008 suggested the number of students in higher education in Australia continues to grow strongly, reaching nearly 900,000 in the first half of 2007, according to new figures released by the Department of Education, Employment and Work Relations (DEEWR) (Gillard, 2008).

This rapid increase in tertiary students, has brought additional problems for the universities including the issue of attrition of undergraduate students which has increased over the last 10 years. A study funded by the Department of Education, Science and Training supported this, identifying that the proportion of students withdrawing from at least one subject had doubled since 1994 (Krause et al., 2005). These results were part of a national survey based on 2,344 individual responses.

Student attrition has been a constant problem and has become an important issue for Australian universities. As a result there is also a growing concern about the quality of the student experience in an increasingly marketised and highly competitive tertiary sector (Krause, 2003). According to the Department of Education, Science and Training (DEST) (2004) the attrition rates for tertiary students in higher education institutions ranged from 15% - 50% over the past decade, with an average attrition rate of approximately 20%. A study conducted in 2006 of 485,983 students in 32 Australian universities found the attrition figure was 10.5% (Olsen, 2008), with one of the key findings being that four of these universities had attrition rates higher than 15%, including three with attrition rates higher than 20%. Interestingly, the Office of Planning and Audit at Charles Sturt University (the subject of this dissertation) listed their attrition rate for first year undergraduate students in 2006 as 15.7% (CSU, 2008).

For first year tertiary students straight from school, the transition from school to university can be quite difficult. Some university students seem to manage this transition whereas others do not cope with the 'transitional' demands such as lifestyle change, assignment responsibility, different learning and teaching styles (Sheard, Lowe, Nicholson & Ceddia, 2003; Higher Education Group, 2008), and of those university students who do drop out, this generally occurs during the first year.

Mature age students (31 years and over for this study) make up a substantial group within the university, particularly in courses offered by distance mode. These students also experience difficulties adjusting to the demands of tertiary study, as they generally work full-time and study at the same time. As a result students come with many conflicting demands on their study time, including work and personal commitments, as well as the years away from actual study (Trott, 2007). Mature age students make up 97.5% of the total students enrolled in the two distance mode

subjects researched in this study, therefore the results will be more skewed towards these mature age students.

Charles Sturt University, a regional university in New South Wales, has seen a decline in total student enrolment in the period from 2000-2004 of 12.92%, with a further decline of undergraduate students in 2008 as a result of recent changes to HECS (Higher Education Contribution Scheme) where increased student charges were introduced. This situation actually goes against the overall trend which was identified earlier. Each course at university incurs a fee and every undergraduate student has to contribute to the cost of tertiary education through the HECS scheme. There are also those students who may not qualify for HECS assistance or prefer to pay their fees up front. In addition, overall student attrition at this university was recorded at 40.6% in 2005 (Higgins, 2008). Recent government policies such as the 1999 Knowledge and Innovation policy statement have linked funding to completion rates, so it is important that attrition is reduced in order to assure organizational efficiency and financial security.

Beecher, Henkel & Kogan (1994) in their cross-disciplinary qualitative study, highlight the first year of study as a time when students are more vulnerable to dropping out. In addition, Johnson (1994) suggests that a number of previous studies have focused on the attributes of students who withdraw. Interestingly, Tinto's (1987) theory on reasons for student departure emphasized the notion of integration; and that personal characteristics and demographic and related characteristics (gender, socio-economic status, ethnicity etc.) produce varying levels of initial commitment to educational goals and to specific institutions. He argued that once a student enrols in a particular higher education institution, initial commitments interact with the economic and social components of the university, resulting in different levels of academic and social integration.

Whilst these studies have been conducted overseas, this concern over non-completion of courses by students is shared in Australia. Universities in Australia are now paying increasing attention to reducing student attrition because it results in costs to the student (fees, emotional, opportunity costs). DEST also now uses commencing domestic bachelor student attrition rates as one of the performance indicators in

allocating its Teaching and Learning Performance Fund (Cao & Gabb, 2008). Studies of Australian universities (McInnes & James, 1995; McInnes, James & Hartley, 2000) show that initial experiences are important and influence students' persistence in higher education. Allen (1999) theorises that the relationship between motivation, persistence and attainment is the best predictor of academic success. This theory of motivation will be examined in conjunction with non-academic issues such as finance, work, family commitments and the part the institution can play. Also considered are issues such as students' perceptions of programs in general. Interestingly, Floud (2003) suggested that most of the variation in attrition rates can be explained by the different characters of the students. For example, some people adjust to changes in routine and different situations more easily than others; these people would therefore adjust to the transition to tertiary study more quickly. A person's temperament can also have an impact, for example to be an undergraduate student requires the acceptance of a subordinate role, particularly for the mature age student who already has a responsible position in the place of employment.

Most universities have a significant proportion of students who discontinue their studies, particularly in the first year of study when rates of discontinuation tend to be quite high. Between 1994 and 1999 there was a 33% attrition in first year students in Australia (McInnes & James, 1995; McInnes et al., 2000). Lake (1999) found in a study at Murdoch University that external students had the highest withdrawal rate of students from any group with a 43% dropout rate in the first year of university. Despite attempts by university administration and teachers to make improvements in areas such as selection, teaching and learning, little has been achieved in reducing these rates. Thus student wastage remains a challenge (Krause, Hartley, James & McInnes, 2005), not only because of the inefficiency of the organisation in cost-benefit terms, but also because of ethical considerations with respect to the future of those individuals who discontinue (Baumgart & Johnstone, 1977). Withdrawal from tertiary study could mean the student may never reach the expected level in their chosen career, nor perhaps even enter the career of their choice, having to settle for something less, unless they recommence study again at a later date.

The high withdrawal rate of students is not confined to undergraduate students; postgraduate coursework studies have similar challenges to undergraduate study.

Welsh (1980) studied the progress of postgraduate students in a single university in Scotland and found that the individual faculty had an effect on the success rate. Bowen & Rudenstine (1992) confirm this, identifying a persistent pattern of higher completion rates in the sciences compared to humanities and social sciences in a study conducted in the USA. Although this may be because students studying sciences in the USA do not pay fees for study. An Australian study conducted by the Department of Education Science and Training (DEST, 1999) now known as DEEWR (Department of Education Employment and Workplace Relations), found that one in five postgraduate coursework students withdrew from their course. Martin, Maclachlan & Karmel (2001) found a similar trend in an Australian study, identifying that 39% of students undertaking a master's coursework degree did not complete the study and were no longer studying.

A review of the current research literature identified gaps relating to withdrawal from undergraduate study for distance students from regional and rural universities, and also mature age students. The current literature tends to focus mainly on on-campus students and does not include a comparison between these two groups (identifying both differences and similarities), nor give appropriate consideration to the mature age student and comparison between students who have recently completed school and mature age students regarding attrition.

My own experience

Being a student studying both on-campus and distance, and later as a lecturer at the same university, has given me an empathy with students and also an understanding of some of the issues they may experience both as a distance and on-campus student, and finally as a mature age student. This has equipped me with the desire, understanding and resourcefulness to consider in-depth the different issues encountered during study. As a lecturer, I have frequently seen students who generally perform well, achieved quite good results for assessments, and who seemed to also have a good rapport with other students (on-campus), unfortunately withdraw from study, and generally within the first six months. The question, I asked was 'Why'? and 'Could these students have been helped to avoid their withdrawal'?

Sometimes students contacted me briefly prior to withdrawal, outlining problems (for example health, family, work issues, lack of time) they were currently experiencing, and either asked for help such as further time to complete assessments or advised the need for withdrawal (either permanently or temporarily). However this brief contact does not really give a good understanding of the real reasons behind the withdrawal – whilst the reason may be given as 'lack of time', perhaps the background suggests problems with the English language, or family commitments.

Reflection on my own professional practice and the challenges, inconsistencies and difficulties experienced whilst studying at a tertiary level has led to a desire to conduct further research about what really leads to students' withdrawal from their study in a university environment.

Research questions

These problems suggest further research should be conducted about what leads to students' non-completion of their study. Consequently, the research questions for this study are:

1. Why do students withdraw from their course, particularly in their first year of study?
2. Are the reasons for student withdrawal based on institutional factors or personal factors? Or both?
3. What are the differences in withdrawal rate for distance study compared to on-campus study?
4. What relevance if any, do theories of motivation have in explaining withdrawal rates?

These questions have been drawn from the literature and my personal experience, and also an understanding of factors which may play a part in student withdrawal. These questions will be explored within the dissertation.

The study

The purpose of this study is to investigate factors that influence students across two disciplines (in both on-campus and distances modes) to withdraw from undergraduate study within their first year of tertiary study, and whether different factors relate to students who have come straight from the school environment compared to those

commencing as mature age students. The research was conducted at Charles Sturt University in regional New South Wales, across two faculties, the Faculty of Education and the Faculty of Business and involved undergraduate students undertaking two different, though compulsory first year subjects. The subject in the Faculty of Business was MGT100 (Organisations & Management) a compulsory first year subject which feeds into sixteen undergraduate courses. This subject is normally studied in the first semester of commencing study, and is delivered in both on-campus and distance modes. The second subject was EML102 (Written Communication) in the Faculty of Education, again a compulsory first year subject which feeds into two courses, one an Associate Degree and the other an Undergraduate Degree in Vocational Education and Training (VET). This is also normally studied in the first semester of study, however, it is delivered by distance mode only.

The study focused on two different faculties rather than being university-wide as this was intended to be a smaller manageable study. These two specific faculties were chosen as they offered some differences in the type of student involved which could be compared, for example age, background, previous tertiary study or perhaps motivation for undertaking study. The researcher was quite familiar with these two subjects having taught both at some time and had access to university data which could be relevant to the study; as well as specific knowledge of issues relating to these two faculties. For example the makeup of the Vocational Education and Training (VET) students - some are Technical and Further Education (TAFE) sponsored which means fees are paid by the TAFE College, and others are responsible for their own fees. The Organisations and Management (MGT100) subject consists of both on-campus students who study full-time, and distance students who study either part-time or full-time, these students are responsible for their own fees. Figure 1.1 below identifies a number of differences within the two groups:

**Figure 1.1: Faculty of Business and Faculty of Education:
Differences between the two groups**
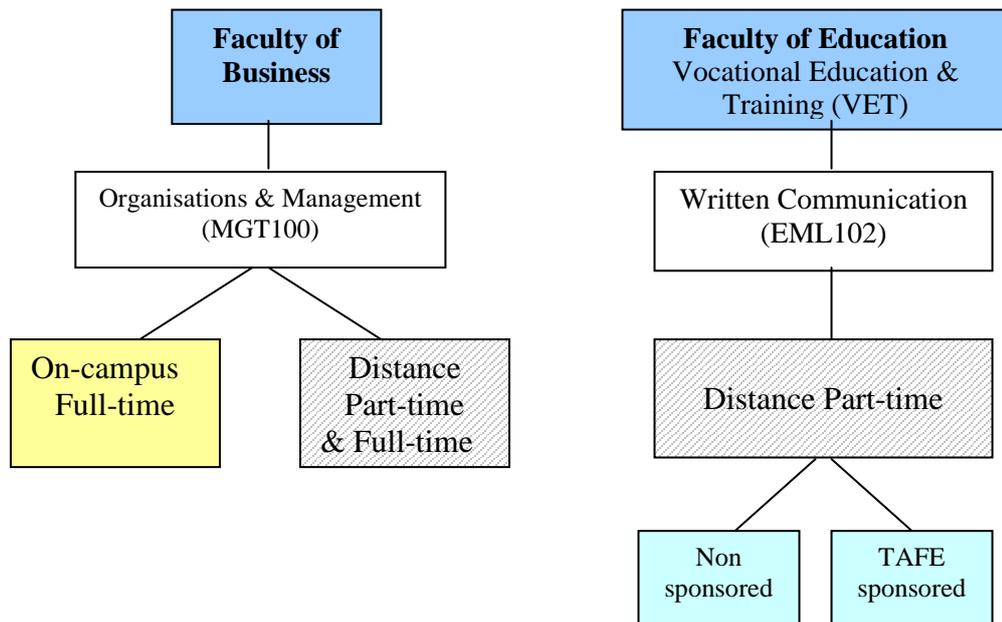
Distance education (Students studying by distance mode)

The makeup of the distance education cohort of students tends to be complicated (refer to figure 1.1). For example the VET students involve two specific groups, those who are already TAFE (Technical and Further Education) teachers and are undertaking this study as a requirement of their employment, and a second group who are working in other types of employment (such as part-time TAFE teachers, or teaching in a registered training organization) and studying to further their career and employment opportunities. Consequently these are generally mature age students.

The Commerce Distance students are also primarily working full-time and studying to further their career and future job prospects. These are also predominantly mature age students who generally work full-time.

On the other hand Commerce on-campus students (studying internally) are generally under 24 years of age, having commenced study straight after completing school. There are only a small number of students working full-time with most working 'after hours' at night. However, there is a small number working full-time during the day (often as trainee Accountants). These young people are granted leave from work to attend on-campus university classes as part of their employment.

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Importance of the topic

This study aims to fill a gap in the literature on student attrition by focusing on tertiary study delivered by distance mode (predominantly mature age students) with comparison between on-campus students and those who study by distance; as well as mature age students and a comparison between this group and those who have just recently completed their schooling.

The 1999 White Paper published as *Knowledge and Innovation*, announced major policy changes to the funding of higher education in Australia. Funding is now performance based with tertiary institutions rewarded for ensuring that students complete their degrees (DEST, 1999; Martin et al., 2001: 1). Funding has changed from an emphasis on inputs to one of outputs. Thus it has become imperative that the institution identifies and understands the key influences for successful completion of study. The Bradley Review of the Australian Higher Education System released in December 2008 calls on the Government to set new targets for participation in higher education particularly by regional and remote students. This will have far-reaching implications for Charles Sturt University which is a regional university (CSU, 2009) and further supports the urgent need to investigate undergraduate student attrition.

Government policy is forcing change in higher education and Australian universities can no longer view themselves 'merely as citadels of learning; they are businesses, subject to market forces similar to those affecting other organisations' (Darlaston-Jones, Cohen, Haunold, Pike, Young & Drew, 2003:1). These new government funding strategies place an emphasis on completion rather than enrolment, making completion a funding necessity and have led to increased class sizes, fewer tutorials, and concerns about the maintenance of academic standards as well as the quality of education within universities. This increasingly competitive higher education environment makes it necessary for universities to find ways to more effectively use limited resources and to maximise outcomes for both individual students and the institution as a whole. As such there is a need to recognise that various problems experienced by students (such as those considered above) equate to high attrition rates that lead to fewer graduating students and thus less funding. Such problems can also result in high social and economic costs to families and the community as well as the individuals concerned (Evans, 2000; Tinto, 1993; Yorke, 1999).

Post Dawkins, when selected fee-charging for students was introduced (see Chapter 2), universities have put a lot of time and effort into recruitment. However, there has also been widening participation in higher education, particularly over the last 20 years, which has resulted in a more diverse student body (Levy & Murray, 2002). Parry (2003), in a UK study suggests there is also a danger that wider participation may result in a larger proportion of students failing. To try and reduce these wastage rates, universities must adopt appropriate and practical intervention strategies.

Universities are also under pressure to be more efficient and client-focused. It is, therefore, important that the conditions necessary to ensure a satisfactory transition are recognized from school to tertiary study (Hemmings, 1997: 1), and also for those classed as mature students (probably working full-time), to reduce student attrition. It is important that university administrators and academics take heed of student concerns to help support these students and thus help reduce the withdrawal rate from university study, though it is obvious that not all types of withdrawal can be influenced by the university.

The recent Review of Australian Higher Education: Final Report identified that Australia is falling behind other countries in performance and investment in higher education, and losing ground. Within the OECD Australia is now 9th out of 30 in the proportion of population aged 25 to 34 year-olds with degrees to the total population, down from 7th a decade ago. The nation will need more well-qualified people if it is to anticipate and meet the demands of a rapidly changing global economy (Bradley, 2008) therefore the issue of attrition must be explored.

The proposed research on 'Successful completion of undergraduate study: key influences' is significant for the reasons outlined in Figure 1.2 below:

Figure 1.2: Justification for the research
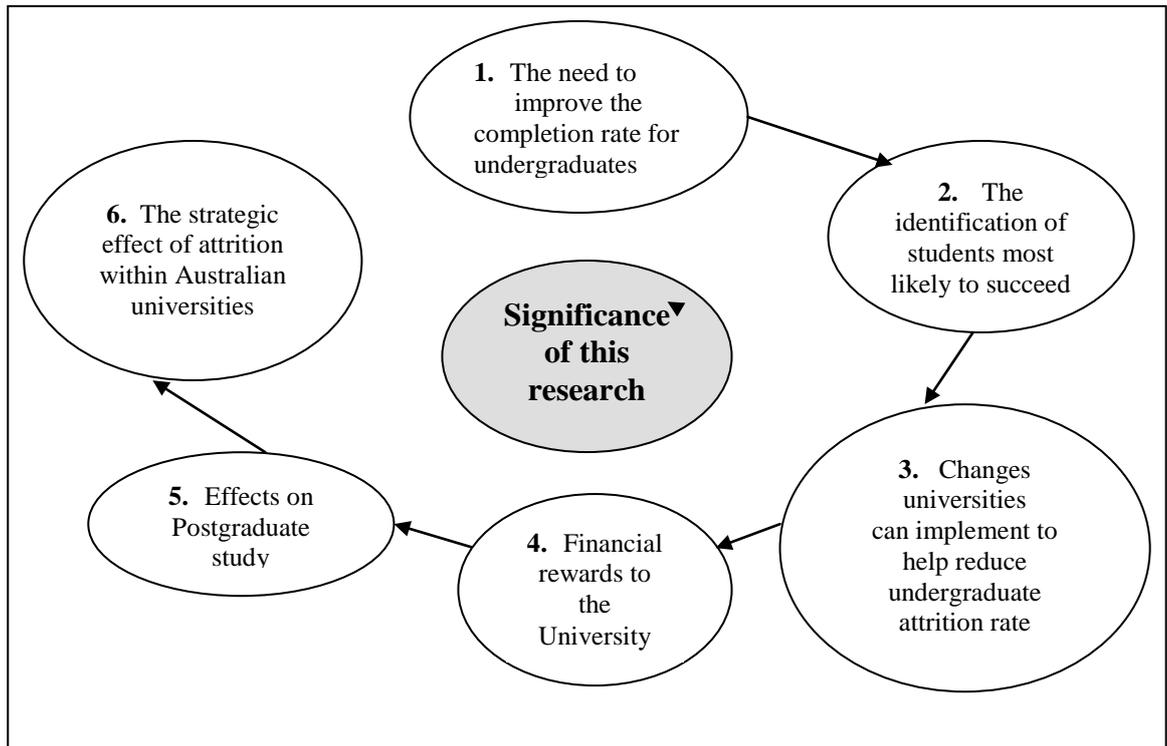
First, evidence suggests that the rate of attrition of first year undergraduate students has been steadily increasing over the last decade (Krause et al., 2005; Burgess & Sharma, 1999; Charles Sturt University, 2008). Information from the Office of Planning and Audit at Charles Sturt University suggests attrition in Faculty of Business undergraduate courses has risen from 14.6% in 1997 to 15.7% in 2007 (CSU, 2008). In fact student attrition represents a significant problem for nearly all Australian universities (Martin et al., 2001), indicating that over 20 percent of undergraduate students do not complete their degrees, and much of the attrition takes place in the first year of an undergraduate degree (DEST, 2004). The cost of student attrition to a university can be high, both financially and in reputation, which can have a negative influence on future student enrolments. If individual universities in the Australian market are to remain competitive, an understanding of the relationships between Australian universities, their students, and student requirements, needs to be developed. Consequently, results from this study highlight important issues (both pre-university and post-admission) for Australian university management but specifically for Charles Sturt University, that need to be identified and considered.

This study aims to identify whether student attrition is consistent with the theories put forward within the literature, and whether withdrawal and non-completion may be considered as inefficiencies in the system, and also a waste of talent, time and money. There could also be ethical considerations such as students not having the opportunity to follow their chosen career, or not reaching the level they wished as a result of withdrawal from study. Orr & Blythman (2002), for example argue that true participation is only realized when the new students are helped to complete tertiary study with qualifications that do justice to their potential.

Therefore, universities may need to consider the economic implications of non-retention. The changing nature of higher education also means that many university courses are satisfying the functions of both education (systematic instruction) and also professional training (high level skills and knowledge to reach the desired standard of an occupation). This only occurs if students are retained and complete their study. Thus students would achieve a high standard of both knowledge and skills in a certain occupation.

The research seeks to report some of the major findings of the study so that management decision makers both within and without this university will have current and valid data to assist in this task.

Undergraduate students have been chosen as a focus of this research rather than postgraduate because:
   i) of the relevant experiences of student withdrawal from study encountered by the researcher as a lecturer and tutor with responsibility for undergraduate students.
   ii) the percentage of students who fail to complete their undergraduate study is greater than for those undertaking postgraduate study.
   iii) there would be additional benefit to universities if reasons for non completion of undergraduate study were identified and attrition reduced. Successful undergraduates may then go on to postgraduate studies when the current program has been completed.

Definitions and limitations

In this research project the following definitions will be used:

'Withdrawal': will mean each student who withdrew from the course, rather than from individual subjects. It is most likely to take place within the first twelve months of commencement of study.

'Mature age': there are varying definitions for 'mature age' though generally it is identified as people aged between 45-65 years (Australian Bureau of Statistics, 2005). However for the purpose of this dissertation, mature age is defined as 31 years and over.

'Equity group': in Australia includes people such as: women in Non-traditional Study (WINS); those from Non-English Speaking Backgrounds (NESB); people with Disabilities; those from Rural and Isolated Areas; people from Socio-economically Disadvantaged Backgrounds (Low SES); and Aboriginal and Torres Strait Islander People (Martin, 1994).

'Leave of absence': relates to students who have temporarily withdrawn from study. Leave of absence is approved by the university for a period of time, generally from one to two years.

'Attrition': is the number of students who withdrew from their course. They neither completed nor returned to study the following year.

'Completion': is the opposite to attrition and means the student successfully finished the course.

'Retention': indicates the student is continuing study (has not withdrawn) with the expectation of completing the course.

Retention is a key measure of a university's effectiveness as an educator, therefore withdrawal and non completion can be considered a waste of time and money (Burr,

Burr & Novak, 1999) for both the university and students – thus the economic and social implications of non-retention should also be considered.

Education for education's sake

It is suggested by Dodds (2008) that knowledge and understanding may be both intrinsically and extrinsically valuable. Basic science or philosophical understanding is valued as an end to itself and can be satisfying to the person as well as being useful to society.

Similarly, there is a need to reflect on the full range of values of higher education. For example the characteristics of higher education tend to focus on knowledge and skills, particularly for vocational needs. However, the value of greater understanding, knowledge, self confidence and fulfillment should not be overlooked (Dodds, 2008) as a motivation to commence university study and also to focus on completion of their study rather than withdrawal. Knight (2008:1) suggested "university taught me a whole range of skills – how to talk to people, how to research and most of all has given me confidence in my own abilities".

Australian higher education should respond to demographic change more effectively, especially in providing lifelong learning to meet the challenge of the aging population. Education has been valued in the past where it developed vocational skills as preparation for the workplace, however Australians will need a different kind of education for the future as it is unlikely that vocational skills or professional qualifications will be sufficient. There will need to be substantive knowledge and analytical skills so they can continually adapt and learn. Education to merely gain a qualification or a job will not be sufficient.

There is also the issue that possibly the open entry policy to tertiary study, for example entry as a mature age student without previous tertiary experience and without having completed the Higher School Certificate, may bring problems of a lack of value, ie. if entry was more difficult then students might value their place in the system more highly.

An example was my own re-introduction to study as a mature age student undertaking a Master degree. This study was commenced to improve my management status in a male dominated industry, to give me self confidence and improve my knowledge, understanding and analytical skills. There was no thought or desire for a change in job or career as I was satisfied with the high level management position and good salary I already had. The change of employment to that of an academic came later. This encouraged me to persevere with the completion of my studies rather than withdrawing when the workload became a problem.

As universities widen participation, it may be necessary to adopt learning and teaching strategies to better suit those students who are less familiar with the traditional model, whilst still catering for those who have come direct from school (Trotter & Cove, 2005). Whilst students have been given the opportunity to identify socially related reasons for undertaking study such as enhancing personal or social status (Reay, David & Ball, 2005), this may not have a significant impact on the results in this study because distance students who live in regional communities throughout the state make up the majority of the survey, and the group is largely homogenous in terms of ethnic origin and social status. Also, the study will be limited to two subjects, two faculties and a manageable sample size to ensure the study was achievable within the thesis timeframe.

There may need to be some integration of the pre-university and post admission teaching and learning experiences in both content and process according to Trotter & Cove (2005) to better equip students to adjust to university life, and policies to support those students particularly vulnerable to withdrawal. Whilst this is a UK study there is also relevance to students in Australia and helping them to adjust to university life here.

Consequently, whilst limitations of this study are acknowledged, the results should highlight to Australian university management, important issues (both pre-university and post-admission) that need to be identified and adopted. If individual universities are to remain competitive, an understanding of the relationships between universities and students and their requirements, needs to be developed.

It is argued by some that not all reasons for student withdrawal represent failure. Leaving may be a positive step: students may change their goals; transfer between courses or institutions; or join the workforce (Pitkethly & Prosser, 2001:186). In the UK a high proportion of those who withdraw do return to higher education (Yorke, Bell, Dove, Haslam, Hughes Jones, Longden, O'Connell, Typszak, & Ward, 1997); an aspect that will be investigated in the current research study to see if it is relevant to Australia. However for this study success will be deemed to be the successful completion of the relevant undergraduate course, as the focus for this research is on the institution rather than the student, and funding to the university is now dependent on the number of students who successfully complete the course.

Structure of the Dissertation

This dissertation will follow a six-chapter sequence, as outlined below:

Chapter One – Introduction: This chapter introduces the reader to the research topic, identifies a brief background to the research, presents the research questions, and justifies the research. Further there is a brief description of the methodology, and delimitations of the scope and definition of the key terms.

Chapter Two – Literature review: presents an examination of the factors influencing the withdrawal of students from undergraduate study through the review of the academic literature relating to the research question. Firstly, an extensive review of literature was undertaken, identifying significant factors that can influence student attrition including pre-university issues and post admission influences. The literature reviewed motivation theories such as those of Herzberg & Maslow, identifying factors which may contribute to students' decision to withdraw from study.

Chapter Three – Methodology: describes the research design, the population and selection surveyed and interviewed, and data collection methods, including how the questionnaires and interview questions were structured.

Chapter Four – Data Analysis: A summary of the responses of participants in the survey and interviews is presented in this chapter. The responses are analysed, and an overall summary of the results supported by illustrative quotations is provided.

Chapter Five – Discussion: This chapter presents discussion on the findings of the analysis undertaken, specifically considering factors affecting the withdrawal of students involving pre-university influences and post admission influences, and the relevance of the motivation theories.

Chapter Six – Recommendations and Conclusion: summarises the study and the findings. As a result of the findings a number of recommendations are made and conclusions drawn. Implications arising from this study for further research are commented upon.

Conclusion

This chapter laid the foundation for the research that is undertaken in this dissertation. Firstly, a background to the research was given; this was followed by a brief reflection of my own experience as a tertiary student, followed by the introduction of the research questions. The purpose of the study was outlined, the importance of the topic was shown; and an outline of the type of research and how the research will be undertaken was presented. This was followed by a delimitation of the scope of this research, identification of particular definitions and an outline of the dissertation.

What the study has to offer

Whilst literature is available which considers on-campus student attrition, particularly outside Australia, there is a paucity of literature on distance mode student attrition within Australia, certainly literature since 2000. This is important as there have been numerous recent changes that may have an influence on student attrition, for example globalization, changes in the Australian government and the focus on tertiary education.

Also to more clearly understand whether the reasons for withdrawal tend to be influenced by issues relating to the background of the student or whether there may be issues the university may be able to address, discussion for this study has been divided into pre-university and post admission influences.

This study will help to fill a gap in the literature on student attrition outlined above by focusing on tertiary study delivered by distance mode with comparison between this

and on-campus study; as well as mature age students (generally studying part-time) and a comparison between this group and those who have just recently completed their schooling (generally studying full-time).

Based on the foundation laid in Chapter One, this dissertation will move on to present a detailed description of the research reported in the literature.

CHAPTER 2: Review of Literature

Introduction

This chapter will examine the contextual setting for the research project. The aim of this chapter is to introduce and analyse the literature in the field of student attrition, and to give the reader an understanding of some of the factors which may influence the withdrawal of first year undergraduate students from tertiary study. To more clearly structure this section, information has been divided into three parts:

    i)   Pre-university influences

    ii)   Post-admission influences

    iii)   Relevant Motivation Theories

Throughout this review of literature, pre-university and post-admission factors have been presented as two discrete categories for simplification, however in reality there is some overlap with some of the factors, such as personal and financial.

Whilst there are various theories which may have relevance to factors influencing withdrawal from tertiary study, only two theories will be explored here, these are Maslow's motivation theory and Herzberg's theory of motivation. These have been chosen because of the relevance of the theories in relation to issues raised in earlier research into student attrition, and the researcher's knowledge of issues raised by previous students. A number of factors identified by these two theories has also been recognized as valuable in the compilation of the questionnaires and interviews. The review of this literature has helped form the research questions used in this study. The final section of this chapter discusses the implications from the literature for this research.

Setting the scene

Student withdrawal from university education has been the subject of significant research over many years in countries such as the USA and Canada, though British universities traditionally have higher undergraduate retention and completion rates (Rickenson & Rutherford, 1995). However, there are various factors which may have an influence on this higher retention rate in the UK; for example the structure of

degrees (where students must pass a whole year to proceed to the next) and the difficulties of entry (such as higher academic requirements). An early OECD study by Blume & Amstersamska (1987), identified concerns from Norway, the USA and France about high attrition levels for undergraduate tertiary. Noble (1994) highlights both attrition and the time taken to complete tertiary study as long-standing causes for concern in Britain, Canada, and the USA as well as Australia; support for this is given by Johnes & McNabb (2004). In 2003-04 the non-completion rate for universities in the UK was around 17% (Christie, Munro & Fisher, 2004) having peaked at 19% in 1995-96.

In Australia, changes in the tertiary education system over the past generation have raised the expectations of students and their families so that now most secondary school leavers expect to be able to take part in some form of tertiary education (Burgess & Sharma, 1999:1) which has contributed to the increase in the number of students commencing tertiary study.

However, the Australian first year university population has seen a constant proportion of first year students (for example 33% between 1994 and 1999) intent on withdrawing from study in the first semester (McInnes & James, 1995; McInnes et al., 2000). Low first year university retention rates lead to fewer graduating students, which results in less funding because the Government now allocates funds to universities based on the number of students who have completed courses that year, and also fewer enrolments. Whilst the number of available places for students has increased, the funds available per student has not; in fact changes in Government Policy have led to a reduction in funding for universities.

Major policy changes for funding of higher education (*Knowledge and Innovation* policy statement, also referred to as the 'White Paper') were announced in December 1999, and performance-based funding for training was one of the new policies. Tertiary institutions would now be rewarded for ensuring that students completed their degrees, as detailed above (Martin et al., 2001: 1). Successive federal governments have encouraged the Australian higher education system to be conceptualised as a market (James, 2001). There are a number of assumptions behind this, including the belief that increased competition between universities for students

will create greater diversity of course offerings, and efficiencies throughout the system (Barr, 1998; James, 2000). Previously, the government had introduced reductions in public funding for universities in 1996, and also increased student charges under the Higher Education Contribution Scheme (HECS), and announced that institutions would be able to levy direct tuition fees for up to 25 per cent of places in any undergraduate course. This opened up the way for selected fee-charging for international students, postgraduate students and continuing professional education which has changed the face of higher education as suggested by James (2001). The Commonwealth sought a larger system with a mixed public-private funding base, in which institutions would operate as autonomous corporations (Marginson, 1998).

The former Howard Coalition Commonwealth Government also initiated a 'bonus scheme' via Learning and Teaching Performance which commenced in 2006 (with funding of A$45 million, rising to A$83 million in 2007 and A$113 million in 2009) based on performance criteria such as attrition and progression rates (DEST, 2005). The financial health of universities now depends on student numbers, and ensuring a high progression rate (Christie, Munro & Fisher, 2004), thus it has become imperative that institutions identify and understand the key influences on the successful completion of study. Whilst the recent 2008 Federal Budget increased funding for universities, overall the amount of funds per student has seen little improvement.

An early study by Baumgart & Johnstone (1977) identified that undergraduate discontinuation rates at Macquarie University were in excess of 30%, which was a similar level to that experienced by many other universities, for example the University of South Australia (Ramsay, Tranter, Summer & Barrett, 1996). A small study conducted by Burgess & Sharma (1999) at an unnamed Australian university across three academic organizational units (Design, Engineering, and Humanities and Social Sciences) found that the attrition rate for commencing students differed across these three faculties, and they had risen from 7.70% - 21.70% in 1996/97 to 9.90% - 30.90% in 1997/98 (see Table 2.1 below):

Table 2.1: 1997 Student attrition rate by selected academic organisational units

Variable	Attrition Rate %		
	Design	Engineering	Humanties and Social Science
Commencing students	12.80%	20.20%	30.70%
Females	7.50%	15.60%	29.30%
Males	12.20%	15.90%	34.70%
Less than 20 years	13.40%	16.90%	32.40%
Between 20 and 24 years	10.70%	16.10%	30.20%
Between 25 and 29 years	9.50%	12.30%	31.20%
30 or over	15.00%	29.70%	31.40%
Full-time students	9.10%	13.80%	21.80%
Part-time students	15.10%	19.90%	37.60%
1996/1997 Attrition Rate	7.70%	22.10%	21.70%
1997/1998 Attrition Rate	9.90%	15.90%	30.90%

Source: Burgess & Sharma (1999)

Burgess & Sharma (1999:8) suggest that courses with higher cut-off scores, and more competitive entry have lower attrition rates compared with first year students studying in other schools. Also students in the course of Design were involved with professional preparation courses that required them to have a specific career goal and career plan prior to applying for the course. It would appear that students undertaking a Design degree had more seriously considered/explored their choice of career and were committed and motivated to complete the course (although of course there may be fewer opportunities to change), whereas those in other faculties such as Humanities and Social Science chose their course with less consideration thus leading to a 'this course will do' attitude which failed to ensure commitment or motivation.

These high rates of attrition have continued, for example in 2006 a study of 32 Australian universities found that the attrition figure for undergraduate students was 10.5% (Olsen, 2008).

The literature has identified a number of influences on student attrition from tertiary study. To help more clearly structure the paper these influences will be presented as two general categories, 'Pre-university' influences and 'Post-admission' influences. Some early studies identified that many of the student characteristics related to dropout include family background, educational history, and goal commitment, though these are not the kind of variables that can be incorporated into selection

procedures such as the tertiary entrance ranking (TER) or equivalent (Baumgart & Johnstone, 1977). It has also been claimed by Kember, Lai, Mlurphy, Siaw & Yuen (1994) that students studying by distance mode have a higher rate of withdrawal than on-campus students. This issue will be followed up in the study to be conducted.

Tremaine (1979: 29) suggested that the most practical way of analysing information about respondents in terms of withdrawal is to use three (3) types of reasons: *fate, foreseeable* and *the university*, as they are relevant to the kind of assistance which might help students who withdraw. For example *fate* would involve illness, personal problems; *foreseeable* reasons include issues such as lack of time; and finally reasons such as course difficulty or administrative problems are grouped in *the university* category. Although this particular study has grouped reasons under *pre-university information*, and *post admission issues* (experience at university) as specific areas which may have a strong influence on the outcome of study, a number of those reasons mentioned by Tremaine (1979) such as personal issues, and problems or challenges at university were also included in these groupings as it was felt these had a great deal relevance to this study.

Significant factors that can influence student attrition include pre-university issues such as personal issues and characteristics, financial factors, primary language, age, culture, career choice or goal, and mode of entry. There are also post-admission influences that include the university (courses, workload), student expectations, and transition to university. Further discussion and consideration of pre-university and post-admission influences is set out below:

Pre-university influences

Reason, (2003) suggests cultural differences such as background, values, the particular way members of a society do things, can have an impact on a student's decision to withdraw and Darlaston-Jones et al., (2003) reached the same conclusion. Although other literature suggests that issues such as student background characteristics, personal issues, age, primary language, financial problems, career choice and goals, and mode of entry to be pre-university factors which may influence the withdrawal of university students.

Background characteristics

A study by Sharma & Burgess (1994) found that circumstances of the individual student's life influenced their retention, although the specific circumstances were not identified. A US study of college students identified the principal reasons for withdrawal were personal circumstances (Rickinson & Rutherford, 1995) such as problems with social adjustment, and commitment to study.

Some research suggests that females are more likely to complete a course than males (Martin, Maclachlan & Karmel, 2001), though Long, Ferrier & Heagney (2006) found in a study they conducted of Australian first year university students that there was little difference. Socio-economic status involving background such as the highest level of education achieved by parents, family income and parental employment, has also been found to be more likely to impact on attrition rates (Western, McMillan, & Durrington, 1998)

Personal

Southern Cross University found its attrition rate was affected by a high number of mature aged students deferring for work or family reasons, these were identified under the heading 'personal' (Gilmore, 2009).

An early study conducted by Tremaine in New Zealand found that lack of time was given as the major reason for withdrawal from study, however not every reason given by students as lack of time was placed in that category. Reasons which could not have been anticipated at the time of enrolment such as changing jobs, and personal problems were included in this category (Tremaine (1979: 24). Illness of self or family was the second largest category for withdrawal in this study, although this did not include pregnancy (Tremaine, 1979: 24). Health issues were also identified by Long, Carpenter & Hayden (1995) as a problem area which consistently appeared.

Ramsay, Tranter, Sumner & Barrett (1996) found in a study of the University of South Australia that reasons for withdrawal included personal issues such as employment. Problems with employment were also found by Long et al., (1995) to be a major issue contributing to withdrawal. The increasing work demands on the student population including more time spent in paid work created problems for

students according to McInnes et al., (2000) with the result that they required more flexibility from universities and teaching staff in order to achieve their goals.

Another study of an Australian University by Sharma & Burgess (1994) identified that individual circumstances of the student's life influenced their retention. Factors such as personality characteristics can also have a very strong influence on attrition rates of undergraduate students according to Darlaston-Jones et al. (2003).

The contradictory nature of the evidence in the research literature however indicates that there is more than just the issue of culture in the equation (Long et al., 1995). If students view education and qualification as an economic process, then social factors will be less important, but moving society away from regarding education as an economic process might be beneficial for retention rates. If they see gaining a qualification as gaining prestige or status in the social group then this may keep them studying. This can be particularly important to some groups with concepts of saving/loosing 'face'.

There are also socio-demographic variables that can be related to student attrition such as socio-economic status. Some evidence suggests that equity groups such as mature age students, and students with disabilities, are less persistent in pursuing further education than non-equity groups (Reason, 2003; Bourke, Burdon, & Moore, 1996; Dobson & Sharma, 1995; McClelland & Krueger, 1993) though again other research does not show any difference between the performance of equity and non-equity groups (Long et al., 1995).

In an early study by Baumgart & Johnstone (1977) at Macquarie University problems such as emotional issues, lack of interest, and employment problems dominated as primary reasons for withdrawal. However Wilhite (1990) found that student/academic performance is affected by the external locus of control.

Literature suggests that personal issues influencing student withdrawal from study are wide and varied, however the review of literature for this study will consider issues such as lack of time, illness, individual circumstances, employment, cultural differences, socio-demographic and socio-economic variables, and emotional issues.

Age

Both Reason (2003) and Darlaston-Jones et al. (2003) agree that students bring with them a complex combination of variables that impact on university performance and success. With the advent of alternative entry methods to university, age has become an important variable in the debate (Evans, 2000), though much of the evidence from the literature is again contradictory. West, Hore, Bennie, Browne & Kermond (1986) in a much earlier study found that age had little impact on university success or perseverance. Other researchers such as Pargetter, McInnes, James, Evans, Peel & Dobson (1998) disagree. In contrast, other studies argue in favour of deferring university study for a year following high school graduation as greater maturity increases the chance of university completion (Long, Carpenter & Hayden, 1995). Age was found to be strongly related to better performance by Clark & Ramsey (1990), although the case study by Burgess & Sharma (1999) indicated that older students (30 or over) were more likely to discontinue studies (Table 2.1).

An Australian study by Shah & Burke (1996) found a 20 year old student had the greatest chance of completing their degree compared with a student of any other age group – though this is not surprising as a 20 year old would have already been at university for two or three years, and obviously the longer a student remains in the institution, the more likely they are to complete the course. In other words, if a student of any other age group were compared with a 20 year old in the same course, the latter would be more likely to complete this course. In general, those students who commence a course when over 24 years have a lower chance of completion than those who commence at younger ages; and overall females have a higher chance of completing a course than do males according to Shah & Burke (2004: 367-368). There are of course other factors to consider in addition to age, such as the field of study undertaken (Burgess & Sharma, 1999).

A study conducted by Burgess & Sharma (1999) found that students who withdrew were generally older students aged 30 years or over. Studies by Martin, Maclachlan & Karmel (2001) and DEST (2004) suggest that students 17-20 years of age have a much lower attrition rate than older students, individual factors were responsible for the greatest differences between discontinuing and continuing students and were

associated with handling the pressures of university life, competing demands (including family and other responsibilities), and some financial pressures.

Yorke's (1999) study of premature leavers in the UK found that older students were more likely to have family responsibilities of various kinds (this could include issues such as responsibility for dependents such as children or aged parents). Also Ramsay et al., (1996) suggest that for older students, some of whom had been admitted via TAFE, mature age entry or special entry; employment and financial issues were major considerations in their decision to withdraw.

Primary language

According to Bergevin & Davison (1994) primary language is the one in which the student speaks, thinks, writes and reads when free to use any language. There is evidence (Drennan & Rohde, 2002) that when this language is different from the language used in the academic environment, there is a negative effect on the student's academic performance.

The effect of language is often used to explain performance differences between students, and a number of researchers have examined the influence of the factors. For example, Drennan & Rohde (2002), suggest that students whose primary language is English are likely to outperform others. However, researchers such as Bergevin & Davison (1994), Jackling & Anderson (1998) and Rankin, Silvester, Vallely & Wyatt (2003) found no significant impact on performance.

It has also been found (Wright, Baker & Perera, 2006) that for international students and those whose first language is not English, the language in which a student is taught significantly affects performance and highlights the importance of ensuring all students have sufficient proficiency in the language in which they will be taught. Currently, the official proficiency criteria in English for students applying to commence study at Charles Sturt University is 6.7 International English Language Testing System (IELTS), although there are a number of institutions (for example the University of Sydney) that believe the minimum should be 7. There is some evidence that the admission of international students without sufficient English language skills is occurring because of the number of pathways where students applying on-shore can

bypass the IELTS requirement. From 2002-2005 more than a quarter of international student enrolments and commencements in Australia were based on pathways other than formal test regimes (Bradley, 2008: 103).

Mode of entry and entrance score

Mode of entry to the university (eg. scholastic results, flexible entry such as previous experience, prior study, special entry considerations including equity group students) has been suggested to have an influence on student attrition by McClelland & Kruger (1993). Special entry to university is increasing in many tertiary institutions although this has rarely been included in studies to date because of the small numbers involved. McClelland & Kruger (1993) found in a study of Queensland tertiary admissions that compared with regular school entry students, those with previous post-secondary qualifications (particularly tertiary rather than TAFE) were more successful, but students without previous formal qualifications were less successful (including mature age). However, Lewis (1994) analysed the results of 10,482 commencing undergraduate students who enrolled at the University of Wollongong between 1990 and 1993 and found the performance of students who were admitted to the university by means of its access and equity schemes were comparable to that of other students. Long et al. (1995) agree and found research showed no difference between the performance of equity groups and non-equity students.

Rankin et al. (2003) found results show that better performance is associated with the entrance score of first year students and Abbott-Chapman, Hughes & Wyld (1992) conducted a study which agreed. Burgess & Sharma (1999) support this position suggesting that the highest previous level of study had an influence. For example, in their study amongst discontinuing undergraduate students, only 42% completed Year 12/Higher School Certificate, 10% had completed an undergraduate course, and 14% had completed a postgraduate diploma (in a different area); the remainder had gained entrance to university through flexible or equity access schemes. However there has also been a tendency for students to under-report the importance of academic difficulties on the decision to withdraw (Davies & Elias, 2003). This could reflect some defensive bias, where students want to present themselves in a good light and not admit academic failure. In a study carried out in the UK, Yorke (1999) also found entry requirements an issue, where non-continuation rates rise for all students as A-

level grades fall, and qualifications other than A-levels correlate with lower retention rates.

An interesting study by Wright et al., (2006) found an association between student entrance score and entry route (flexible arrangements, for example transfer between courses, and institutions, recognition of prior learning) and primary language. The results show that students with lower entrance scores perform less well than students with higher entrance scores. With respect to entry route, results again show that students with lower UAI entrance scores or non-UAI entry routes perform less well than students who enter university directly on the basis of their UAI. However, a much earlier study by Elsworth & Day (1983) found that for students who persist in higher education, entry grades do not appear to predict degree outcomes.

Financial

Over the last 20 years, a number of researchers have examined the impact of financial help needed to aid a student to stay in tertiary study. Generally, students receiving financial incentives are more likely to continue with their studies (Maryland Higher Education Commission, 2007). A recent article by Gilmore (2009) identified that financial hardship was a major cause for high fallout rate of university students in Australia.

The Centre for the Study of Higher Education (CSHE) at the University of Melbourne (McInnes & James, 1995; McInnes et al., 2000) conducted studies of first year students across a five year period (1994 to 1999) and discovered a 9% increase in the proportion of full-time students working part-time and also a surprising increase in the hours students are working (James, 2001) - this relates to the suggested financial worries many students experience whilst studying. Financial difficulties were also raised by Abbott-Chapman et al., (1992) and West et al., (1986).

However, a recent project conducted by the Australian Council for Educational Research found that participation in paid work does not appear to have any effect on students' perception of the academic experience; it also countered the perception that off-campus work is linked with more passive forms of university study (Coates, 2007). The method measured student engagement with their courses and campus life,

and was the basis of a new survey of undergraduate students from 25 universities in Australia and New Zealand. It was suggested that this was the first time Australian students were actually asked what they do.

Motivation to study

The academic orientation and motivation of students was found to be a significant predictor of performance and persistence by researchers such as Allen, Robbins, Casillas and In-Sue (2007); Le, Casillas, Robbins & Langley (2005); Eccles & Wigfield (2002); and Abbott-Chapman et al. (1992).

Results from a study by Burgess & Sharma (1999) indicated that of the discontinuing students 62% did not have a career goal, and Abbott-Chapman et al., (1992) and West et al., (1986) confirm that long term goals make a difference. However, the case study university researched by Burgess & Sharma (1999) was the first preference university for discontinuing students which suggests that in this instance the choice had been given some prior consideration. Some students also felt 'reactive' entry to the university is the natural progression - everyone goes to university, their parents/teachers want them to go to university, so going to university is probably the thing to do at the moment. These students thus commence higher education without the necessary motivation, goals or specific career choice to work hard and complete the course.

Summary:

In general, the literature (Dobson, 1999; McInnes, James & Hartley, 2000; Shields, 1995) agreed that various pre-admission factors impacted on attrition rates, including the background characteristics of the students, age, as well as external and institutional factors (Tinto, 1993). However, there were also some who argued there was little or no significance (Long, Ferrier & Heagney, 2006; Rankin et al., (2003); Long et al., 1995; and Bergevin & Davison (1994).

Moreover, the literature generally reported that the disposition of the student on entry, as well as other issues such as cultural background, and personality characteristics (Lewis, 1994; Long, 1994; McJamerson, 1992; Scott, Burns & Cooney, 1996; Strage, 2000; Western, McMillan & Durrington, 1998) can influence undergraduate student

retention and perseverance. Therefore the questions used in the research will be guided by factors such as those outlined above.

Post-admission influences

It is suggested by the literature that post admission issues such as the university, transition to university study, student expectations, social and academic interaction could influence the withdrawal or perseverance of university students and this will be followed through in the study.

University (such as course, workload, teaching)

The level of student satisfaction with the teaching and learning activities provided by the institution has been found to predict persistence (Pargetter et al. 1998), where withdrawers identified little encouragement or enthusiasm. This was also confirmed by Abbott-Chapman et al. (1992).

Abbott-Chapman et al. (1992) also concluded that student attrition was mainly influenced by course commitment and study motivation, though an earlier study by West (1985) found the principal reasons for withdrawal from studies were related to the actual course chosen, experiences of the university (social and academic), and whether students were prepared academically. According to Tinto (1993) the type and nature of the course have a significant influence on whether or not the student remains at university. One of the most frequent reasons for students discontinuing their study in 2004 was '*I changed my career goals*' (Long, Ferrier & Heagney, 2006:163-164) this may then mean the student was studying the wrong course, for example studying a business degree but then needed to study medicine or perhaps tertiary study was no longer required as a Certificate IV was sufficient.

Other influences can involve the heavy workload, long hours of study, the taste of independence after living as part of the family, and the 'spoon feeding' debate where students expect the same high level of assistance at university that they received at school. McInnes et al., (2000) found that students appear to be getting higher grades for doing less, and that student satisfaction relates more to meeting expectations than to actual levels of workload/academic demands.

Overseas research found that institutional commitment is a factor that influences persistence in study (Cabrera, Nora & Castaneda, 1993). Some researchers have distinguished between initial and subsequent institutional commitment. For example, Pascella & Terenzini (1991) found that institutional commitment appears to be more related to persistence for female (and directly affected by social integration). Allen & Nelson (1989) agree. It was also found that females dominated males in persistence in studies conducted by Clarke & Ramsay (1990) and Tinto (1993).

Transition to University

Studies both in Australia (Sharma & Burgess, 1994) and also in the US (Curtis & Curtis, 1966 cited in Sharma & Burgess, 1994) identified that a major reason for first year undergraduate students discontinuing their studies was due to the difficulties in adjusting to university education and the emotional stress associated with the education transition (Burgess & Sharma, 1999). In addition, the individual makeup of students is also an influence on their ability to cope with the pressures of university education (Compas, Malcarme & Fondacaro, 1988) irrespective of their age.

Issues affecting the transition from secondary school to the first year at university are not new in Australia (Powell, 1979), but the issues change with time. With the increasing emphasis on recognition of prior learning and credit transfer, the expansion of pathways to tertiary education and lifelong learning transition problems such as student demographic characteristics (eg. variable age, 'normal entry' qualifications, linguistic and cultural backgrounds), student psychological characteristics, student prior performance, social factors and institutional factors (Clarke, Burnett & Dart, 1994) have been identified as relevant to student transition to university study and can be devastating for individuals and their families, resulting in enormous social and economic waste (Pargetter, 1995).

Students who live away from home usually change their daily living patterns eg. different diet, physical activity and changes in sleep and work patterns (Weaver, 1979) altering the way they are used to living thus causing much stress which can affect their motivation to study.

It has been suggested by Holdaway & Kelloway (1987) that after commencing university, students are not prepared for the experience including the workload and responsibilities. They often lack the required study skills such as note-taking, time-management, library research, essay writing and examination requirements (Cornell, Cornell, Dickie, Elizov, Farrell, Kubanel, Monpetit & Walter, 1990), as well as good personal relationships which help them to cope with adjusting to university life. The difficulties experienced by students who lack the required study skills, both with their studies and 'fitting in' with other students, has been witnessed as a lecturer of first year students. When combined with other difficulties, this may then lead to the student withdrawing from study during this critical first year.

Student expectations

Pargetter et al. (1998) found that a mismatch between prior expectations and actual experiences was a major reason for withdrawal. Additionally, Terenzini, Allison, Gregg, Jalomo, Millar, Rendon & Upcraft (1993) found that faculty involvement was critical in orientation, and parents' involvement was also important.

Studies such as Cornell et al. (1990) and Terenzini (1992) suggest that in the first semester students move from a school environment which is quite structured to a more relaxed one. This results in first semester students having to adjust and show greater self-discipline and self-motivation in order to meet university study requirements (Cornell et al., 1990). In addition, students need to be flexible so that they can adapt to the different instructional methods such as lectures, tutorials and practical workshops, as well as the varying teaching styles used by lecturers (Johnes & McNabb, 2004); Holdaway & Kelloway, 1987) as first semester university study is much more difficult than high school.

In Australia, research by James (2001) suggested student expectations of higher education seem to be changing, particularly the declining willingness of many students to fully take part in university life. According to James (2001) students' changing preferences and expectations of higher education and the consequences of mismatches with the reality affects both the educational consequences and the two-way interaction between the students and the university. It was found that students may develop unrealistically high expectations (for their own level of attainment, or of

university services). Students' expectations relate to both quality, (Am I getting value for money?) and personal relevance (Is the course right for me?) and are thus quite diverse and individual in character.

A presentation by Round (2004) in the UK on undergraduate non-completion of higher education suggested some of the main reasons for attrition were incorrect choice of course (did not match the student's strengths/interests), mistaken expectations by students (for example expectations of university study versus expectations of study at school), and the university learning styles versus the school learning styles (the knowledge learning at school vs problem solving focus at university of no wrong answers), and reactive entry (university is the natural progression, everybody goes to university). Professor Bradley in her recent review of higher education said factors affecting an individual's completion of a course included course content and course satisfaction (Bradley, 2008). Students from government schools generally appear less likely than those from non-government schools to enter tertiary education (Elsworth & Day, 1983), but those who do are more likely to persist and to perform (Abbott-Chapman et al., 1992; West et al., 1986). An exception to this was the study of medical students by Tutton & Wigg (1990).

Factors such as school type were identified as having an influence on performance (Elsworth & Day, 1983), as students' expectations of university are formed during the final years of high school, therefore the contribution of the school towards the transition from school to university is important. How prepared the student was for university (West et al., 1986), and previous school performance (for example their success academically (McInnes et al., 2000)) has also been shown to help predict first-year success at university. An Australian study found the attrition rate of 5% from higher education for those with ENTER (Equivalent National Tertiary Entry Ranking) scores of 90 or more compared with a rate of 23% for those with ENTER scores of less than 70 according to Cao & Gabb (2008). A UK study (Johnes & McNabb, 2004) also found that the type of school previously attended contributed significantly to student expectations and attrition though McMillan (2005) did not find this to be the case.

Academic and social interaction

Academic interaction with faculty staff has been found to be a significant predictor of persistence in tertiary study (Pargetter et al. 1998). This has been confirmed by Pascarella & Terenzini (1991) especially for males and distance students (in particular first year students). Although Bean & Vesper (1994) and Bean (1985) found that faculty contact did not appear significant at a large US research university.

Other studies (Kember et al., 1994; Scott, Burns & Cooney, 1996) confirm the importance of social and academic interaction to student progress, particularly in distance education. It was also found that students had differing experiences of interpersonal supports such as academic skills advisors, counsellors, medical services, or financial management advice whilst at university, though personal reasons in themselves did not necessarily result in withdrawal (Burgess & Sharma, 1999).

Results from a study conducted at Macquarie University indicate that students valued opportunities for student and staff interaction, particularly in their area of study, and confirmed the importance of social interaction within academic learning communities (Dickson, Krause & Rudman, 2002). A discussion paper by Beder (1997) identified that the first year is important in the social and academic integration of a person into the academic and social role of the university. Social integration is more than a simple matter of the student having social interactions, rather it requires students to see themselves as a "competent member of an academic or social community" within the university.

Summary:

A survey undertaken at the University of South Australia (Ramsay et al., 1996) identified that the majority of commencing students who withdrew in the first semester did so before the HECS cut-off date (6 weeks after commencement of the semester) which shows the decision was made in the first few weeks of commencing university. It was also found that attrition rates for indigenous students were very high, possibly due mainly to the flexible entry scheme to university, and those rates for external (distance) students were also well above the University's average. The reasons given for withdrawal included personal reasons (particularly for women and rural/isolated groups, and non English speaking students), employment, financial

(NESB in particular), and academic preparation. Students' goal commitment, and individual university experiences after entry (social and academic) can also contribute to the decision to withdraw (Ramsay et al., 1996).

Whilst discontinuing and continuing students admitted to experiencing stress associated with academic coping, this did not seem to be a causal factor for withdrawal (Burgess & Sharma, 1999).

Two large quantitative studies in UK higher education have been carried out by Yorke (1999) and Davies & Elias (2003). Yorke's work involved responses from 2151 students who left their program, and Davies & Elias attracted 1510 responses from students who left. These studies found the most frequently cited influences on students' early departure from their courses were wrong choice of course, academic difficulties and financial problems (these are ranked in Table 2.2 below):

Table 2.2: Main factors influencing student withdrawal: Comparison between Yorke (1999) and Davies & Elias (2003)

Yorke (1999)	Davies & Elias (2003)
Wrong choice of field of study	Wrong choice of course
Academic difficulties	Financial problems
Financial problems	Personal problems
Poor quality of student experience	Academic difficulties
Unhappiness with the social environment	Wrong choice of institution

Source: Yorke (2003: 2)

Another study also conducted in the UK of two contrasting Scottish universities (Heriot-Watt and Glasgow Universities) produced similar results to those above (Christie et al., 2004). It was based on a relatively small-scale quantitative survey of students who withdrew or continued so comparisons between the two groups could be made. This study found the main factors influencing student withdrawal included: poor choice of course, limited social support networks, and lack of 'fit' between student and institution (see Figure 2.1 below):

Figure 2.1: Reasons why students do not complete degrees (total no. of students=63)
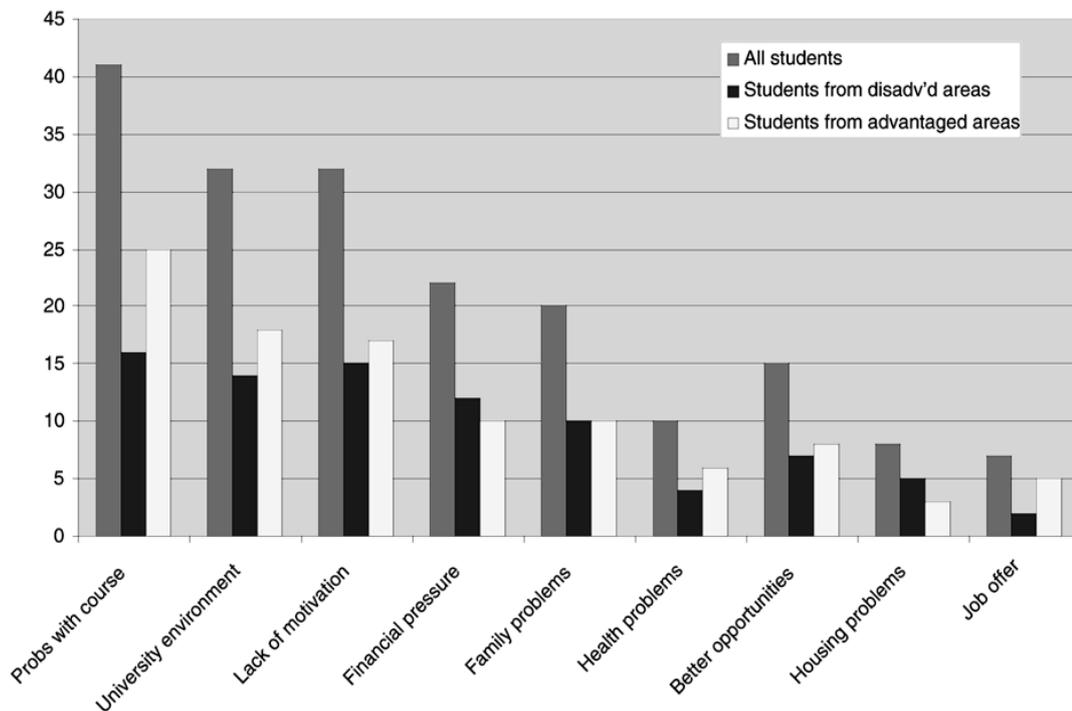
Source: Christie et al. (2004: 622)

However in Australia, the Department of Education Science and Training (DEST) (1999) suggested that differences in delivery mode, discipline areas, and the actual faculty (eg. Sciences compared to Humanities or Social Sciences) can have an effect on the success rate of students. A study by Shah & Burke (2004) agreed, suggesting that the probability of completing, and the time to complete an undergraduate course, is likely to vary according to the field of study undertaken, and also by the age and sex of the student. For example a student commencing the course at between 19 and 20 years of age has the highest chance of completion and females have a higher chance of completion than males. Thus those students who commence a course at an age over 24 years, have a lower chance of completion than those who commence at a younger age.

Overall, the literature reviewed has identified various issues (both pre-university and post-admission) that may influence the decision of students to withdraw from tertiary study. These issues have been chosen for further investigation as previous research and personal experience with students suggests that these issues can provide insight as to why students withdraw from undergraduate study. A summary of the literature

referred to when considering the pre-university and post-admission influences of undergraduate withdrawal from study is set out below (Table 2.3):

Table 2.3: Literature used for pre-university and post-admission influences

Pre-university Influences on Attrition	Literature	Country
Background characteristics	1994 Sharma & Burgess 1995 Rickinson & Rutherford 1998 Western et al. 2001 Martin et al 2006 Long et al	Australia USA Australia Australia Australia
Personal	1977 Baumgart & Johnstone 1979 Tremaine 1990 Wilhite 1993 McClelland & Krueger 1995 Long et al. 1995 Dobson & Sharma 1994 Sharma & Burgess 1996 Ramsay et al. 1996 Bourke et al. 2000 McInnes et al. 2003 Reason 2003 Darlason-Jones 2006 Long et al	Australia New Zealand Australia Australia Australia Australia Australia Australia Australia USA Australia Australia Australia
Age	1986 West et al. 1990 Clark & Ramsay 1995 Long et al. 1996 Ramsay et al. 1996 Shah & Burke 1998 Pargetter et al 1999 Yorke 1999 Burgess & Sharma 2000 Evans 2001 Martin et al. 2003 Reason 2004 Shah & Burke 2004 DEST 2003 Darlaston-Jones et al.	Australia Australia Australia Australia Australia UK Australia UK Australia USA Australia Australia Australia USA
Primary Language	1994 Bergevin & Davison 1998 Jackling & Anderson 2002 Drennan & Rohde 2003 Rankin et al. 2006 Wright et al. 2008 Bradley	USA Australia Australia USA Australia Australia
Mode of entry and entrance score	1983 Elsworth & Day 1992 Abbott-Chapman et al. 1993 McClelland & Kruger 1994 Lewis 1995 Long et al. 1999 Burgess & Sharma 1999 Yorke 2003 Rankin et al 2006 Wright et al. 2006 Long et al 2003 Davies & Elias	Australia Australia Australia Australia Australia Australia UK USA Australia Australia UK
Financial	1986 West et al. 1992 Abbott-Chapman et al. 1995 McInnes & James 2000 McInnes et al.	Australia Australia Australia Australia

Pre-university Influences on Attrition	Literature	Country
	2001 James	Australia
	2007 Maryland Higher Education Commission	USA
	2007 Coates	Australia
	2009 Gilmore	Australia
Motivation to study	1986 West et al.	Australia
	1991 Pascella & Terenzini	USA
	1992 Abbott-Chapman et al.	Australia
	1999 Burgess & Sharma	Australia
	2002 Eccles & Wigfield	USA
	2005 Le et al	USA
	2007 Allen et al.	USA
University (eg. coursework, workload, teaching)	1985 West	Australia
	1989 Allen & Nelson	USA
	1990 Clarke & Ramsey	Australia
	1991 Pascella & Terenzini	USA
	1992 Abbott-Chapman et al.	Australia
	1993 Cabrera et al	USA
	1993 Tinto	USA
	1998 Pargetter et al	USA
	2000 McInnes et al.	Australia
	2006 Long et al.	Australia
Transition to university	1966 Curtis & Curtis (cited in Sharma & Burgess 1994)	USA
	1979 Powell	Australia
	1979 Weaver	USA
	1987 Holdaway & Kelloway	Canada
	1988 Compas et al.	Australia
	1990 Cornell et al.	Canada
	1994 Sharma & Burgess	Australia
	1994 Clark et al.	Australia
	1995 Pargetter	Australia
	1998 Pargetter et al.	Australia
	1999 Burgess & Sharma	Australia
	2007 Allen et al.	USA
Student expectations	1983 Elsworth & Day	Australia
	1986 West et al.	Australia
	1987 Holdaway & Kelloway	Canada
	1990 Cornell et al.	Canada
	1990 Tutton & Wigg	Australia
	1992 Abbott-Chapman et al.	Australia
	1992 Terenzini	USA
	1993 Terenzini et al.	USA
	1998 Pargetter et al.	Australia
	2000 McInnes et al.	Australia
	2001 James	Australia
	2004 Round	UK
	2004 Johnes & McNabb	UK
	2005 McMillan	Australia
	2008 Cao & Gabb	Australia
	2008 Bradley	Australia
Academic and social interaction	1983 Pascarella & Terenzini	USA
	1985 Bean	USA
	1994 Kember et al.	USA
	1994 Bean & Vesper	USA
	1996 Scott et al.	Australia
	1997 Beder	Australia
	1998 Pargetter et al.	Australia
	1999 Burgess & Sharma	Australia
	2002 Dickson et al.	Australia

Theories

There are a number of theories put forward which may provide an explanation of first year students' decision-making regarding continuing or leaving university study. However, Zimitat (2003) argues that Tinto's theory of student departure, and the motivation theories of Herzberg and Maslow, can give a strong contribution to addressing the question 'Why do students withdraw from study, particularly in their first year?

Although modern theories of motivation, focus more specifically on the relation of beliefs, values and goals with action (Eccles & Wigfield, 2002), their relevance to this study has also been given consideration.

Tinto's Theory of Student Departure

Literature on first year university student persistence has been strongly influenced by Tinto's (1993) work which suggests that it is the level of integration between the student's personal characteristics and attributes that influence commitment to the course and institution, and relates to decisions about withdrawal (Horstmanshof & Zimit, 2003:1). The theory argues that once a student enrols in a particular higher education institution, these initial commitments interact with the economic and social components of the university, resulting in different levels of academic and social integration.

According to Tinto (1987, 1993), academic integration stems not only from the student academic performance but also from interaction with staff, while social integration reflects student participation in and satisfaction with extra curricular activities and peer group relations. The theory argues that, all things being equal, a match between an individual student's characteristics and the institution's academic and social components determine the student's commitment to university completion and the commitment to their university. These two final commitments, together with the levels of academic and social integration, have a direct effect on decisions to persist or withdraw from the university.

Tinto's model has been criticised by authors such as Ozga & Sukhnandan (1997) who suggest it needs to be more specific about integration, suggesting it was not clear

exactly what he meant by integration and that he focused on the student as the problem. Also Ozga & Sukhnandan (1997), Yorke (1999) and Tanaka (2002) expressed concern that the theory is characterised by culturally specific assumptions of student characteristics and behaviour and therefore has limited application to higher education institutions outside the USA (Horstmanshof & Zimitat, 2003). McInnis (2001), writing within an Australian context, further emphasised this. Spalding (1998 cited in Burgess & Sharma, 1999) suggests that decisions to withdraw from a particular course compared to a student's decision to withdraw from all higher education, would be based on different motivation and differing outcomes rather than Tinto's explanation.

Whilst there may be reason to agree that Tinto's (1993) understanding of student attrition may have some relevance, other literature (Burgess & Sharma, 1999) suggests the more committed a student is at a personal level to their course choice, together with higher levels of social integration and emotional intelligence, the more likely they are to remain at university and complete their course. As Burgess & Sharma (1999) suggest, for a university to be able to modify policies, procedures, and practices to reduce withdrawal, then an understanding of both withdrawing and completing students is needed (Spalding, 1998 cited in Burgess & Sharma, 1999).

Theories of Motivation

The motivation theories presented may provide an appropriate (though limited) model for examining first year students' decision-making regarding continuing or leaving university study. Eccles & Wigfield (2002) suggest that the study of motivation is the study of action which again relates to the students ie. learners who are notivated involve 'action'. A number of authors have defined the concept of motivation. For example motivation has been defined as: the psychological process that gives behaviour purpose and direction (Kreitner, 1995); a predisposition to behave in a purposeful manner to achieve specific, unmet needs (Buford, Bedeeian & Lindner, 1995); an internal drive to satisfy an unsatisfied need (Higgins, 1994); and the will to achieve (Bedeian, 1993). Different people have different wants or needs; part of what a motivational theory tries to explain and predict is who has which wants.

Lumsden (1994) identified student motivation as the desire to be involved in the learning process, and Weiner (1990: 618) acknowledged that initially 'motivational psychologists were concerned with what moved a resting organism to a state of activity'. Motivated learners are more likely to achieve higher levels of success and motivational factors contribute to the retention of students according to Hu (2008) and learners (especially adult learners) who maintain high motivational levels during their learning are more likely to be successful. It may appear therefore that the higher dropout rate of online or distance courses can be considered an indicator of motivational problems (Hu, 2008). A study conducted by Zimitat (2003) found that nearly half of full-time first year students reported sporadic study efforts and difficulties with motivation and they made the minimum effort to pass their courses, however the students were largely satisfied with the assessment outcomes from that level of input.

The Hawthorne studies, conducted by Elton Mayo found people are not solely motivated by money. Understanding what motivates people was the focus of many researchers following publication of the Hawthorne Study results (Lindner, 1998). Five major approaches that led to our understanding of motivation are: Maslow's need-hierarchy theory, Herzberg's two-factor theory, Vroom's expectancy theory, Adam's equity theory, and Skinner's reinforcement theory (Lindner, 1998).

Maslow suggested that people have five levels of needs: physiological, safety, social, ego and self-actualising, where the lower level needs must be satisfied before the next level need would motivate people (Travaglione, 2004: 23-24; Maslow, 1970). Herzberg's work categorized motivation into two factors: motivators and hygienes. These involve motivator or intrinsic factors such as achievement, recognition, satisfaction, status or prestige, and hygiene or extrinsic factors such as pay and job security which can produce dissatisfaction (Herzberg, Mausner & Snyderman, 1903). Vroom (1964) based his theory on the belief that effort will lead to performance which then leads to rewards. Rewards can also be positive or negative – the more attractive the reward the more likely the person will be highly motivated, and obviously the less attractive the reward the less likely the person will be motivated. Adams' (1965) theory suggests people (employees or perhaps students) strive for equity between themselves and others. Equity is achieved when the ratio of employee

outcomes over inputs is equal to other people's outcomes over inputs (Adams, 1965). Finally, Skinner's theory states that behaviours that lead to positive outcomes will be repeated, and those that lead to negative outcomes will not be repeated (Skinner, 1953).

More recent theories of motivation reviewed by Covington (2000) and Eccles & Wigfield (2002) focus on the relation of beliefs, values and goals with action. Several of these theories focus on expectancy (self-efficacy theories, control theories), there are also theories focused on the reasons for engagement (intrinsic motivation theories), theories integrating expectancy and value constructs (attribution theory, modern expectancy-value theory), and also theories integrating motivation and cognition (Bartol, Tien, Matthews & Sharma, 2008, and Eccles & Wigfield, 2002). These theories can be divided into two groups: achievement-as-drive (where the key construct is motivation to achieve) and achievement-as-goal theories according to a recent study by Le, Casillas, Robbins & Langley (2005).

During my own involvement with tertiary study, first as a student, and more recently as a lecturer over the last nine years, I have become aware of the part motivation can play in the success or failure of students commencing study at university and their transition to tertiary study either as a mature age student or a student who has come straight from a school environment. From my own observations, a number of the factors identified in Maslow's and Herzberg's theories appear to be related to issues that contribute to the success or failure of students undertaking tertiary study such as wrong choice of institution, course or personal problems.

It would therefore follow that the study of motivation theories may have relevance to reasons for undergraduate students discontinuing their studies, as there are various factors in relation to these theories which may motivate students to either continue their study or withdraw (see Table 2.3).

As mentioned previously, Zimitat (2003) suggests that the motivation theories of Herzberg and Maslow, can give a strong insight into addressing the question 'Why do students withdraw from study, particularly in their first year?' and identifies a number of factors which may have an influence on students' decision to either withdraw from

study or to continue to complete their course, such as overall personal satisfaction with study, assessment and teaching.

Additional discussion on these two theories follows:

Maslow's Motivation Theory:

Maslow (1970) identified a hierarchy of motivational needs that influence behaviour and involves physiological, safety or social needs, and psychological needs, indicating that certain needs have precedence over other needs. It begins with physiological needs that indicate a person's acquisition of basic or lower needs such as food, shelter, and clothing; individuals try to satisfy these needs before turning to needs at the safety and security level which involve security, protection, stability. Once the physiological and safety needs are satisfied the social and 'belongingness' needs such as relationships and acceptance are activated. The higher order needs are esteem, recognition and self-actualisation, and are depicted in Figure 2.3. Here challenging work and recognition for performance are the focus (Wood, Wallace, Zeffance, Chapman, Fromholtz & Morrison, 2004). Maslow suggests some needs are assumed to be more important than others and must be satisfied before the other needs can serve as motivators. Thus the basic physiological needs must be satisfied before the safety needs are activated, and the safety needs must be satisfied before the social needs, then the higher needs of love, self-esteem and personal fulfilment would be released which in turn become the motivators (Wood et al., 2004).

The five needs in Maslow's hierarchy (starting with the most essential) are:
   i)   Physiological (basic elements of life)
   ii) Security (safety and security)
   iii) Social (belongingness – need to be loved)
   iv) Esteem (one's own worth & competence)
   v)   Self-actualisation (need to be personally fulfilled/sense of achievement).

See Figure 2.2 below:

Figure 2.2: Maslow's Hierarchy of needs
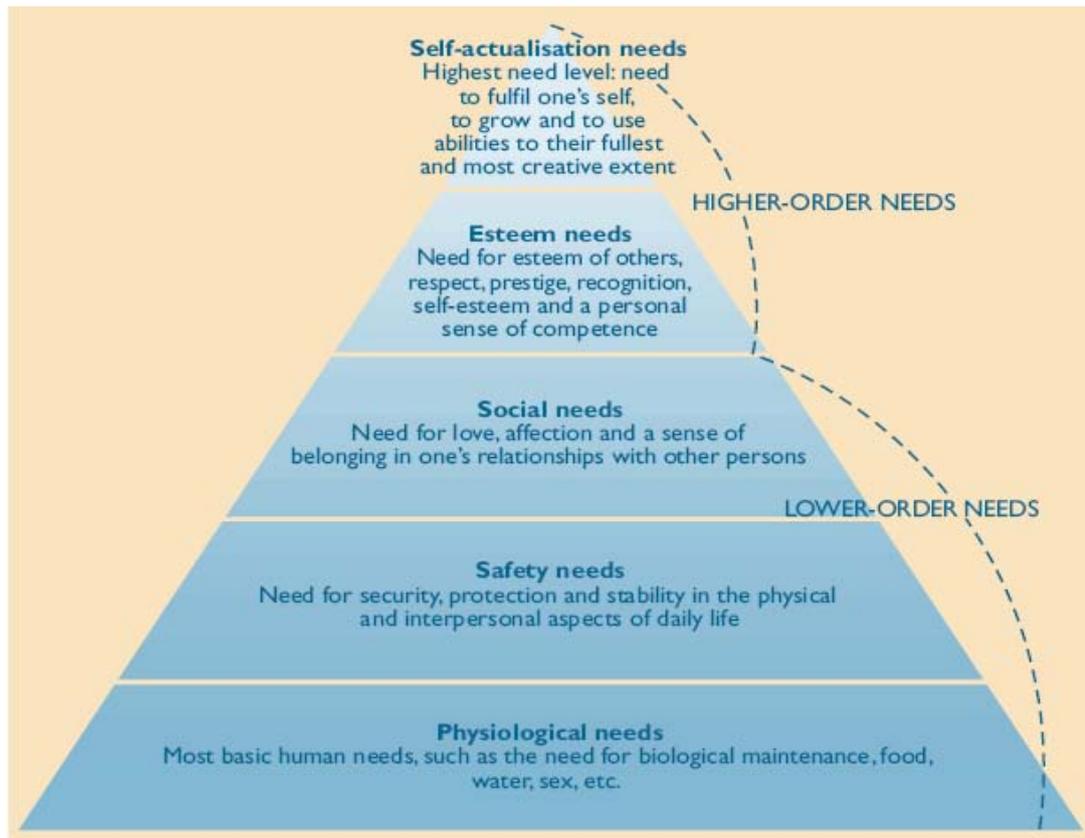
Source: Wood et al, (2004: 144)

Therefore if students' basic physiological (eg. food, water, warmth, accommodation, financial) and security needs (somewhere safe to live, security) become threatened, they would focus on those lower order needs and would decrease their efforts to satisfy social (companionship and involvement with others), esteem (gaining recognition and respect from others) and lastly self-actualisation (concerning the desire for status, prestige and personal growth) or achievement needs which is the highest level (Hitt, Black, Porter & Hanson, 2007: 418-419), for example their studies. In other words students may withdraw from study if the lower order needs were not satisfied.

One of Maslow's major findings suggested that there is a dual process of equalisation and actualisation that helps the continued development of the whole person. Equalisation is the process by which the lesser needs are fulfilled, whereas actualisation represents the needs that influence the individual towards continuing

change and growth (Reid, 2007). These needs are considered to be higher needs: knowledge, creative, ethical and aesthetic. Thus Maslow's theory highlights the fact that learning, behaviour and development are influenced by motivational needs, providing an excellent model for understanding human motivation (Reid, 2007) and gaining an understanding of what motivates students to complete their study.

Criticisms have also been voiced of Maslow's theory by a number of authors (Tietjen & Myers, 1998; Haslam, Powell & Turner, 2000; Ramlall, 2004). An example is given when companies built golf courses, country clubs and sponsored after-hours activities in the hope that employee motivation could be achieved by increasing workers' ability to socialise – in general these programs failed, as people were already satisfied and these additional 'things' did not motivate them further. There was also the problem that when these things were later withdrawn, there was a lot of dissatisfaction, and demotivation by employees. The most common criticism concerns his methodology, as he chose a small number of people that he identified as self-actualising, and after either reading about them or talking with them, came to the conclusion about self-actualising – to many people this is not good science (Boeree, 2006). Maslow's theory has sometimes been criticised on hierarchical grounds, for example Wahba & Bridgewell (1976) found little evidence for the ranking of needs described by Maslow or the existence of a definite hierarchy, for example people often risk their own safety to rescue others from danger. The question is asked whether this really reflects the order in which needs are satisfied, or is it more like lofty goals such as personal growth and creativity are at the top and base instincts like hunger at the bottom? (Tietjen & Myers, 1998; Haslam, Powell & Turner, 2000; Ramlall, 2004). It also needs to be remembered that a lot of time has elapsed since this theory was first introduced and we have seen changes in society including what actual issues are most important to young people at the present time, and students in particular.

Herzberg's Theory of Motivation:
When it became apparent that there were problems with Maslow's explanation of motivation, Herzberg continued the work with others to develop the motivation/hygiene theory (Herzberg et al., 1993).

Herzberg categorised motivation into two factors: motivators and hygienes (Herzberg et al. 1993). Motivator or intrinsic factors such as achievement and recognition which could produce satisfaction for students, and the enjoyment of acquiring knowledge with the sense of accomplishment it brings; and hygiene or extrinsic factors such as pay, job security and career which could produce dissatisfaction, relying on receiving rewards or avoiding punishment to motivate their level of performance - they tend to exert a minimal amount of effort to obtain the maximum reward (Lepper, 1988). Motivation is dependent on internal or external factors that explain the level of involvement in an activity.

With this theory the factors that are linked with people being happy are called 'satisfiers' or 'motivators', and can be identified as a sense of achievement and recognition for things done, for example study completed, qualifications achieved, responsibility, advancement. Thus the factors that can be linked with people having a bad time or being unhappy are called 'dissatisfiers' or 'hygiene factors'. These can include things such as personal factors, not coping with study and assessments, lack of status, lack of achievement, problems with peers. These items are associated with bad feelings which are demotivating. So when hygiene factors are maintained, dissatisfaction is avoided (a feeling of achievement is created); however when hygiene factors are not maintained then obviously dissatisfaction occurs and motivation (perhaps to complete study) cannot happen.

Motivational factors associated with higher education are not generally obvious and can only be understood through consistent involvement, so student dissatisfaction on commencement would probably involve an absence of hygiene factors such as facilities and services (Horstmanshof & Zimitat, 2003). Prospective students are known to be able to make decisions about courses, and institutions by leaning towards hygiene factors such as ease of access from home and the ambience of the campus buildings and surroundings (James, Baldwin & McInnes, 1999). The less observable issues of university experience include inspirational teaching and belonging to an appropriate peer group and learning community. Thus working to address students' expectations of hygiene factors is quite important to help head-off potential dissatisfaction (Horstmanshof & Zimitat, 2003). Whilst for some students satisfaction with the university experience itself is sufficient benefit to continue, however for

others, the perceived satisfaction that a hoped-for future will bring may outweigh any temporary dissatisfaction experienced in the current university situation (Horstmanshof & Zimitat, 2003).

In the USA a study by DeShields, Kara & Kaynak (2005) focused on student satisfaction and retention in a university. The results found that students' experience of satisfaction was consistent with Herzberg's two factor theory. Students who have a positive tertiary experience are more likely to be satisfied with the university than students who do not have a positive experience, and are less likely to withdraw from study. It was concluded that 'As Herzberg's two-factor theory suggests, a non-significant path coefficient from the advising staff performance to student partial experience is consistent with the role of a hygiene factor'. It was also found that whilst 'the absence of good advising staff performance may lead to dissatisfaction, their presence does not lead to satisfaction, since students may not see advising staff as being directly related to the expected outcomes' (DeShields, Kara & Kaynak, 2005:4).

Again there are a number of critics of Herzberg's hygiene theory (Gagne & Deci, 2005; Evans, 1998; Ramlall, 2004). For example Tinto (1993) suggested that satisfaction is associated with performance and is predictive of persistence in higher education. Allen (1999) theorised that the relationship between motivation, persistence and attainment is the best predictor of academic success. There is also the criticism that the two-factor theory result is observed because it is natural for people to take credit for satisfaction and to blame dissatisfaction on external factors. Furthermore satisfaction does not necessarily imply a high level of motivation or productivity.

Set out below is Table (2.4) identifying theories and factors in relation to the motivation theories of Maslow and Herzberg, clearly showing relevance to issues relating to student attrition. Factors identified in this table were included in the surveys and interviews to help identify issues which may contribute to student attrition:

Table 2.4:   Factors relating to students and motivation theories

Maslow's motivation theory: Student focuses on basic physiological & security needs (accommodation & financial) ie. lower order needs, and would decrease efforts to satisfy the higher level needs eg. their studies.	Students motivated by factors such as: • personal issues • financial • better job and pay • further career opportunities
Herzberg's theory of motivation: Students may make decisions about courses, and institutions by leaning towards hygiene factors such as ease of access from home and the ambience of the campus buildings and surroundings.	Students motivated by factors such as: • background characteristics • course choices • what university offers • distance or on-campus mode

On reviewing discussion of the various theories, and also the criticism from other researchers of Tinto's 1990 theory of student attrition it has been decided to base the study on the work of Maslow and Hersberg alone, with some allusion to Tinto.

However the strong support of motivation theories such as Maslow and Herzberg by literature above (including Zimitat, 2003) and the relevance shown to students commencing undergraduate study; my own understanding of the motivation theories and my first hand experience with undergraduate students as a lecturer has influenced this paper to specifically focus on these two theories. Issues such as document restrictions has also had a bearing on this decision. It is also worth remembering that whilst Maslow's and Herzberg's theories are not the most recent examples and have their critics, they are probably the two most famous content theories of motivation and have strong relevance in this research.

Summary

Darlaston-Jones et al., (2003:1) concluded that various factors impact on attrition rates, such as the background characteristics of students (Dobson, 1999; McInnes, James & Hartley, 2000; Shields, 1995) in addition to both external and institutional factors (Tinto, 1993). This would include the student's goal commitment on entry, and individual experiences after entry (both social and academic), as all these would contribute to the decision to withdraw. Tinto (1993) suggested the size of the institution and the type and nature of the course also influenced whether or not the student remains at university. Then there are the needs of specific student groups and the difficulties they might encounter as a result of their academic, social, and cultural backgrounds as well as personality characteristics (Lewis, 1994; Long, 1994; Scott,

Burns & Cooney, 1996; Strage, 2000; West, 1985) such as NESB (non English speaking background) students.

Burgess & Sharma (1999) agreed, suggesting that incentives and disincentives for undergraduate students to complete a university degree do not relate to one specific issue, rather there can be a range of individual, interpersonal, or other factors relating to the institution. McInnes et al., (2000) believed that there is a general agreement that retention issues are becoming more complex, and Australian national research findings highlight increasing financial pressures and work demands on the student population.

The literature suggested that student attrition is a result of a relationship between students and the teaching and learning environment (Ramsay et al., 1996). Robinson (2004) supported this suggesting there is a large volume of literature written on persistence and retention of college and university students, particularly in the USA (Cabrera, Nora & Castaneda, 1993; Pascarella & Terenzini, 1991; Tinto, 1975; Tinto, 1988; Tinto, 1993) which showed that both the characteristics of students entering universities as well as their social experiences at the institution play a role in retention. According to Evans (2000) studies suggested that students' persistence and performance are related to their background characteristics, disposition on entry, goal commitment and experiences after entry – including academic and social interaction, as well as to external and institutional factors.

Conclusion

Overall, specific characteristics which seem to be consistently identified in the literature include background and personality characteristics (motivation, commitment), expectations and transition to university. Other factors such as financial, cultural background, mode of study (on-campus or distance), social interaction and mode of entry (Higher School Certificate results, mature age, work experience) may also have some influence on a student's decision to withdraw from study. Consequently, each of these identified factors from the literature, warrant detailed consideration in this research.

Whilst there is a well-defined body of research evidence on non-completion of undergraduate study generally, this review of the literature identifies a paucity of literature which specifically focuses on distance study (including rural-based tertiary students), *and* a comparison between on-campus students with those who study by distance. The literature appears to mainly consider either students studying on-campus (for example James, 2001; McInnes & James, 1995; Yorke, 1999) or students generally, with no distinction about the mode of study although there was some consideration of the mode of entry (for example Ramsay et al., 1996; Burgess & Sharma, 1999). Therefore this study will bring a new perspective to this project, by focusing on distance students and comparing the two groups (distance and on-campus students) and mature age students with the younger group. Exploration of these differences can bring a better understanding of the nature of non-completion of undergraduate study and what procedures the institution can implement to help retain these students.

The results of this study will be particularly useful for identifying why students withdraw from their study, developing a profile of the student most likely to withdraw from tertiary study (key characteristics/factors influencing withdrawal), comparing both distance students with those studying on-campus, and mature age students with those who have only recently completed study at school.

Whilst this study will focus on why students withdraw from study, there could be an opportunity in the future as part of a different study, to focus on the experiences of both the continuing and non-continuing students (Christie et al., 2004) ie. why pressures such as social, institutional, or financial, remain bearable for one student but not for another.

CHAPTER 3: Methodology and Research Method

Introduction

This chapter presents the research questions that direct this descriptive and explanatory investigation. Along with the details of procedures and methodologies used to conduct this study the chapter indicates the rationale for the integration of both qualitative and quantitative approaches. The chapter describes the context and design of the research, and summarises the methods and techniques chosen to collect and analyse the qualitative and quantitative data. Finally, the ethical considerations are outlined.

Few studies have examined distance students and the reasons some withdraw from study, research tends to mainly focus on on-campus students. The primary purpose of this research is to redress this omission by gathering, interpreting and analyzing students' perceptions of the factors that influence withdrawal from undergraduate study in two faculties within a tertiary institution and to explore the profile of the first year student most likely to withdraw from the course. Motivation theories such as Maslow's Hierarchy of Needs (Bartol, Tein, Matthews & Martin, 2006) and the Hygiene Theory or the Two Factor Theory of Motivation (Herzberg et al., 1993) may also have a part to play.

Based on the analysis of the literature relating to attrition in undergraduate study, the aim of this study is to determine the impact of selected features on the attrition rate of undergraduate students across two disciplines with two different modes of study (on-campus and distance) over a twelve month period (2007/2008) at an Australian institution, and whether the performance of these undergraduate students is associated with selected features that reflect the students' diversity. The institution is a regional university with a complex mix of internal and distance education students. Success will be deemed to be the successful completion of the relevant undergraduate course (not unit of study) within appropriate completion time.

Attrition was measured with regard to students in the cohort who were enrolled in the term of interest and neither graduated nor progressed. The university operates a two-semester year for these courses.

Both qualitative and quantitative research approaches were adopted. The approaches included the administration of a survey questionnaire and conducting in-depth semi-structured interviews. The two approaches were not weighted equally; the qualitative was the dominant, and the quantitative approach the less dominant. This is commonly referred to as a dominant-less-dominant design (Tashakkori & Teddlie, 1998).

Case study research

Case study research is not a new concept, it has had a long history in educational research. The main issue when deciding which unit of analysis to use, is what you want to be able to say in the report – in this case it would be 'what issues influence students to withdraw from study'.

The case study is the preferred method to use when 'how', 'who', 'why', or 'what' questions are being asked, or when the researcher has little control over the events. The main techniques are observation (both participation and non-participation) and interviewing (structured and unstructured) (Burns, 2000: 460).

The types of case studies include: historical case studies (tracing the development of an organisation or system over time), observational case studies (often focusing on a group, classroom, teacher), oral history (first person narratives), situational analysis (particular events that are studied), clinical case study (to understand a particular individual in depth), and multi-case studies (a collection of case studies) (Burns, 2000: 461-464).

This research will be presented as three case studies, involving students from the Faculty of Business (distance), Faculty of Business (on-campus) and the other, the Faculty of Education (distance), therefore the type of case study conducted in this research was multi-case study which was a collection of case studies. The methods used for this research involved telephone interviews, and mailed survey questionnaires.

The research for this dissertation was carried out in three stages:

The first stage involved a detailed literature review relating to Australian students' overall level of satisfaction with their course and the concern over non-completion of undergraduate study both in Australia and overseas. Motivation theories as indicated earlier have also been further considered. As a result, this study identifies whether attrition is consistent with the motivation theories (Maslow's Hierarchy of Needs and Herzberg's Theory of Motivation), put forward within the literature review. The particular factors which will be analysed involve:

Maslow's Hierarchy of Needs:

Factors such as personal issues and financial problems (being lower order needs in the hierarchy of needs) may be identified by students when completing the surveys or in discussion during the interviews, as a reason for withdrawing from tertiary study. This would relate to Maslow's theory that these lower order needs must be fulfilled before the higher order of needs such as self-actualisation, prestige, status (all as a result of study and gaining qualifications) could be focused on. The surveys and interviews both asked the student what motivated them to commence study, the options included career opportunities, better job, prestige, other. It will be useful to learn the focus for their motivation and how or if it relates to this theory.

Herzberg's Theory of Motivation:

For this theory the answers students give in the surveys they returned and during the telephone interviews will particularly relate to reasons for withdrawal from study such as initial choice of course to study. What the university has to offer will be another area of importance, and will look at whether students felt their expectation of the university were met (for example the content of the courses, facilities available, environment and surroundings). Also whether the students were studying by distance mode or as an on-campus student, this would initially depend on their circumstances, whether they were working and wished to continue working and the method of studying by distance suited them. It will then relate to whether the choices can be linked to 'satisfiers' (motivators) or 'dissatisfiers' (hygiene factors).

The second stage of the dissertation involved a combined methodological research approach. Methodology is described as a strategy that guides the actual research plan and 'provides specific direction for procedures in a research design' (Creswell, 2003: 13). There are a number of methodological approaches however the mixed method and case study approaches were used in this study. According to Creswell (2003:135), the use of mixed method research design is believed to be appropriate in many disciplines. In this study, the term *mixed methods* refers to the use of qualitative and quantitative methods. The sequential explanatory design strategy was used in this instance, as this design is straightforward in the sense that quantitative data are collected and analysed, which is then followed by the collection and analysis of qualitative data (Jones, Torres & Arminio, 2006: 147).

Case study analysis needs to firstly identify the unit of analysis and case studies can involve a focus or multiple units of analysis (Jones et al., 2006: 90), in this study groups of students from two different faculties were considered.

In practice, many researchers use both qualitative and quantitative approaches within one investigation (Burns, 2000:14), in contrast to the more vulnerable single-method approach. This is often called a multimethod approach; where the use of two or more methods of data collection to cross-validate research questions is referred to as 'data triangulation' (Burns, 2000; Cohen & Manion, 1981: 208). The benefits of this type of data collection method can be numerous; two such advantages would be firstly, single observation provides only a limited view of situations in which human beings interact, and therefore can distort or bias the researcher's picture of what is being investigated. Secondly, some theorists have been critical of the limited use of methods of enquiry in the social sciences and their application. The use of triangulation techniques can help to overcome the problem of 'method-boundedness' (Cohen & Manion, 1981: 208-209).

The multi-method approach is particularly appropriate in educational settings, for example i) when a more holistic view of educational outcomes is needed, ii) where a complex phenomena requires clarification, iii) when different methods of teaching are to be evaluated, iv) where a controversial aspect of education needs to be evaluated more fully, and v) when an established approach provides a limited and often

distorted picture (Cohen & Manion, 1981: 215-216). Triangulation techniques can be highly appropriate in Educational Research and are therefore an appropriate method for this study.

Qualitative and quantitative research methods each have their own benefits and limitations and thus have relevance to specific situations. Rossman & Wilson (1984: 629) suggest three broad reasons for utilizing a combined qualitative/quantitative research methodology:

> i)   to enable confirmation or corroboration of each other via triangulation
>
> ii)   to elaborate or develop analysis, providing richer detail; and
>
> iii)   to initiate new lines of thinking through attention to surprises or paradoxes, *"turning ideas around"*, and providing fresh insight.

Similarly, Firestone (1987:17) suggests that, on the one hand, quantitative studies "persuade" the reader through de-emphasising individual judgment and stressing the use of established procedures, leading to a more precise and generalisable result. On the other hand, qualitative research persuades through rich depiction and strategic comparison across most cases, thereby overcoming the *"abstraction inherent in quantitative studies"*.

A combined qualitative/quantitative methodology will benefit from the advantages of both approaches. Consequently the multi-method approach, using both qualitative and quantitative methods, is used for this study.

Quantitative research component

The first part of the study was undertaken as a descriptive survey research in the form of a questionnaire posted to students. The use of a survey was justified as a means to identify the outcomes, numerical patterns, trends and relevant points identified that could be further addressed in the interview stage (qualitative).

Quantitative research generally includes large samples, using tests, questionnaires or surveys, focusing on attitudes and concerns, and statistical analysis of numerical data. However if mailed surveys are forwarded to respondents to complete, there is little

control over the feedback or interpretation of the questions, though they are very convenient and are best for the collection of sensitive information as they provide anonymity. Other advantages of a questionnaire include cost, each respondent receives an identical set of questions and is free to answer in their own time without fear and embarrassment, and guaranteeing confidentiality, resulting in more truthful responses. However there are also disadvantages such as the possibility of misinterpretation, the respondent's motivation for answering the questionnaire is unknown, incomplete or ambiguous information cannot be followed up (Burns, 2000:581).

Because of the diversity of the student body and the benefits that quantitative research provided, it was decided to use this method in the first instance. In order to gather quantitative data a number of steps was followed. First a letter was sent to all students enrolled in the two subjects (ie. Organisations & Management (MGT100), and Written Communication (EML102)) at the time of conducting the surveys (Autumn Semester 2007) outlining the research, including reasons for the study. Students were advised that this contact would be followed by a survey which they were to be asked to complete. A general information sheet was attached containing details of ethics approval, responsibilities and contact details. Student names and contact details were obtained from the university data base.

A mail-out survey was used in this study as the number of students in this cohort was quite large (409) and by using this approach all students could be given the opportunity to give feedback, and it would also be cost effective. It was felt that the result should produce a basic understanding of issues which may be significant to student withdrawal and could be followed up as part of in-depth interviews. Further research consisted of questionnaire surveys which were conducted with all available students undertaking undergraduate studies within a specific undergraduate subject from the two faculties. The questionnaire collected a wealth of information on first year students from the university, undertaking particular subjects within the Faculties of Business and Education (VET).

The surveys were conducted after the first six months of students commencing undergraduate study in 2007. The questionnaires included mainly closed questions

with a small number of open-ended questions. Closed questions have greater uniformity and reliability, as respondents answer to fit the response category and consequently are more easily coded. Thus closed questions were chosen as the main item, although there are some disadvantages such as respondents finding none of the alternatives suitable. Open-ended items simply supply a frame of reference for respondents' answers and form the basis of unstructured interviews (Burns, 2000:571-2). A Likert scale, or selection of choices was used for the question asking whether expectations of the university had been met and the choices were: very strongly agree, strongly agree, agree, disagree and strongly disagree. It was also used for the question 'Did you fit in with the university environment (eg. making new friends, university way of life, academic requirements)? To what degree?' The choices were: really well, quite well, not really, not at all.

Four hundred and nine (409) questionnaires were mailed to students, the total number who were studying either the subject MGT100 (Organisations and Management), a Faculty of Business subject studied both by distance mode (part-time and full-time) and on-campus (full-time), or EML102 (Written Communication) a Faculty of Education, Vocational Education and Training (VET) subject which is only studied by distance mode, part-time. These two specific faculties were chosen as they offered some differences in the type of student involved which could be compared, for example age, background, previous tertiary study or perhaps motivation for undertaking study. These two subjects were chosen as they represented a compulsory area students must undertake during the first semester of their undergraduate study in the relevant faculty and literature suggests that withdrawal from study generally takes place with the first 12 months. The researcher was also familiar with these two subjects having taught both at some time and having access to university data which could be relevant to the study and also specific knowledge of issues relating to these two faculties. Of the 409 questionnaires sent to students 264 surveys were returned (64.5%) and information from each of the responses could be used in the data analysis, although a number of these surveys had small amounts of information missing (see data analysis results).

An Information Sheet (Appendix A) was attached to the questionnaire (Appendix B) when it was mailed out, giving information about the research which was being

conducted, reasons for undertaking the study, the aims of the survey and contact information for any queries that might arise in completing the questionnaire. Students were asked to return the completed questionnaire within the following seven days and all those returned were usable responses. The survey questionnaires were forwarded with a reply paid envelope for the return of the completed forms. Consideration was given to conducting the same survey on a similar group of students who commenced study in 2008, however as there had been no recent major changes to the course/s there seemed little likelihood of meaningful changes in results from new surveys, although the student body would have been different.

The questionnaire was divided into four different sections, Student Information, Course Information, Motivation and Continuing Study. These sections were based on the findings of the literature review. The specific questions were chosen to address the following:

> *Student information*: Personal information about the student such as age, gender, ethnicity, marital circumstances, financial situation, family responsibility (eg. dependants and background, and if employed) was sought as these factors could have an influence on the students' likelihood to either complete the course or withdraw.
>
> *Course information*: This section sought information related to the student's course choice and enrolment, and could indicate that perhaps wrong choice of course may be a major reason for withdrawal (Christie et al., 2004). Subjects studied internally rather than by distance may influence students to either complete the subject or withdraw depending on how they related to this mode of study. The mode of entry can also have an influence on the result - a student who has previously undertaken successful study could be more likely to successfully complete tertiary study. Having completed previous study could help the student adjust to university life more easily and consequently the student could be more likely to complete the course.
>
> *Motivation*: Successful completion of a course of study can be attributed to a variety of factors, motivation being highly important. People are motivated by different things – students' reasons for undertaking study can influence their

results, for example study as a career goal versus independence from home or family influence. The particular expectations a student has on entry can influence the result, especially if these are unrealistic. How a student 'fits in' socially or academically can also make a difference to whether a student withdraws or not.

Continuing study: This section of the surveys sought student response about their intention to either continue study at Charles Sturt University or to withdraw. The number of students who have withdrawn from various courses and particularly the reasons for withdrawal may indicate a pattern, when considering other information the student has indicated on the questionnaire. Also, sometimes students who have withdrawn from study may intend to resume their study in the future. Responses from students who have withdrawn can then be followed up during the interviews to gain further information which may be relevant to the research.

The data obtained from these questionnaires was analysed using basic descriptive analysis such as frequencies and cross tabulations from an SPSS program.

Qualitative research component:

In qualitative analysis 'unlike quantitative analysis there is no cookbook formula' for dealing with the data from interviews (Burns, 1994:324). The process of data analysis is not dictated by established practices, instead by exploration and intuition (Burns, 1994).

Qualitative methods are appropriate for fields of research that exhibit high complexity and have limited theoretical foundations (Bonoma, 1985). It can be used for gathering data, as in surveys or experimental situations, or for sampling respondents' opinions, as in interviews, and has been defined as a two-person conversation initiated by the interviewer to obtain research-relevant information, focusing on content specified by research objectives of systematic description, prediction or explanation (Cohen & Manion, 1981: 241). It is a method which involves the gathering of data through direct verbal interaction between individuals, thus differing from the questionnaire

where the respondent is required to record responses to set questions (Cohen & Manion, 1981: 241).

Many researchers agree that the process of analysis begins during data collection with a reflection on daily data collection allowing for regular overview of progress and testing emerging themes and directions (Patton, 2002) which was the method adopted for this research process. Although Bogdan & Biklen (1982) suggest involving data analysis *after* the data have been collected to avoid bias in the compilation of the data.

The advantage of using an interview include the interviewer having the opportunity to press for additional information (flexibility), more people willing to talk and react verbally than to write responses, and probing can be useful to gain more complete responses. The interviewer can also take control of the sequence of items discussed, and individualised appreciation can be shown to the respondents (Burns, 2000: 583). However, there are also limitations; the main disadvantage is that they are more expensive and time-consuming than questionnaires. Also, only a limited number of respondents may be interviewed due to both time and cost, respondents may feel they are being 'put on the spot'. Certain factors may bias an interview (such as age, sex, educational level, race and experience at interviewing), also if information documented from the interview is not clear and easily interpreted, problems could arise with the analysis due to the data obtained, and consequently the interpretation of the findings. Finally, ethical issues are particularly important to consider when using interviews as the person conducting the interviews enters the personal area of those being interviewed. It is also important that this same person avoids interviewer bias (Burns, 2000).

The second part of the study was undertaken using semi-structured telephone interviews. Semi-structured interviews were used, rather than having a specific interview schedule. An interview guide was developed for much of the study without fixed wording. This permitted greater flexibility than closed interviews with the expectation of more valid responses (Burns, 2000).

The aim of a qualitative approach is to enhance, elaborate, or illustrate the results obtained from the quantitative method. Qualitative research gathers information

which is varied and in-depth, exploring people's experiences rather than facts and figures, though it is important to ask the correct questions to ensure the relevant information is provided. It is practical and creates greater confidentiality and accuracy than other methods such as quantitative and has lower cost (Burns, 2000).

The use of qualitative techniques presented an ideal vehicle for the development of a rich and multi-layered picture of the insights and perceptions that students have of the challenges and problems experienced by them when commencing tertiary study. The importance of this method is in the fact that interviews are a powerful way of gaining access to people's ideas, perspectives and understandings. Therefore qualitative research offered the best opportunity to gain a good understanding of the experiences of students who had withdrawn from tertiary study. For this reason qualitative research was chosen as the major research method to obtain in-depth interviews and information from students who have either withdrawn from their study or been granted approved leave of absence for a period of time. This method was also used to 'fill the gaps' and further expand on information obtained from the previous quantitative method which involved the use of surveys.

Researchers identified different approaches to the process of refining raw data into 'manageable chunks'. This study used the constant comparative method (later known as the Grounded Theory) because of its effectiveness in capturing, explaining and generating the participants' understandings of their experiences (Glaser & Strauss, 1967). It is a process where data generated by the study are constantly compared within and between data (Cocklin, 1993). For example the data from different students or cohorts (Faculty of Business, Faculty of Education, those studying by distance mode, or on-campus students) were compared, such as their different experiences, situations, background information. There is a strong relationship between sampling and analysis which means the researcher can consistently check that the initial findings remain 'constant' as further data is collected and checked.

The qualitative approach used here was in-depth interviewing by telephone and was semi-structured using a basic set of questions put to participants in a conversational style, to allow for a diversity of data to be generated (Cohen & Manion, 1994). This option was used in this study to capture the views of tertiary students regarding their

experiences during undergraduate study. Rather than having a specific interview schedule or none at all, with this technique an interview guide can be developed where direction is given to the interview so that the content focuses on the crucial issues of the study (Burns, 2000: 424).

Telephone interviews have a number of advantages, for example, they are more economical than personal interviews, the response rate is generally high, and the interviewer can edit open-ended responses. However there are also disadvantages such as the interviewer's voice may be biasing, the informant cannot be observed and facial expressions cannot be seen (Burns, 2000: 584), although there would be the option of using Skype or MSN Chat with a web cam for video conferencing.

Interview questions were formulated at the conclusion of the quantitative data collection. The responses to the surveys gave an indication of the type of questions which should be further followed through during the interviews, to give a better understanding of issues related to withdrawal from study (for example personal problems). Contact by telephone was chosen rather than personal interviews as participants interviewed were located in various states throughout Australia and access would have been difficult. An Introductory Letter – Interviews (Appendix C) was mailed to all students who had been enrolled in the subjects MGT100 or EML102, but according to University records had withdrawn from study. A copy of the basic Interview Questions (Appendix E) to be asked was forwarded to each participant prior to the interview taking place, together with a Project Information sheet (Appendix D) which gave specific relevant information about the research project; and an approximate timeframe for the interview was arranged.

Research population

For the purpose of this study the research population involved all students who were enrolled in the undergraduate subjects MGT100 Organisations and Management (distance mode and on-campus, Faculty of Business) and EML102 (distance mode, Faculty of Education) at Charles Sturt University, during the semester under review (ie. 409) students. Surveys were forwarded to each of these students for completion and return.

The sample research consisted of students who were non-completers from these subjects and involved interviews by telephone. This research involved two groups of students - one group that had withdrawn from their course, the other group having applied for and been granted a Leave of Absence from study for a short period of time. The students to be interviewed were representative of the students from each of the two faculties, and involved twenty two (22) students who had withdrawn from their course (from a total of 32 students who withdrew), and three (3) students (from a total of 27 students) who had been granted a Leave of Absence from the course rather than students who had responded to the questionnaire (refer to Table 3.1 for further information). The study investigated and recorded the experiences of the selected students over their twelve month history, and involved interviews of both on-campus (internal) and off campus (distance education) students.

Table 3.1: Interviews of withdrawals and leave of absence

	VET (distance)		COMMERCE (distance)		COMMERCE (on-campus)		TOTAL	
Interview students who have withdrawn from study	Inter-view	Proportion who with-drew	Inter-view	Proportion who with-drew	Inter-view	Proportion who with-drew	Total Inter-views	Total who With-drew
	9	10/77 (13%)	10	19/245 (7.7%)	3	3/87 (3.4%)	22 (70%)	32/409 (7.8%)
Interview students who obtained leave of absence	1	8/77 (10%)	1	49/245 (20%)	1	7/87 (8%)	3 (4.6%)	64 (15.6%)

Ethical considerations

It is essential that researchers ensure they follow a strict code of ethics. The ethical principles of confidentiality, anonymity, informed consent, privacy, respect, and 'do no harm' are central to the process of conducting qualitative research and emerge as dilemmas throughout the research process (Jones et al., 2006:161). In all cases, ethical standards determined by the Charles Sturt University Ethics Committee (in accordance with the requirements of the 2007 National Statement on Ethical Conduct in Human Research) were strictly followed and approval by that Committee for this study was acquired before research commenced (see Appendix F).

The third stage was the analysis of entry and completion data for students studying undergraduate degrees at the tertiary institution over a period of twelve (12) months ie. 2007-2008. Raw data on the cohorts surveyed (from the Faculty of Business and the Faculty of Education) was also obtained directly from university records. Only the basic information that was required for the study was used, for example had the student withdrawn from study or applied for a Leave of Absence.

The literature referred to above identified a number of factors which may influence the successful completion of study. However the factors specifically relevant to identifying reasons why undergraduate students withdraw from study and examined in surveys and interviews were:

i)   Age at registration/entry

ii)   Financial restrictions

iii)   Mode of delivery (full time/part time; on-campus/distance)

iv)   Gender

v)   Primary language

vi)   Number of dependents

vii)   Previous tertiary study

viii) Work/employment history/experience

ix)   Motivation (reason for study)

The research analysed the effects of these factors on all the cohorts studied.

Outcome

A study from the Department of Education, Science and Training (DEST), (1999) (now DEEWR or the Department of Education, Employment and Workplace Relations) suggests that the challenge for universities is to further investigate and engage with possible changes to education. Both DEST data and other studies have shown that there can be differences in delivery mode (such as on-campus or distance mode) and descriptive areas (for example city and regional areas). This suggests that further research into the position of undergraduate students, and influences on their progress and motivation in this particular researcher's university would be of interest to both the university and also a wider audience. The results of this study are particularly useful for:

a) developing a profile of the student 'most likely to withdraw' (key characteristics/factors influencing attrition)

b) assisting the university to address student concerns (about relevance of content, resources, interaction, and faculty support).

Universities put considerable effort and expense into recruitment for courses and more recently widening participation. Retention is a key measure of a university's effectiveness (Mortiboys, 2002), therefore to enhance retention and student success the process and dynamics of educational attainment must be understood (Allen, 1999). As a result, this study identifies whether attrition is consistent with the motivation theories (Maslow's Hierarchy of Needs and Herzberg's Theory of Motivation), put forward within the literature review. The particular factors which will be analysed involve:

Maslow's hierarchy of needs:

Factors such as personal issues and financial problems (being lower order needs in the hierarchy of needs) may be identified by students when completing the surveys or in discussion during the interviews, as a reason for withdrawing from tertiary study. This would relate to Maslow's theory that these lower order needs must be fulfilled before the higher order needs such as self-actualisation, prestige, status (all as a result of study and gaining qualifications) could be focused on. The surveys and interviews both asked the student what motivated them to commence study, the options included career opportunities, better job, prestige, and other. It will be useful to learn the focus for their motivation and how or if it relates to this theory as it may have a significant bearing on their reason for withdrawal from study.

Herzberg's theory of motivation:

For this theory the answers students give in the surveys they return and during the telephone interviews will particularly relate to reasons for withdrawal from study such as initial choice of course to study. What the university has to offer will be another area of importance, and will look at whether students felt their expectations of the university were met. For example the content of the courses, facilities available, environment and surroundings. Also whether the students were studying by distance mode or as an on-campus student, would initially depend on their circumstances –

whether they were working and wished to continue working and the method of studying by distance suited them. It will then relate to whether the choices can be linked to 'satisfiers' (motivators) or 'dissatisfiers' (hygiene factors).

Withdrawal and non-completion can be considered as inefficiencies in the system, and also a waste of talent and money, therefore institutions may need to consider the economic implications of non-retention (Burr et al., 1999). The changing nature of higher education also means that many university courses satisfy the functions of both education and professional training (Trotter & Cove, 2005), which may have a significant impact on retention.

It is believed that the outcomes may also reflect on future marketing strategies of the institution, to more specifically target those students most likely to succeed and ensure courses, available information and integration are structured to further enhance the likelihood of success.

Conclusion

Chapter Three has provided a description of the research design, presented the research questions that guided the study and justified 'the reasons why students withdraw from study' as the central focus of the study and the procedures followed to source data to carry out this research. It has addressed issues that relate to the study's reliability, validity and its ethical base. The combination of both quantitative and qualitative strategies has been chosen as both can provide useful insights into the tertiary experience.

The development of a framework for a participant questionnaire was enabled through a detailed review of literature with particular emphasis on issues of student attrition and retention. This quantitative strategy enabled the discovery of overall patterns and structures and specific issues. The qualitative strategies accessed the thoughts, feelings and actions of the people being studied, allowing a richer and deeper understanding of the processes of the tertiary environment. Together they provide a more holistic view, and using both approaches also acted as a form of triangulation thereby enhancing the validity of the findings.

The following chapter, Chapter Four, presents the findings from both the quantitative surveys and the qualitative interviews undertaken by students concerning their views on the tertiary environment and associated attrition.

CHAPTER 4: Results

Introduction

The main purpose of this study was to investigate factors that influenced students across two disciplines (in both on-campus and distances modes) to withdraw from undergraduate study within their first year of tertiary study, and whether different factors relate to students who have come straight from the school environment compared to those commencing as mature age students.

This chapter presents the findings from the analysis of quantitative and qualitative data collected to explore, examine the reasons for students motivation towards study, and then focus on developing an understanding of these factors across the three cohorts researched (Commerce distance, Commerce on-campus and VET distance).

Quantitative data were collected from the 264 usable surveys returned by students enrolled in the subjects MGT100 (Faculty of Business) and EML102 (Faculty of Education) and included in the final data analysis.

Qualitative data were drawn from the student interviews which allowed students who had withdrawn from study to express their views about their experiences of tertiary study. The discussion and comments provide the raw data for this part of the research. The objective of the qualitative analysis presented here is to interpret this rich, descriptive qualitative data and indicate evident key themes. Interviews were conducted with every available student who had withdrawn from either of the two subjects.

Surveys (Quantitative)

The first stage in the data collection was quantitative research involving surveys posted out to students. This was used as it was considered to be the best method to reach a large number of students initially to 'flesh out' the broad themes so these could then be followed up with the more in-depth interviews as the major stage of the research. Descriptive statistics were used in the analysis of the data, once again as it was the secondary research method.

Firstly, a letter was sent to each student enrolled in these two subjects outlining the research including reasons for the study. There were 409 surveys forwarded to students (the total cohort) who undertook these two subjects, and the response rate was 64.5%. The survey was introduced to the respondents with a coversheet which again briefly confirmed the aims of the survey and contact details for any queries which might arise. Figure 4.1 below notes the Survey Response Rate by the students:

Figure 4.1: Survey response rate

409 questionnaires posted

264 returned (64.5%)   145 not returned (35.5%)
All were usable
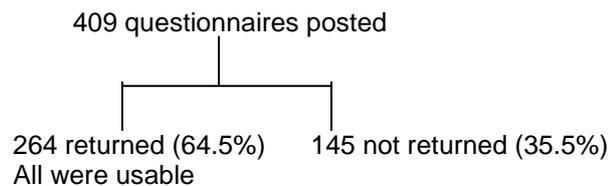
A test for non-response bias (Oppenheim, 1966) involves comparing the early and late respondents on the assumption that late respondents are similar to non-respondents, with the implication being that non-respondents would have similar backgrounds to respondents. Some of the key points to consider about generalizing the findings in survey research includes:

- The population and sample;
- Response rates;
- Comparison of early and late respondents;
- The results of the comparison (Radhakrishna & Doamekpor, 2008).

It is important to identify respondents within the deadline date and label them as early, and then identify all other respondents and label them as late. According to Miller & Smith (1983) non-respondents tend to be similar to late respondents in responding to surveys. Therefore the results or information from the early and late respondents should be compared. If no significant differences between early and late respondents are found then the findings can be generalized to the population. Recent studies suggest response rates may not be strongly related to survey error or representativeness according to Holbrook, Cho & Johnson (2006). Also, there did not appear to be any unexplained reason for specific non-respondents, such as a large number of students studying by distance mode, or mature age female students who did not respond due to family issues.

In this case, surveys were sent to every student enrolled in subjects MGT100 and EML102 for the period under review, therefore every student should have had the opportunity to respond. The response rate to the surveys was 64.5% (35.5% not returned). A comparison of information received from the early and late respondents showed no significant differences, therefore the findings can be generalized for the population in this study.

The survey gathered information from students in the following areas: personal information, pre-university information, university experience, future intentions and general comments.

Research findings from questionnaire

Analysis was undertaken to provide a picture of demographic, personal, educational, and environmental characteristics and background of the participants, and to compare the differences between the variables. Descriptive statistics were used in the analysis of the data (quantitative method), once again as it was the secondary research method. Responses to the questionnaire were coded and data entered; as this was a survey, data analysis consisted of determining the frequencies for the major variables involved in the study together with a series of cross tabulation analyses. As records were available for the individual ages and gender within each of the groups, a comparison was made of the results from the respondents and the actual makeup of each group for these two factors. The results from the analysis of data are:

Age: The largest proportion of students who had responded to the surveys were aged 31 years and over (124/264 or 46.9%) with 65/124 of the Commerce distance students and 58/124 from the VET distance students. This is not surprising as the majority of students from these two cohorts were studying whilst working full time, not having commenced study straight from school, but rather having undertaken a full-time position as part of the progression towards their career and were thus also mature age students. The 16-20 year olds were almost exclusively Commerce on-campus students (58/64), although the majority of the 21-30 age group (64/76) were from the Commerce distance cohort.

However the records of the age groups for the total enrolled students making up these cohorts (those surveyed) showed differences in the distribution compared to those who responded, suggesting that those who responded were not necessarily typical of the cohort as a whole. The largest proportion was for 21-30 year olds with 128/154 for the Commerce distance students, followed by 111/183 for the 31 years and over Commerce distance students again. Not surprisingly, the Commerce on-campus students held the most students in the 16-20 year old groups with 65/72. Further information on Age of those surveyed and respondents can be found in Table 4.1:

Table 4.1: Age of students surveyed and age of respondents

	VET Distance		Comm Distance		Comm On-campus		Total	%
Age students surveyed:								
16-20 years	1	1.3%	6	2.5%	65	74.7%	72	17.6%
21-30 years	10	13.0%	128	52.2%	16	18.4%	154	37.7%
31 and over	66	85.7%	111	45.3%	6	6.9%	183	44.7%
Column total	77	100.0%	245	100.0%	87	100.0%	409	100.0%
Age of respondents								
16-20 years								
21-30 years	1	1.5%	5	3.7%	58	89.2%	64	24.3%
31 and over	6	9.3%	64	47.8%	6	9.3%	76	28.8%
	58	89.2%	65	48.5%	1	1.5%	124	46.9%
Column Total	65	100.0%	134	100.0%	65	100.0%	264	100.0%

Gender: Results indicated that there were more females than males (56.3% females or 148/263, compared to 43.7% males or 115/263) who responded to the questionnaire. This result is representative of the overall number of students enrolled in this course (and to whom surveys were distributed) which was 52.8% (216/409) females compared to 47.2% (193/409) males. When considering the various cohorts the proportion of males to females for the VET respondents resulted in more males than females (63% males and 37% females). However with the Commerce DE cohort there were more females than males who responded (67.7% females and 32.3% males).   The results for the Commerce on-campus cohort was much closer for respondents, with slightly more females compared to males (52.3% female and 47.7% male). (See Table 4.2 below for comparison between total student surveys distributed and responses received).

Table 4.2: Gender of students surveyed and gender of respondents

	VET Distance		Comm Distance		Comm On-campus		Total	%
Gender of students surveyed								
Male	46	60.0%	98	40.0%	49	56.0%	193	47.2%
Female	31	40.0%	147	60.0%	38	44.0%	216	52.8%
Column Total	77	100.0%	245	100.0%	87	100.0%	409	100.0%
Gender of respondents								
Male	41	63.0%	43	32.3%	31	47.7%	115	43.7%
Female	24	37.0%	90	67.7%	34	52.3%	148	56.3%
							263	100.0%
System missing							1	
Column Total	65	100.0%	133	100.0%	65	100.0%	264	

Married/single: A comparison of students who were married and single gave a different result for each of the cohorts (Table 4.3 below). However these results appear to be representative of the particular cohorts. For example only 2/65 on-campus students (3.1%) were married (generally these students commence tertiary study straight from school), 49.6% (66/133) of Commerce distance students were married (generally mature aged) and 72.3% (47/65) of VET students (again these are generally mature age students). (For further information see Table 4.3 below).

Dependents: The majority of students (56.3% or 148/268) had no dependents, the largest proportion coming from the Commerce cohorts (a total of 125/148 for both distance and on-campus), with 37.6% of total respondents having either one or two (mainly Commerce distance and VET students), and the remainder (6.1%) having either three or more (the majority coming from Commerce distance) (see Table 4.3).

Table 4.3: Marital status and dependents

	VET Distance		Comm Distance		Comm On-campus		Total	%
Married	47	72.3%	66	49.6%	2	3.1%	115	43.7%
Divorced	8	12.3%	7	5.3%	0	0%	15	5.7%
Single	9	13.9%	54	40.6%	63	96.9%	126	47.9%
Other/defacto	1	1.5%	6	4.5%	0	0%	7	2.7%
							263	100.0%
System missing							1	
Column Total	65	100.0%	133	100.0%	65	100.0%	264	
Dependents – 0	23	35.4%	73	54.9%	52	80.0%	148	56.3%
- 1	10	15.4%	28	21.1%	5	7.7%	43	16.3%
- 2	28	43.0%	22	16.5%	6	9.2%	56	21.3%
- 3 & more	4	6.2%	10	7.5%	2	3.1%	16	6.1%
							263	100.0%
System missing							1	
Column Total	65	100.0%	133	100.0%	65	100.0%	264	

Background: The majority of respondents (87.0%) were Australian citizens with only a small proportion from a non English speaking background (NESB), ATSIC or other background (see Table 4.4 for a detailed breakdown). The results are interesting, with Commerce on-campus of 20% (or 13/65) non English speaking students which is slightly more than VET distance of 16.9% (11/65). From personal experience the Commerce on-campus cohort generally includes a number of young people from overseas countries such as India, Asia, China, Lebanon and Iran, so this result is as expected, whereas the Commerce distance cohort does not (See Table 4.4 below for further information):

Table 4.4: Background information

	VET Distance		COMMERCE Distance		COMMERCE On-campus		Total	%
Background:								
Australian	52	80.0%	124	94.0%	52	80.0%	228	87.0%
NESB	11	16.9%	4	3.0%	13	20.0%	28	10.7%
ATSIC	0	0%	2	1.5%	0	0%	2	0.8%
Other	2	3.1%	2	1.5%	0	0%	4	1.5%
							262	100.0%
Systems missing							2	
Column Total	65	100.0%	132	100.0%	65	100.0%	264	

Need to work (full-time/part-time): Most students (83.0% or 219/264) said they needed to work to support their study and were currently employed, whereas only 17% (72/264) said they did not need to work. Also 69% (161/233) of students worked full-time whereas only 31% (72/233) worked part-time. The students studying

by distance (both Commerce distance and VET) were primarily working full time and studying to further improve career or future job prospects. On the other hand most Commerce on-campus students commenced study after completing school and are studying full-time, therefore the relevant mode of study would most likely be full-time rather than part-time.

It is interesting to note that 40.4% (19/47) of the on-campus students who completed this section have also indicated that they work full time. Obviously these full time on-campus students would either require time off from work to attend classes (some accountancy organizations do employ students and grant them leave to study), or need a position where they could work outside usual university class hours. My own knowledge of some third year on-campus students confirms this, as some of these work (full time) either on a production line doing night shift or are employed in hospitality during the evenings (see Table 4.5 below for further information).

Table 4.5: Need to work and work mode

	VET Distance		COMMERCE Distance		COMMERCE On-campus		Total	%
Need to work:								
yes	61	93.8%	122	91.0%	36	55.4%	219	83.0%
no	4	6.2%	12	9.0%	29	44.6%	45	17.0%
Column Total	65	100.0%	134	100.0%	65	100.0%	264	100.0%
Work:								
full-time	47	75.8%	95	76.6%	19	40.4%	161	69.0%
part-time	15	24.2%	29	23.4%	28	59.6%	72	31.0%
							233	100.0%
Systems missing							31	
Column Total	62	100.0%	124	100.0%	47	100.0%	264	

Motivation to study: One area of the study where results were particularly interesting was what motivated students to initially commence study (Table 4.6 below). Generally, students suggested that the main reason for undertaking university study was either for their career (58.8%) or to obtain a good job and earn good money in the future (37.6%) as first choice, whilst future prestige and other issues (such as family) accounted for the remaining 3.6%. In most cases, students who undertook these courses were already working, and had embarked on a career.

Table 4.6: Motivation to study

	VET Distance		COMMERCE Distance		COMMERCE On-campus		TOTAL	%
Career future	28	63.6%	75	63.0%	30	47.6%	133	58.8%
Job prospects	15	34.1%	40	33.6%	30	47.6%	85	37.6%
Prestige	0	0%	3	2.5%	3	4.8%	6	2.6%
Family	1	2.3%	1	0.9%	0	0%	2	1.0%
Systems missing							226 38	100.0%
Column Total	44	100.0%	119	100.0%	63	100.0%	264	

Previous tertiary study: The number of students who indicated they had previous tertiary study was inconsistent, for example a large number of VET students (62.5%) had participated in previous study, whereas less than one half the Commerce distance (41.8%) and a much smaller group of on-campus students (18.5%) had previous tertiary study (refer to Table 4.7).   This is a similar result to that expected, as the distance students are generally mature age students (see Table 4.1) and are working full time (see Table 4.5) therefore it would be reasonable to assume that a number had already taken the opportunity to complete some form of tertiary study since leaving school.

Mode of entry: More students identified that they gained admission to university through HSC (Higher School Certificate) results (54.2%) rather than from work experience (or mature age) entry (refer Table 4.7 below). This was unexpected due to the number of distance students who could possibly have gained admission to study through work experience (or mature age student). Only a small proportion of these students (6.1%) entered university through special consideration. Whilst there was a reasonably high percentage of Commerce distance students who identified that they had entered university as a result of their HSC marks rather than work experience (as could have been expected due to their age), this could have been because tertiary study had been deferred on leaving school and commencing work; this happens quite often in recent times.

Table 4.7: Previous tertiary study and mode of entry to study

	VET Distance		COMMERCE Distance		COMMERCE On-campus		TOTAL	%
Previous tertiary study								
yes	40	62.5%	56	41.8%	12	18.5%	108	41.1%
no	24	37.5%	78	58.2%	53	81.5%	155	58.9%
							263	100.0%
System missing							1	
Column Total	64	100.0%	134	100.0%	65	100.0%	264	
Mode of entry								
HSC	15	23.4%	67	50.3%	60	92.3%	142	54.2%
work experience (mature age)	43	67.2%	60	45.1%	1	1.5%	104	39.7%
Special consideration	6	9.4%	6	4.6%	4	6.2%	16	6.1%
							262	100.0%
Systems missing							2	
Column Total	64	100.0%	133	100.0%	65	100.0%	264	

Mode of study: Results from the student surveys identifying the mode of study were interesting. The two groups which studied by distance mode identified that 45/198 (22.7%) of the students studied full time, and 2/65 (3.1%) on on-campus students. It can be seen a number of students who work full time maintain they also study full time, as mentioned previously they are able to do this by undertaking night work and are thus able to study during the day and during the campus holiday break.

Table 4.8: Mode of study

	VET Distance		COMMERCE Distance		COMMERCE On-campus		Total	%
Mode of study:								
Full time	30	46.9%	15	11.20%	63	96.9%	108	83.0%
Part time	34	53.1%	119	88.80%	2	3.1%	155	17.0%
Column Total	64	100.0%	134	100.0%	65	100.0%	263	100.0%

Expectations met: Overall, students agreed that their expectations of university were met (Table 4.8), there were only 8.2% (21/258) who did not agree although there were 32 students who withdrew from study. This may indicate that any unmet expectations students had of university were not a reason **by itself** for student withdrawal. Perhaps it indicates that students really did not know what to expect when they commenced tertiary study, or the university may be fulfilling most of the students' expectations and needs, or perhaps this could be a socially appropriate response.

Table 4.9: Expectations met

	VET Distance		COMMERCE Distance		COMMERCE On-campus		TOTAL	%
Expectations met								
very strongly agree	8	12.9%	15	11.5%	15	23.0%	38	14.7%
strongly agree	18	29.0%	40	30.5%	30	46.2%	88	34.1%
agree	29	46.8%	65	49.6%	17	26.2%	111	43.0%
disagree	7	11.3%	8	6.1%	3	4.6%	18	7.0%
strongly disagree	0	0%	3	2.3%	0	0%	3	1.2%
							258	100.0%
Systems missing							6	
Column Total	62	100.0%	131	100.0%	65	100.0%	264	

Interaction (Social and Academic): A significant factor was the number of distance students who believed there was either no interaction or certainly a lack of interaction (VET distance 65.6% and Commerce distance 77.7%), especially socially and also academically with the university itself to a lesser degree (VET distance 46.8% and Commerce distance 43.0%). This could partly be explained by the fact that 74.6% studied as distance students; made up from VET (61 or 62) and Commerce distance (130) students totaling 191 from a total of 256 (Table 4.9) - therefore opportunities for interaction and communication with others was limited, apart from initiatives such as the Forum, emails and the Interact program which had been recently introduced by the university. The Forum and Interact are programs specific to Charles Sturt University and enable students the opportunity to communicate easily with one another in a type of 'chat' situation.

The results for the question regarding Academic Interaction were reversed however, as each of the cohorts (including those studying by distance mode) felt academic interaction was mainly satisfactory. There was an overall 62.6% of students who said 'yes' with only 37.4% who answered 'no' to this question (Table 4.9). However when looking at the cohorts individually, 46.8% (29/62) VET distance students and 43.0% (56/130) Commerce distance students did not find satisfactory academic interaction, although there was only 16.9% (11/65) from the Commerce on-campus group.

Table 4.10: Social and academic interaction

	VET Distance		COMMERCE Distance		COMMERCE On-campus		TOTAL	%
Social interaction								
yes	21	34.4%	29	22.3%	53	81.5%	103	40.2%
no	40	65.6%	101	77.7%	12	18.5%	153	59.8%
Systems missing							256 8	100.0%
Column Total	61	100.0%	130	100.0%	65	100.0%	264	
Academic interaction								
yes	33	53.2%	74	57.0%	54	83.1%	161	62.6%
no	29	46.8%	56	43.0%	11	16.9%	96	37.4%
Systems missing							257 7	100.0%
Column Total	62	100.0%	130	100.0%	65	100.0%	264	

Challenges: The challenge most consistently identified by students was the issue of workload (82.5%) and the problems this created for students, this was the major challenge for each of the three cohorts (Commerce distance and on-campus, and VET distance). Financial was the second most frequently identified challenge for each of the three cohorts surveyed (12.2%), with other (3.7%) and wrong course (1.6%) next. Interestingly, these two were identified by both VET distance and Commerce distance, but not by Commerce on-campus (refer to Table 4.10).

Table 4.11: Challenges

	VET Distance		COMMERCE Distance		COMMERCE On-campus		TOTAL	%
Challenges:								
workload	56	86.1%	103	83.1%	43	76.8%	202	82.5%
financial	4	6.2%	13	10.5%	13	23.2%	30	12.2%
wrong course	3	4.6%	1	0.8%	0	0.0%	4	1.6%
other	2	3.1%	7	5.6%	0	0.0%	9	3.7%
Systems missing							245 19	100.0%
Total	65	100.0%	124	100.0%	56	100.0%	264	

Intention to continue studying at University: Most students who completed the surveys, intended to continue their study at the same university (88.4%), and no respondents indicated they intended transferring to a different university at this stage. Of those who intended withdrawing at the time (surveys were completed late 2007), at least one student from both the VET distance and Commerce on-campus cohorts did not follow through with withdrawal intentions by the commencement of study for 2008. Also five of those who indicated here they would not be continuing with study

did so because their course was actually completed at the conclusion of 2007. However it should be noted that this was a first year subject that these people had obviously not completed previously for some reason and had thus been deferred, for example two students were completing a Bachelor of Viticulture and a Bachelor of Arts degree, and had elected to complete a Management subject as part of their degree course for future assistance with their career advancement (see Table 4.11 for further information).

Table 4.12: Intention to continue studying at university

	VET Distance		COMMERCE Distance		COMMERCE On-campus		TOTAL	%

Continue study at University:
   yes
   no
	47
	14
		77.0%
		23.0%
			121
			12
				91.0%
				9.0%
					60
					4
						93.7%
						6.3%
							228
							30
								88.4%
								11.6%

Systems missing							258 6	100.0%
Column Total	61	100.0%	133	100.0%	64	100.0%	264	

Summary

The quantitative study received feedback predominantly from students who were continuing their study rather than those who were discontinuing study. Only two students who had withdrawn completed the surveys and wrote comments. Therefore the feedback mainly gave information about the type of person who is studying these subjects and questioned their motivation to continue with their study, whereas the interviews of those who have withdrawn from study should produce more direct information on why students withdraw.

The interviews represent the second stage of the research and should help provide a clearer understanding of what prompted students to withdraw, and fill the gaps or answer the questions left from the quantitative research. This could also give an indication of steps which may be taken to help reduce attrition in the future.

Interviews (Qualitative)

This section presents the findings emerging from the analysis of interview data collected to explore and examine reasons undergraduate students withdrew from study. Data were drawn from interviews conducted with 22 students who had withdrawn from study, and three students who had approved leave of absence.

The objective of the qualitative analysis presented in this chapter is to interpret these descriptive qualitative data and indicate key themes or patterns.

The interview questions involved both closed and open-ended questions. Open-ended questions have a number of advantages, for example they are flexible and allow the interviewer to probe, often resulting in unexpected answers. They test a respondent's knowledge but also encourage co-operation and establish a rapport.

One particular type of open-ended question used in the interview was the 'funnel'. This type of interview commences with a broad question and narrows down to more specific ones (Cohen & Manion, 1981) thus allowing the interviewer to follow issues through.

The questions put forward in the interviews with students involved the following format:

Student Information general background information such as marital status, dependants, language spoken at home, and whether they were currently working – age, sex, name already obtained from the university data base.

Pre-university Information including mode of entry, mode of study, previous tertiary study, the level of understanding re the content of the course/subject on commencement of study, the level of understanding of the workload needed to pass this subject, how this would fit in with other demands, and the level of understanding of the requirements for the assessments for this subject.

Experience at university (or post admission) for example was there social and academic interaction, what challenges were experienced at university, at what stage

was the decision to discontinue made, and what were the main reasons for discontinuing study?

Future intentions in regard to future study. This also gives an understanding of how the student felt about the experience of tertiary study.

General comments which could help improve the subject or course, or whether there was anything further the Faculty of Business or the Faculty of Education could have done which may have helped to keep students at university.

A breakdown of the in-depth interviews conducted follows (refer to Table 4.11):

Table 4.13: Breakdown of interviews conducted

Breakdown of Interviews	Total Withdrawals	Total Interviewed	% Interviewed
VET distance	10	9	90.0%
Commerce on-campus	3	3	100.0%
Commerce distance	19	10	52.6%
Sub total	32	22	
Leave of absence	27	3	11.0%
Total	**32**	**25**	**78.1%**

A list of students who had withdrawn from the subjects involved in the research was obtained from the university records and all students who were available and contactable by telephone were interviewed. The interview questions addressed similar issues to those involved in the surveys, to ensure points raised in the surveys could be followed through in more depth where required. However, there was specific focus on teasing out the main issues affecting withdrawal from study as this was the major factor to be identified here. To address this, one of the main questions interviewees were asked included reasons for their decision to withdraw from study.

Student withdrawal

To gain an understanding of the issues involved and to seek answers to the questions outlined at the commencement of the study, one of the major questions students were asked in their interviews was the main reasons for their decision to withdraw. As Table 4.14 indicates, there was no one specific reason for non-completion, confirming the findings of previous studies, that withdrawal is the result of a series of

interconnected factors including personal issues (36.4%) followed by lack of time (27.3%), and wrong course (27.3%), then finally financial and other issues (both 4.5%).

Table 4.14: Factors affecting withdrawal

Factors affecting withdrawal	Total
Personal (including family problems, illness, lack of support)	8
Time factor (including workload)	6
Wrong course/change in career	6
Financial	1
Other (such as loss of job)	1
	22

Source: Interviews conducted with students who withdrew from study

Feedback from the interviews for each of the cohorts follows.

Commerce (Distance)

Ten students (of the total 19) who had withdrawn from study were available for interview from the Commerce distance cohort, which is slightly more than half. Of the ten interviewed, five were married (three of these had dependents) and ages ranged from 56 to 25 years. The four who were single had no dependents and were aged between 30 and 21 years. The remaining interviewee was in a defacto relationship, had no dependents and was aged 35 years.

The age group of the students and their method of entry to tertiary study did not appear to have any relevance on the decision to withdraw, and there did not seem to be any pattern here. There were more females (68%) compared to males (32%) who withdrew but then there were also more females undertaking the course (60% females compared to 40% males).

Each person interviewed identified career/job prospects as the main reason for initially embarking on tertiary study which seems appropriate as this was a mature age group who had already commenced working and were endeavouring to improve their career prospects, and most also worked full-time.

There was an even proportion of those who entered university as a result of work experience as mature age students and those who were admitted as a result of their

HSC performance (these were all in the 20-31 age group rather than the more mature age group).

Mode of study: Each student interviewed identified that they studied part time whilst working full time.

Interaction: Most students (seven out of ten) believed the academic interaction was good. Comments from one who did not find academic interaction satisfactory included:

> *"Emails were not answered promptly by staff, and online communications via the Forum and Interact were not well managed."* (24 year old female from Commerce distance, with no dependents).

> *Note:* refer to previous description of terms *'Interact'*, the *'Forum'* and *'emails'*.

However the question of social interaction brought a different result from students. There were six of the ten students who felt social interaction was not satisfactory. However it must also be remembered that these students were studying via distance mode and each one was working, most full time (only one part time). In fact one student identified that she was working:

> *"... a 10 hour day in addition to tertiary study."* (24 year old female from Commerce distance, with no dependents).

The main reason identified by this group for withdrawal from study was associated with time factors and workload (see Table 4.15 for a more detailed breakdown of respondents). There is further discussion in the summary.

Table 4.15: Reasons for withdrawal – Commerce distance

Reason	Number of Respondents
Time factor and workload	5
Wrong course	2
Personal (including illness and lack of support)	2
Financial	1
Total	10

Of particular interest was the fact that those who had dependents said either personal issues or time factor was the main reason for withdrawal. Although, many of those without dependents also identified personal issues and time factor as the main issue. This is an issue which was followed through with other cohorts to compare these, and ascertain if there was a similar trend across other cohorts.

A female student who identified personal issues as the reason for withdrawal, identified lack of time as the main problem:

> *"Lack of time was the contributing factor for withdrawal. There was also a problem with financial issues (especially as payment is required up front). The course content was excellent overall, although more information about actual topics and also how the university operated, should be available to help students."* (A 44 year old female Commerce distance student with no dependents.)

Another suggested the problem was a time management issue:
> *"I worked shift work and found I could not fit everything in. It was a time management problem. There was no problem with the subjects at the University."* (25 year old male Commerce distance student with no dependents).

A female student had similar problems:
> *"I work a 40 hour week, and try to fit in university work."* (44 year old female Commerce distance student, with no dependents). This suggests that the student did not recognize that study would be additional to regular work.

Some interesting feedback was received from interviewees about both challenges experienced whilst studying, and also some suggestions that the university may wish to consider for the future follows:

Feedback from one student who had re-commenced study during 2008 in a different Faculty and studying a different course (although she had withdrawn for personal reasons) suggested:

> *"The forums were useful, and feedback and replies from lecturers were speedy. However it would be very helpful to have more residentials, as this could be a great way for students to meet fellow students and also the lecturers; as well as giving an opportunity to gain a better understanding of the subject/s being studied at the time."* (33 year old male Commerce distance student, with two dependents.)

A male student who had previously completed undergraduate study at a different university found this course was structured differently to the previous study.

> *"Unfortunately, when I commenced study I did not understand how distance education operated here, including the need to undertake exams which became a worry – in fact it was all quite overwhelming. I left due to personal reasons including lack of support from family*. There also needed to be further support at university such as classes, although of course this is one problem when studying by distance mode (perhaps more residentials could be a help here). Internet communication between people was not used well to get the most benefit. I started out confident but found I didn't have the skills which were really needed to study at this level and with this mode of study."* (35 year old male Commerce distance student, not married, with no dependents).

Another student believed the lecturer for the subject lacked experience and did not teach to a standard he expected:

> *"The lecturer who taught the subject was not very good – the University needs to use competent lecturers"[for this introductory subject].* (35 year old male Commerce distance student, with two dependents).

Interestingly, six of the ten interviewed said they may recommence study some time in the future. One student considered:

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* When the student mentioned 'family' she was speaking about her parents and siblings.

> *"The course content was excellent, and I'll consider going back to study again when finances are available."* (44 year old female Commerce distance student, with no dependents).

However three felt they would not study again in the future, and one was unsure at this stage. Two of the students who indicated they would study again had already commenced during 2008 and had transferred from business studies to education, as they felt this was where they should have enrolled when they commenced.

General comments from students: Most felt they had quite a good understanding of the subject at commencement of study and only one identified this as a problem. He said:

> *"It has been a while since I studied and I was a little rusty. The accounting subject didn't prepare me for this subject."* (35 year old male Commerce distance student, with no dependents).

Understanding of the workload involved, and the actual demands of studying had a slightly different result as more than half (five) said their understanding of exactly how much work was involved was only marginal. Interestingly they were only able to allocate between two and four hours per week to study. Further comment is made about time available and workload in the general summary at the conclusion of this chapter. However all respondents felt they had quite a good understanding of what the assessments required.

<u>Summary of findings</u> (Commerce distance):

Students in the Commerce cohort who studied by distance mode and withdrew from study were most likely to be in the 21-35 year age group, with more females than males withdrawing overall according to the University data base (twelve females to seven males), they also identified that they studied part time. There was an even chance of students who withdrew being married or single, but most (six out of ten) did not have any dependents. All interviewees were motivated by career prospects to commence tertiary study, and the mode of entry was evenly balanced between HSC

results (5/10) or work experience due to entry as a mature adult (5/10); no students had been admitted through special consideration.

Also students interviewed believed they were prepared for study, and their understanding of the assessments and their requirements was satisfactory. However their understanding of the subject, the workload, and the demands of study were only marginal, for example they were only able to contribute four hours or less per week to study

Whilst the reasons for withdrawal were varied, the problem identified most consistently was time factor (the highest proportion), then workload and wrong course, followed by financial issues, though there did not seem to be any specific pattern here, for example age group, or people with dependents.

Students generally withdrew within the first six months, and most (six) students intended recommencing at a later date, though three did not.

Commerce (on-campus)

There were only three students from this mode (total of 87 students) who withdrew which amounts to just 3% of the total cohort and is well below the general attrition rate for undergraduate students at this university and universities in general. The three students (two female and one male) from this group who withdrew from study were interviewed. Feedback indicated one female was in the 20 years and under group and worked full-time, the other female was aged 21 with one dependent, and the male aged 35 years had two dependents (neither of these two worked). Also two of the three students were married, which again is interesting given the general age of this group.

As with the previous group who studied by distance mode, career advancement was the motivation for undertaking tertiary study for each of the three students, the mode of study being full time and the mode of entry was through the Higher School Certificate results.

Interaction: Each student identified that there was good interaction academically, although one (male) had not experienced social interaction, however he did not wish to elaborate on this comment and explain in more detail.

Challenges: One student identified the heavy workload and thus the time factor, trying to fit everything in. This group indicated they were able to set aside between five and fourteen hours for tertiary study per week. Another female considered initially choosing the wrong course to study was a real challenge.

> *"I lost interest in the course, and realized I had chosen the wrong one."* (20 year old female, Commerce on-campus student, with no dependents).

The male in the group said:

> *"My expectations of the course were not met. It was not well structured and it was quite overwhelming. Internet communication between people did not take place which could have helped."* (35 year old male Commerce on-campus student, with two dependents[*]).

A female student also spoke about the challenges she experienced:

> *"I suffered from a mental illness which caused me to get upset during exams. I was given little to no support from university – I passed essays and tasks really well, but failed the exam."* (20 year old female Commerce on-campus student, with no dependents).

There are support mechanisms available at the university however, which could have assisted the student such as additional examination time, although on further questioning it appeared the student did not specifically explain her problem to relevant staff nor request any help with examinations.

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[*] The student was referring to the <u>Forum where students are able to communicate between themselves; this was not really utilized by students</u> in the on-campus class, rather they relied on contact at university.

The other female who withdrew identified changes in staff (lecturers) and changes in the structure of the course as challenges.

> *"The Course Coordinator kept being changed – there did not seem to be any 'concrete' staff. The course also changed – I started one course and the structure changed so I could no longer major in the area I wished – this was not appreciated and was not very professional."* (21 year female on-campus Commerce student, with one dependent).

This student did not work but studied full time and had completed previous tertiary study. Whilst she intended returning to study sometime in the future, she would go to a different university to complete this study however.

All three identified wrong choice of course as the reason for withdrawal from study. One female said:

> *"I chose the wrong course to study; withdrew during 2007, and commenced studying primary teaching during 2008 at the same university and I'm very happy with this so far. Some lecturers are difficult to understand however, particularly those who have a non English speaking background."* (20 year old female on-campus Commerce student, with no dependents).

This particular student did not work in addition to her full time study at university, she had no dependents and went straight to tertiary study from completion of school.

Table 4.16: Reasons for withdrawal – Commerce on-campus

Reason	Number of Respondents
Wrong course	3
	3

The only male in this group believed there were actions the University could take to help students:

"There needed to be more support for students such as a phone call or an email from the co-ordinator. There needed to be more interaction. Perhaps some one-on-one time on a regular basis to discuss the timetable and workload (such as a mentor)." (35 year old male Commerce on-campus student, with no dependents[*]).

Perhaps he would benefit from more structured learning and was not aware or equipped for the level of independent learning that was required. He had also completed previous tertiary study, and did not work. He withdrew from study as it was the wrong course:

"I'll continue to study at CSU in the future, with a change in disciplines, but will also be looking for more support and contact." (35 year old male Commerce on-campus student, with no dependents).

General comments from students: Students felt their overall understanding of the subject and preparedness for study was good, also their understanding of the workload involved, and general demands of study ranged from satisfactory to good. The actual assessment items were quite satisfactory for one, and very good for the other two.

Summary of findings (Commerce on-campus):
Students in the Commerce cohort who studied as on-campus students and withdrew from study were 20 years and under, with more females than males withdrawing overall, according to the University data base (one male to two females). Two students were single (one married), and two of the three who withdrew had dependents. All were motivated by career prospects to commence tertiary study, and the mode of entry was HSC results.

Also students interviewed believed they were prepared for study, and their understanding of the assessments and their requirements was ranged from very good to satisfactory, also their understanding of the subject, the workload, and the demands of study were good to satisfactory.

The reason identified for withdrawal in each case was wrong choice of course.

Two students (20 year old and 35 year old) withdrew from study within the first three months, however the 21 year old female withdrew during the first 12 months. Whilst these students did not complete the course, they believed they would recommence tertiary study at a later date, in fact each one has already commenced study in a different course and Faculty during 2008.

VET (Distance)
The majority of these students were in the 31 and over age group (generally between 44 and 55 years old) thus they were mature age students (with work experience) which was identified as the method of entry to study. Also 20/77 (26%) of the initial student cohort were sponsored by TAFE, as it is a requirement of their employment to complete this degree; consequently not one of the TAFE sponsored students withdrew. This also makes the percentage of VET (non sponsored) students who withdrew much higher. As the proportion of those who withdrew from study is now 19/57 rather than the 19/77 previously considered for this cohort (as no TAFE sponsored students withdrew) the percentage is actually 33.3% (rather than 24%), which is quite high. Nine of the 19 students who withdrew from study were interviewed (Refer to Table 5.4 and comments).

Most of those interviewed (7 out of 10) worked full time either as teachers or trainers in the VET community, two worked part-time and one worked as a volunteer - each of the students interviewed said they only studied part time. The opportunity to further their career was listed as the main reason for undertaking study.

Approximately one half of those interviewed had dependents and generally this involved either two or three. Each person was either married or had been married, although there did not appear to be any identifying differences whether these people had dependents or not; for example those who had dependents did not always identify time factor as the main issue and alternatively sometimes those without dependents chose available time as an issue, so it was not consistent as a factor for withdrawal.

Interaction: During interviews, five participants said they found academic interaction satisfactory though four believed it was not adequate. However social interaction appeared to be a problem for six of the students with only three identifying that social

interaction was satisfactory, although it needs to be remembered that this subject was studied by distance mode so there was little opportunity for socializing.

Challenges: The question about challenges resulted in workload being identified as the major challenge for this group of students with personal issues next, followed by problems with understanding the requirements for assignments:

> *"The most challenging thing was the workload, I also had some problems with assignments. However overall the course itself was fine, I withdrew due to personal issues and bad timing with my studying"* said a female student. (48 year old female VET distance student, with three dependents).

The number of hours per week this group suggested they were able to give to their study was quite varied. At one end of the scale two students indicated one to two hours whereas another set aside 20 hours, others indicating 5, 10 and 14. Again this raises the question of what these students expected to have to contribute to their study. The non-withdrawing students did not provide any data or comments on actual hours undertaken for study.

Reasons for withdrawal: Factors leading to withdrawal from study primarily involved workload/lack of time, followed by personal issues/family. These two main reasons for withdrawal were identified by both those who had no dependents and also people with dependents. Two interviewees obtained other job offers and felt they no longer needed to study so therefore decided to withdraw. As with Commerce distance students, all except one who had dependents identified personal issues and time factors as the reason for withdrawal. The only one who identified a different reason, did so because the employer required her to study in a different area. There was an opening in administration within the business and as the employer felt that she would be suited to an administrative role, suggested she undertake a Bachelor of Business instead.

One student needed further support for study from her family:

> *"I was not supported at home. I needed psychological support from family and didn't get it."* (45 year old female VET distance student, with no dependents).

Whilst another had literacy problems, particularly her proficiency in English:

"I needed help to gain proficiency in English and didn't know where to get it; no one seemed to be able to help, or was interested." (46 year old female VET distance student with two dependents).

This student withdrew due to personal reasons. The University does provide assistance to students however. A course which helps prepare students for tertiary study at Charles Sturt University is called 'Studylink' and is a prospective student's website (http://www.csu.edu.au/student/studylink/prospective/). It covers topics such as: English skills for academic writing, Academic skills development, Preparation for Studying Business.

A student working with the Defence Department found the workload difficult and this was ultimately the reason for his withdrawal*:*

"There needed to be more customer focus, I was disappointed with the support and interest from the university; when I withdrew there was no consultation, no lecturers called to find out why I withdrew, you were just a number not a person. The social worker I spoke with said 'just do this to cancel the course' – no help was offered or ideas given to keep going." (44 year old male VET distance student, with two dependents)*.*

He also believed there should be more focus on employability skills for Recognition of Prior Learning (RPL) units not just scholastics, especially military and VET mapping. He was not impressed with the University and felt teacher focus was not on students.

Some students identified a number of contributing factors to their decision to withdraw, for example:

"There was inconsistency with lecturers and their marks and remarks, and there was also a very heavy workload. I have had an opportunity for employment in a different area which meant that study is not required now, so I've withdrawn. Family and personal issues all had a bearing on this decision as well." (44 year old female VET distance student, with two dependents).

More than one half (six out of ten) interviewees suggested they intended taking up study again, others were unsure at this stage:

"At the moment I am unsure whether I will commence study again as it is also too long to study for seven years to gain a degree." (44 year old male VET distance student, with two dependents).

However only one indicated they would not be undertaking study again in the future:

"Study will not be pursued in the future, this is due to a recent job loss and my now having embarked on a new career." (55 year old female VET distance student, with no dependents).

General comments from students: which could either help improve the subject or course, or actions the relevant School could take to help the students remain at university, included feedback that:

"The university could consider issues such as better methods of personal contact for distance students – the forum is not an ideal place to bounce ideas off" and *"Administration was difficult to make contact with, frequently messages on the phone advised me to call back or to contact someone else."* (46 year old female VET distance student with two dependents).

However there were also those who suggested that there was good contact:
"There was good contact together with plenty of online updates." (50 year old female VET distance with no dependents).

Therefore this sort of negative comment was not consistent. This is quite interesting as the comments relate to the same subject and lecturers, yet are two entirely different points of view from different people.

Another student believed there was lack of follow up by the University, she said:

> *"A complete lack of follow up by the university, people just felt like a number."* (46 year old female VET distance student, with two dependents).

Although conversely again, another had a different point of view:

> *"I liked the distance mode and felt the method and amount of contact was fine with plenty of online updates."* (50 year old female VET distance student, with no dependents).

These are contrasting views from students in a similar age group, who all worked in addition to studying and entered university as mature age students. Certainly most were females although there was an even match between those who had dependents and those who did not.

Summary of findings (VET distance):

Students from the VET distance cohort who withdrew from study were generally 31 years and over (mature age group), with more females than males withdrawing (eight out of nine were females). All had been married, but one was divorced, and five students had two or more dependents though the remaining four had no dependents.

All except one were motivated to commence tertiary study for future career reasons, and the one exception identified study as a work requirement (this was not a TAFE student). Each of the students identified they had studied part time. The mode of entry was as a mature age student for seven students, and the remaining two students entered university based on their HSC results.

Also students interviewed believed they were prepared for study, and their understanding of the assessments and their requirements was generally satisfactory (though two identified it was only marginal). Also their understanding of the subject, the workload, and the demands of study had a similar result, with four suggesting quite a good understanding and the remaining five students said their understanding was only marginal. Interestingly, those who contributed between 10 and 20 hours per week to their studies, did not indicate workload or time factor was a problem. The two students who spent 20 hours and 14 hours on study work felt they had a good understanding of the workload needed to pass the subject and how this would fit in with other demands, although some others with lesser hours to contribute felt they did not have a good understanding of what was required.

The reasons given for withdrawal were varied, but the majority of students identified Personal issues as the primary factor in their decision (see Table 4.17 for a detailed breakdown of respondents' reasons):

Table 4.17: Reasons for withdrawal – VET distance

Reason	Number of Respondents
Personal issues (including loss of job)	6
Time factor/workload	1
Wrong course	1
Other (study not now required - job change)	1
Total	9

Students generally withdrew within the first six months, and four students intended recommencing study at a later date, five were unsure and one did not intend any further study.

Leave of Absence

Telephone interviews were also conducted with a sample of three of the students who had applied for and been granted a leave of absence from study. The same list of questions were used as for those who had withdrawn from study, and the same information regarding the research was forwarded to this group. These interviews were conducted at the same time as those for the withdrawals, to ensure the information collected was relevant.

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One person from each of the three cohorts (Commerce distance and on-campus, and VET distance) was interviewed to ascertain if there were any specific trends here. The reason for seeking a Leave of Absence for both the Commerce (distance and on-campus) students was again personal issues and time factor – both these were females and aged between 32 and 45 so neither had commenced study straight from completion of school. The VET student obtained a position as a TAFE teacher and will consequently continue his studies during 2008 as a TAFE sponsored student rather than paying for the study himself. The on-campus Commerce student was the only one who had dependents and she had one dependent.

Comments made by one student suggested:

> *"There were issues with the online requirements, the expectations were quite unreasonable."* (44 year old female Commerce distance student, with no dependents).

Her comment related to the number of small activities (such as OASIS tests and forum activities) which needed to be completed online in addition to the usual assignments and the end of semester examination. It was the time factor involved in completing these tasks which was the problem rather than the computing skills required.

It was interesting to compare the reasons for withdrawal by each cohort. The VET students mainly identified personal issues (identified Table 4.9), as the reason for withdrawal, which was also identified by two interviewees from the mature age group in Commerce distance. However personal issues were not identified by the on-campus Commerce students as the main reason for withdrawal, rather they all felt the problem was they had chosen the wrong course to study. The reason for this could be because personal issues is a euphemism for domestic problems such as unsupportive spouse and family or family problems, especially for female students. Thus as only two of the 65 respondents from the on-campus group were married, there would be less likelihood that personal issues such as these would be identified by people as the reason for withdrawal.

Withdrawals

More females than males withdrew from all the courses (23/31 or 74.2% females compared to 8/31 or 25.8% males), though the total number of females enrolled in both Commerce cohorts was also greater than for males (185 females compared to 147 males). However there were more males than females enrolled in the VET course (46 males compared to 31 females), although withdrawals consisted of all females except for one male (for a detailed breakdown of withdrawals see Table 4.18).

Table 4.18: Gender of students who withdrew

	VET Distance		Comm Distance		Comm On-campus		Total	%
Sex male	1	11.1%	4	40.0%	1	33.0%	6	27.3%
female	8	88.9%	6	60.0%	2	67.0%	16	72.7%
Column Total	9	100.0%	10	100.0%	3	100.0%	22	100.0%

The two age groups who experienced the largest number of withdrawals were mature age or those 31 years of age and above (45.5%), and the 21-30 year age group who had the same percentage (45.5%), although with the youngest group of 20 years and under there were only 9% who withdrew and these were exclusively on-campus students (Refer to Table 4.19 below). Although again there were also more mature age students and those in the 21-30 year age group enrolled in these subjects due to the number of students studying by distance mode, which does not attract the younger student who has just completed school (as previously discussed).

Table 4.19: Age group of students who withdrew

	VET Distance		Comm Distance		Comm On-campus		Total	%
Mature age 31 >	8	88.9%	2	20.0%	0	0.0%	10	45.5%
21-30 years	1	11.1%	8	80.0%	1	33.3%	10	45.5%
20 years and under	0	0.0%	0	0.0%	2	66.7%	2	9.0%
Column Total	9	100.0%	10	100.0%	3	100.0%	22	100.0%

The VET cohort included more males than females (although withdrawals consisted of all females except for one male) which is interesting. More than half of the withdrawals were by mature age students overall (ie. over 31 years of age), although again there were more mature age students enrolled in these subjects due to the number of students studying by distance mode.

It must be remembered that most students studying by distance mode have been working for some time since leaving school, and have already embarked on their career journey; they are thus a mature age student (see previous comments about the makeup of students involved in distance study, Table 4.19).

A point to remember with the VET students in Table 4.20 below, is that the proportion of the Total Withdrawn from study is really 19/57 rather than 19/77 (as none of the 20 TAFE sponsored students withdrew) thus the percentage of total withdrawn VET students is 33.3% rather than 24.6%*. This is quite high when compared to the percentage of students who withdrew from the Commerce subject (both distance and on-campus).

Table 4.20: Comparison of those interviewed who were mature age students and those who were not

	Interviewed (30yr & under)		Interviewed 31 yr & over		Total Withdrawn	
VET*	10.0%	1	66.6%	8	*19/77 _19/57_	_33.3%_
Commerce DE	60.0%	6	33.4%	4	19/245	7.8%
Commerce Internal	30.0%	3	0.0%	0	3/87	3.5%
Column Total	100.0%	10	100.0%	12	31	

* 20 of the VET students were TAFE students – refer to comments below

Overall, most students interviewed (16 out of 22) worked full time but each student only studied part time, and (15 out of 22) had not undertaken previous tertiary study. This is an expected outcome due to the ages of those people in the groups, and the mode of entry into study, as these have commenced as mature age students.

The total nine VET withdrawals from study were from the general VET students, thus there were no students sponsored by TAFE who withdrew from study (TAFE teachers). This was not unexpected as the TAFE teachers' continued employment would be dependent upon the successful completion of their qualification.

To some extent it is perhaps surprising that financial factors were identified in the interviews as the reason for so few withdrawals. Although many experienced financial pressures and needed to rely on working to help relieve these pressures (90%

or 28/31) worked full-time, although there were also three who only worked part-time and withdrew), evidently this in itself was seldom a sufficient reason for withdrawing.

The reasons for withdrawal were compared across the three cohorts and the various age groups, and whilst there may not be a uniform 'trend', from data available it is evident there are differences amongst the groups. For example, reasons for withdrawal by mature age students were not consistent. The results showed that personal issues (such as family), wrong course and other factors (for example employment issues), were the main reasons identified by the VET mature age students for withdrawal. 'Other' covers issues such as employment opportunity (therefore study no longer needed), employer requirement now changed, and loss of job (see Table 4.21). However mature age students from the Commerce distance group identified time factor/workload and financial issues as withdrawal reasons. Lack of time covered all reasons where the student mentioned that there was not sufficient time to cope with study, for example workload, as well as family or work commitments. Interestingly, from interview data it is evident that this group was only able to contribute between two and six hours per week, which is much less than the other two cohorts.

Table 4.21: Reasons for withdrawal: Comparison of different age groups and cohorts

	Personal	Time workload	Financial	Wrong course	Other	Row Totals
VET						
Mature age 31>	6	1			1	8
21-30 age group				1		1
20 years & under	0	0	0	0	0	0
Commerce DE						
Mature age 31>		1	1			2
21-30 age group	2	4		2		8
20 years & under	0	0	0	0	0	0
Commerce Internal						
21-30 age group				1		1
20 years & under	0	0	0	2	0	2
Column Total	8	6	1	6	1	22

Interestingly, those who chose the wrong course were all from the younger age groups (either 20 years & under or 21-30 age group), all except one (from the on-campus Commerce cohort) were female; this was consistent for each of the three cohorts in

the study (Commerce distance and on-campus, and VET). This could suggest younger students need further guidance in choosing the courses to study and perhaps additional information from the institution about what the course involves and the career to follow. There was also the possibility that the course they studied was not their first choice but was the place/course the university offered them. However interviewees confirmed that these were the courses they themselves chose to study, so it was not a matter of having to study a second choice course.

Wrong choice of course was identified by the two students from the Commerce distance cohort who transferred to study in Education:

> *"I changed career direction from real estate to focus on training, so I was now studying the wrong course"* (21 year old female distance Commerce student, single, with no dependents).

An on-campus student interviewed was also one of those who changed courses and had commenced studying Primary Education during 2008:

> *"I lost interest in the course, it wasn't what I wanted to do – I commenced Primary teaching in 2008."* (20 year old female on-campus Commerce student, no dependents).

The VET student only identified that the wrong course had been chosen, however no alternative has been considered at this stage*:*

> *"Perhaps later, and a different course."* (27 year old female VET student, with no dependents).

When offered assistance during the interview the researcher was advised by the student she was not yet ready at the moment. On checking during January 2008, a decision regarding a return to study had still not been made.

From evidence available, females may be more likely to withdraw from study and this trend is common across each of the three cohorts. From a total of 32 withdrawals

there were 24 females compared to 8 males. From the 22 interviewed 11 had no dependents and 11 had one or more dependents so these were evenly balanced. Of the total 22 interviewed, almost all who withdrew worked (only two did not work and these were on-campus students who had just completed school), with 16 working full-time and four who worked part-time. Thus it would seem that females are more likely to withdraw, and they worked (most likely full-time).

Pre-university influences

The pre-university category included student background characteristics, personal issues, age, primary language, and motivation to study/goals. Respondents' feedback from surveys and information obtained from those interviewed, suggested issues such as background characteristics appeared to have little influence on students' decision to withdraw, possibly because there was not a big difference in the background situations of students. The cohort was homogenous and did not include students coming from a very affluent background and others from lower class working families, or where the family expectation is double degrees from a highly ranked institution.

Whilst there were more females than males who withdrew, overall there were more females enrolled in the subjects under consideration. Age presented a similar situation, there were more students aged 31 years and over who withdrew though once again these represented the age range for most students, the one exception here was for the Commerce on-campus students who were either 21-30 years or 20 years and under, which is relevant to this group (see previous discussion).

There were also very few who did not have English as the primary language, and only one student who identified there was a language difficulty (see Chapter 2 for dialogue).

Motivation to undertake study was overwhelmingly identified as career opportunity. Factors which were identified by the respondents as major reasons for withdrawal involved personal issues such as family problems and lack of family support, and time factor - this also includes workload which could also be identified as a post admission influence) (see Table 5.1).

Secondary schools also have a key role to play in ensuring students obtain the skills necessary for success in undertaking tertiary study according to ACER (2008). Although tertiary institutions also have an important role in ensuring a smooth transition to tertiary study.

Post admission influences

It is suggested by the literature that issues such as the university, transition to university study, student expectations, social and academic interaction influence the withdrawal or perseverance of university students.

Issues such as mode of entry, actual university issues (for example course and workload), transition to university, student expectations and social and academic interaction were given consideration by the students interviewed. Wrong choice of field of study was the reason given by all on-campus students for withdrawing from study and was identified by 20% of students overall as a post admission influence on departure from study.

Mode of entry did not appear to have a specific influence on whether students withdrew, as students who entered as both mature age (14/22) or HSC results (8/22), withdrew from study (Commerce distance and on-campus, as well as VET students). Mode of study also did not appear to have an influence, as none of the students who had withdrawn (whether studying distance or on campus mode) said they both studied full time and also worked full time.

Financial issues were suggested as a problem by a small number of students, however as mentioned previously this did not appear to be sufficient reason to actually withdraw as there was only one student who identified this as the reason they withdrew. To address this problem students generally took on a job or if needed they worked longer hours if already working part-time.

As discussed in detail previously, student expectations and both social and academic interaction appeared to have little influence on their decision to withdraw, as these were not identified as reasons for withdrawal by students. Academic interaction appeared to be satisfactory overall, although social interaction for the two cohorts of

distance students was lacking. However, the reasons for this deficiency was understood by students.

Motivation theories

Based on analysis of data provided by students who withdrew from study, consideration has been given to the relevance of the motivation theories such as those of Herzberg and Maslow as to why students withdraw from study.

Maslow's motivation theory:

Maslow's (1970) hierarchy of needs, emphasized that lower order needs (such as food, accommodation, financial, health) must be met before students turn to higher level needs (for example social, esteem and academic study). Whilst this theory has been criticized on philosophical, methodological and hierarchical grounds, including articles by Tietjen and Myers (1998), Haslam, Powell and Turner (2000), and Ramlall (2004), there are also articles which clearly show relevance (Hitt et al., 2007; Wood et al., 2004).

Results from this research indicated there was a relevance to Maslow's hierarchy of needs, identifying that students focused on higher level needs to motivate them to enroll and commence tertiary study. Basic needs were fulfilled (food, clothing, shelter) prior to entering university therefore they focused on career and job opportunities. For example, respondents to the surveys from each cohort identified 'career future' as the main reason to commence study (59%) followed by job opportunities.

Distance students (Commerce and VET) who were married and/or with the responsibility of dependents (children or elderly parents) had basic needs fulfilled prior to making the decision to undertake tertiary study – again career goals and opportunities were identified as the reason for commencing a degree. The fact that all students interviewed (22) believed they were ready for study supports this point - obviously they felt basic needs were fulfilled, also none were required to study to maintain their employment so it was their own personal decision to enter university.

However when lower order needs were not satisfied during the transition period to university (financial, personal issues), students then focused on these rather than study, sometimes taking the ultimate step to withdraw. In the interviews with students who had withdrawn 40% of students identified personal issues (such as family problems, lack of family support, illness), followed by financial as the main reasons for withdrawing. One student suggested:

> *"I'll resume study when finances improve."* (44 year old male Commerce distance student, no dependents).

Herzberg's two factor theory of motivation:
With this theory the factors that are linked with people being happy are called 'satisfiers' or 'motivators', and can be identified as a sense of achievement and recognition for things done, for example study completed, qualifications achieved, responsibility, advancement. Thus the factors that can be linked with people having a bad time or being unhappy are called 'dissatisfiers' or 'hygiene factors'. However Tinto (1993) suggests satisfaction is associated with performance and is predictive of persistence in higher education, and Allen (1999) theorises that the relationship between motivation, persistence and attainment is the best prediction of academic success.

Herzberg's theory of motivation suggests that for on-campus students, they may make decisions on courses and institutions by leaning towards hygiene factors such as ease of access from home, what campus buildings and surroundings have to offer, and teaching or lecturing which is interesting, informative or relevant to their career choice. Obviously distance students would also choose the course most relevant to their career choice, and would also consider issues such as requirements per semester (for example number of assessments) and terms per year of study (semesters or trimesters), depending on their workload and responsibilities. Having factors which are satisfiers to the students' particular situation helps avoid dissatisfaction by the student.

Issues such as wrong choice of course was a major reason (third most frequently identified) for feeling dissatisfaction and thus eventually withdrawing, this was also the only reason identified by on-campus students who withdrew.

When exploring the relationship between students' expectations and their motivation and satisfaction or dissatisfaction, this research also found that students studying by distance mode were more likely to withdraw than on-campus students, because most distance students (141/191 or 73.8%) did not experience satisfactory levels of social interaction or had an unrealistic understanding of the workload or time requirements, and how this would fit in with their private and working environments.

There were also some who had different expectations of what the university had to offer, especially contact and assistance available from lecturers when studying (in particular by distance mode) – again this would be a 'dissatisfier' (although 62.6% felt they had satisfactory academic interaction, and 91.8% felt their expectations of the university were met). However, these results may indicate a different interpretation of what the question meant, or they did not have a clear understanding of what to expect when entering university. When this topic was pursued during interviews, students' responses were still not clear. The desire for follow up, advice, and support from both lecturers and administration staff when there were difficulties and also when there was a need to withdraw, was identified. One distance student suggested:

> *"There was a lack of support in the course, there needed to be more. More support from the university, a phone call, email from support co-ordinator, only one lecturer made an effort to help… also needs to be more interaction. I was not impressed with CSU re teacher focus it is not on students: no communication/lack of interest, there needs to be more than just forums."*
> (44 year old male VET distance student, with two dependents).

Conclusion

The objective of this chapter was to give a clear understanding of any patterns and themes that emerged from the data. The examination of the research question and

various relevant factors relating to the research question for the three case studies of student cohorts (Commerce distance, Commerce on-campus and VET distance) has been undertaken to achieve this objective.

A benefit of using three studies and triangulating the findings is that the conclusion would answer the research question. For example Case Studies one and three (both distance cohorts) identified the same major reason for withdrawal from study, whereas Case study two (on-campus group) gave a different reason.

This chapter has described the findings from both the quantitative and qualitative perspectives. The quantitative study targeted continuing students to gain an understanding of what motivated them to continue with their studies, however the qualitative research focused on students who had withdrawn from their studies to ascertain what motivated these students to withdraw. It was important to include both these methods as the quantitative research (surveys) allowed the researcher to also gain feedback from a large number of current students both on their background and personal issues, as well as identifying challenges experienced during their first year of tertiary study. Issues which were briefly identified could then be followed through in more depth as part of the qualitative research involving indepth interviews with students who had withdrawn from study, thus helping to 'fill the gaps' in the information from the surveys.

CHAPTER 5: General Discussion

Introduction

Now that data have been analysed, this chapter will discuss the findings regarding the factors that influenced students across two disciplines to withdraw from undergraduate study and compare what some recent literature has to say. The feedback from students interviewed regarding Challenges during study and also Personal study goals will be discussed, and information from some students will be included to gain an understanding of their experiences with undergraduate study.

Purpose of study

The purpose of this study was to investigate factors that influence students to withdraw from undergraduate study within their first year of tertiary study, and whether different factors relate to students who have come directly from the school environment compared to those commencing as mature age students. It was also important to determine the major issues that impacted on students' early experience of university and whether/how these issues were connected with the reasons for students withdrawing from study (Trotter & Cove, 2005).

Discussion of findings

Respondents as people

The questionnaire asked about personal details such as marital status, age, country of origin, previous tertiary study, and mode of entry, to gain more knowledge about those who might be prone to withdraw or withdraw for particular reasons, for example mature age students withdrawing through lack of time. More than half the respondents for the combined groups (56.3% of those surveyed) had no dependents and having the responsibility for dependents was not identified as a cause for withdrawal; this is particularly relevant for the Commerce cohorts although only 35.4% of the VET students had no dependents. Almost all withdrawals came from an English speaking background thus having difficulty with the language would not be a major factor leading to withdrawal. Therefore these factors in themselves could be excluded as specific reasons for withdrawal. Both Le et al (2005) and Reason (2003) in US based research also found little significance for these variables to undergraduate student retention or withdrawal.

The results of this research confirmed previous studies that withdrawal does not relate to one single issue but is in fact multifaceted, it is the result of a series of interconnected factors. Far from being a result of academic weakness or financial problems, the study suggests that non-completion results from a complex range of factors such as poor choice of course, personal issues, financial factors and adjusting to the change in lifestyle as well as experiences at university. Students seldom react to just one issue, though they may prefer to explain it as unicausal when taking part in research, especially in a survey which encourages a single 'tick the box' response. The Department of Employment, Science and Training (2005) conducted a similar study on reasons students withdraw from tertiary study. Table 5.1 below gives the mean ranks when respondents were asked to rank order the factors according to importance as an influence on withdrawal. Here the lower ranks were the more important, with factors such as personal, family and health given high importance.

Table 5.1: Ranked importance of factors as an influence on withdrawal

Factor	Mean rank
Personal	3.5
Family	4.8
Health	4.8
Employment	5.0
Course	5.4
Financial	6.8

Source: Department of Employment, Science and Training (2005)

A comparison of the results from the DEST study with those of the current study shows a number of similarities (refer to Table 5.1 and Figure 5.1) particularly when combining personal, family and health into one item titled 'personal' as is the case in the current study. These have been identified as the major influence on student withdrawal in both studies. Incorrect choice of course and financial were also identified as important factors in both studies. The information contained in Table 5.1 is reproduced as a chart in Figure 5.1 below:

Figure 5.1: Factors affecting withdrawal
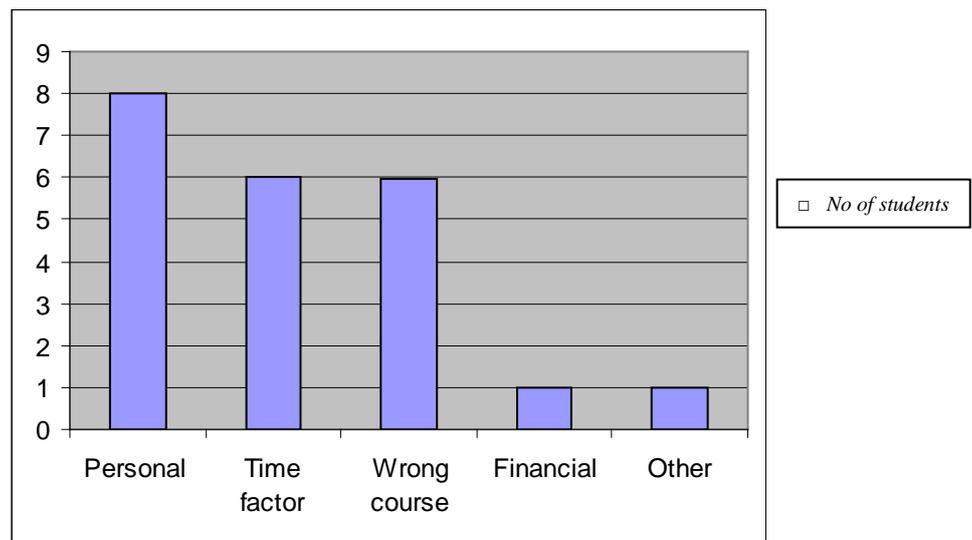
Source: Interviews conducted with students who withdrew from study

Challenges during study

The responses to the questions from the interviews provided an understanding of first year experiences of the student. This feedback included the type of challenges faced by first year students during their transition to university, whether as a mature age student with work experience or having just completed their schooling and the Higher School Certificate (HSC).

Each of the students interviewed identified they did not have a good understanding of the workload involved during study, and this was a major challenge whilst studying. During the interview students were asked the approximate number of hours per week they had set aside to tertiary study. The answers were wide and varied ranging from one or two hours to 20 hours; one tried for six but managed three hours, another tried for six hours but only managed one or two hours. Those studying Commerce distance were only prepared to allocate a very small period of time per week to the study (for example two, three or four hours). This indicates students need to have a more realistic understanding of the workload requirements before commencing study, as it may ultimately have an influence on a student's decision to withdraw from study. From the total 22 students interviewed, seven said they spent only five hours or less per week on their studies, the University recommends at least 10 hours per subject per week for undergraduate study.

The results relating to the influence of mode of entry were predictable. Whilst all of the students in the VET cohort who subsequently withdrew had entered university as mature age students, the makeup of this cohort was also predominantly mature age therefore this would be an expected outcome. However, the results for a similar group, the Commerce distance students was reversed as most distance students were aged under 31 years of age. A US study conducted by Le et al (2005) found that age, family income, and ethnicity variables have little practical significance, although Reason (2003) suggests that the rapidly changing demographics of the undergraduate student population will mean that variables will also change. However, studies are conflicting, some such as Martin et al (2001), DEST (2004), suggest 17-20 year olds have a much lower attrition rate than older students, though Shah and Burke (2004) disagree.

The Commerce on-campus students, who generally commenced tertiary study straight from completing school, were 20 years and under. The main mode of entry was through HSC results (TER or tertiary entrance ranking). No relationship seemed to exist between previous university experience or lack of previous experience and student withdrawal from study. However, Wright, Baker and Perrera (2006) and Reason (2003) found an association and that variables such as high school grade average, entrance exam scores do have some relevance and should be included in all retention studies. Also Allen et al (2007) suggest pre-college (Australian first year university similarly) academic preparation is essential to first year academic performance which then affects likelihood of staying or dropping out. Both these are from the US which has some differences as mentioned previously.

Overall, 89.5% of students who held specific expectations of university believed these were generally satisfied, which is interesting because often students have unrealistic expectations of tertiary study and the social life involved (this is supported by James, 2001). Social interaction held some concerns for a few of those studying by distance mode. Most who mentioned that there was a lack of interaction socially also made the comment that this was a distance subject and therefore was not really an expectation.

Academic interaction which can be important to student progress (Kember et al., 1994; Scott et al., 1996), in most cases was satisfactory though there was a comment

by three Commerce distance students about improving contact with lecturers. One suggested:

> *"It was difficult to make contact with lecturers, and seemed to be only a last resort. There needs to be a good support system."* (30 year old female Commerce distance student, 3 dependants).

Students seemed to mostly rely on the university website to obtain information and advice about various courses and make a decision about which course to study, although one was given guidance from a 'student guidance counsellor' at another campus and another relied on the University Admission Information (UAI). Perhaps the information, particularly that given on the university website could be clearer and more specific to help prospective students gain a better understanding of the content, requirements and outcome from the course they anticipate undertaking. This was an issue raised on a number of occasions in the interviews.

Personal study goals

One area of interest in examining withdrawals is the motivation of students and the reason they embarked on their study initially. Overwhelmingly, students identified furthering their career as the main reason for commencing study at university, followed by job prospects, six identified prestige or status (which should not be affected by career change or change in employment) and two said they were influenced by family.

Interestingly, Le et al (2005) found a very high correlation between motivation, skills and student retention as did an Australian study by Burgess and Sharma (1999). It is also important to remember that for 20 of the VET group, completing an appropriate undergraduate degree is a requirement of their continued employment as TAFE teachers. In addition, it would appear that whilst there could be strong motivation to complete the course, factors such as basic physiological and security needs such as personal issues (financial problems, illness, not enough time for family) were identified as the deciding factors on whether to withdraw or continue as these were more important to students than higher level needs such as education and career. This was particularly relevant for females who worked full-time and had dependents.

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It is worthwhile to note that most of those who withdrew did so within the first six months of study, which indicates that they realized there were problems and needed to withdraw soon after commencing. This course of action was probably taken at this stage to avoid re-enrolling for Semester Two and being responsible for fees for the second semester. This trend is compares with findings by McInnes and James (1995) and McInnes, James and Hartley (2000) who found that students consider withdrawing during the first semester.

One of the most interesting results of the study was that 60% of respondents intended to recommence study at a later date, and a couple had already commenced studying a different course during 2008; 20% were unsure whether to study again, with the remaining 20% saying they would not recommence tertiary study in the future (see Table 5.3 for further information). These respondents had withdrawn from study for a diverse number of reasons with no apparent relationship. However by January 15, 2009 there were two Commerce distance students and three VET students (5/22 or 22.7% of those withdrawn and interviewed) who had recommenced tertiary study at the University (generally in a different faculty).

Table 5.3: Intention to recommence study: Comparison of groups

	Unsure	Yes	No	Row Totals
VET				
31 years and over	3	4	1	8
21-30 yrs	1	0	0	1
16-20 yrs	0	0	0	0
Commerce DE				
31 years and over	0	4	0	4
21-30 yrs	1	2	3	6
16-20 yrs	0	0	0	0
Commerce Internal				
31 years and over	0	0	0	0
21-30 yrs	0	0	0	0
16-20 yrs	0	3	0	3
Total	5	13	4	22

Finally, a number of comments were given by those interviewed that they felt may help improve the experience of study, some of these are:

A student studying by distance mode suggested:

> *"More residentials could be held at the university for distance students, giving an opportunity for interaction with both other students and lecturers. Students could learn first hand about the requirements, expectations for the relevant subject/s, and also suggestions which may help study to be less stressful."* (33 year old male Commerce DE student with 2 dependants).

A female student who studied on-campus felt:

> *"Some lecturers are difficult to understand, in particular those from a non English speaking background."* (20 year old on-campus Commerce student with no dependants).

This can be especially difficult for an on-campus student just commencing university straight from school. The institution should be careful to allocate lecturers (particularly to first year students) that are experienced, able to communicate easily with students, and can present information in such a way to keep students' interest and assist their transition to tertiary study.

Two Commerce distance students mentioned that emails and phone calls tended to be a problem, for example:

> *"Staff are often not available, you leave messages and it takes ages for them to get back to you … sometimes never. There needs to be a good support system."* (30 year female Commerce DE student with 3 dependants).

The other comment was from a 24 year old female Commerce distance student with no dependents. Emails and phone calls need to be answered appropriately and within a reasonable timeframe, as students are often relying on this information, possibly waiting on feedback to help complete assignments, so prompt answers are important.

Online activities as part of assessments need to be monitored to ensure they are realistic as assessments and relevant to theory. For example two assignments involving written essays in MGT100 (Organisations and Management), an examination and numerous online activities (such as a quiz, group discussion) is not

necessarily conducive to students having a better understanding of the subject. Students need to be able to relate theory to actual practice; employers have often complained to the researcher that graduated students commence work with quite a lot of knowledge but without the ability to relate this to the situation in the workplace.

More 'personal' contact and follow-up by lecturers or administrative staff is needed, for example when students identify that they have problems or when they withdraw. They need to feel the university cares about them and their situation.

It is important to ensure course and subject requirements are clearly outlined in information available to students prior to enrolling (such as on the website and information booklets), and explained so students have a good understanding of what is needed. Further specific information should be clearly identified on the actual requirements of the subject and assessments in the Subject Outline.

Consistency with lecturers' marks, remarks and the expectations is very important, so students have a clear understanding of what is required, particularly for assignments (this comment came from the VET cohort). The student suggested:

> *"There was inconsistency with lecturers and their marks and remarks..."* (44 year old female VET distance student, with 2 dependents).

Try to ensure the structure of the course and actual lecturers involved are consistent during the term. Different lecturers have different ideas, methods, and expectations, so changes can be confusing for students.

Reflective thinking

'Reflective thinking' has always had a profound influence on my professional practice, reflecting on my 'teaching' and how queries, concerns and problems of students were handled. The current study presents an ideal opportunity to reflect on issues such as the design and delivery of lectures, student participation, and questions such as:

   i)   are the needs of the students being met
   ii)   should some different approach be used

iii)   which students are most likely to fail or withdraw from the course

iv)   has there been quality consideration and understanding of each student and their particular needs.

Also consideration should be given to comments from a female Commerce student studying by distance regarding the unnecessary complication of coursework online (see Chapter 4). This reflection has led to a desire for better knowledge and understanding about what leads to students' withdrawal from study, consequently the title of this study 'Successful completion of undergraduate study: key influences'. Students in the study reflected on the challenges experienced and the reasons for withdrawal from study and during the interviews identified some of these. My own self-reflection of my professional practice has recently focused on whether there has been quality consideration and understanding of each student and their specific needs, with the busy work schedule lecturers experience. This has resulted from comments students have made regarding follow-up and contact by the university after they had withdrawn from study (for example see comments by a student in VET distance section Chapter 4). Recently the opportunity arose to put this into practice. A student who had requested an extension for submission of an assignment (which I approved) emailed as follows:

> *"I am writing to request an extension for assignment 1 … that will be a big help."*

And then:

> *"Thank you for the extension however I have decided to withdraw. Before I submit my application for a leave of absence, I would like to talk to someone as I am not sure if I will resume studying next year or leave it until sometime further in the future."* (2009 Commerce distance student).

This presented an ideal opportunity to put into practice some of the issues raised by students in the study. Consequently, I personally contacted the student by phone (in addition to answering the email to provide the relevant information), and was able to show my understanding of the situation and ascertain if there was anything further

either I or the university could do to help avoid withdrawal. In the event that the outcome could not be changed, feedback had been given to the student to assist with a smooth transition into tertiary study again when the situation changed. The Course Coordinator was contacted and he also contacted the student straight away to ensure the situation was clearly understood and relevant details were available, rather than the student having to make the initial contact to seek details. The appreciation shown by the student was overwhelming and unexpected, clearly showing such a course of action positively impacted on both the student (smooth re-entry into study) and the university (good feedback about the institution by the student).

Conclusion

Research results from this study show that the reasons for withdrawal are not due to one specific influence, rather a combination of issues identified as part of either pre-university and/or post-admission factors, although according to student feedback personal issues (such as family problems, illness and lack of support) were the major influence on student withdrawal. It was interesting that career goals were identified by students as the main reason for commencing undergraduate tertiary study, by both continuing students and those who had withdrawn from study.

The study also considered the challenges students identified as part of their study. The main challenge identified here by each of the three cohorts was workload, suggesting students may not have had a good understanding of the workload involved, nor the amount of time required to allocate to study, and also the pressures they face when commencing tertiary study.

As a result of research conducted as part of this study, the question must be asked 'Why do some students withdraw and others continue with their study' when they have a number of similarities such as: challenges, motivational factors for commencing, similar age groups, number of dependents, mode of delivery and mode of entry? From my personal experience as a distance student and also a lecturer, the answer to this question may be the level of persistence and commitment a student has on commencement of study. Evans (2000) tends to agree pointing out that studies suggest persistence and performance can have an influence on the decision to continue study, and that these could be related to students' background characteristics.

It will be recommended that further consideration of some of the points raised in this discussion, and possible implementation of some of the suggestions outlined by students who felt these may help improve the experiences of study, may also assist in reducing attrition in the future. For example the introduction of residentials for students studying by distance mode could give students further support, understanding of what was required and interaction between other students and lecturers, which were issues identified in interviews with students as areas where assistance was needed.

CHAPTER 6: Recommendations and Conclusions

Introduction

The aims of this research were to examine student attrition in undergraduate study and the reasons students withdraw in their first year of study, within the Faculty of Business and the Faculty of Education at a regional university in Australia.

In this final chapter the key themes and findings from this study are noted, limitations of the study are considered and recommendations for future practice and research addressed.

Overview of findings

It was found that helping to address the needs of students would be a positive step to help prevent some of the withdrawals which could perhaps have been avoided. The results of this study have shown that there needs to be better understanding of issues which confront students when they first commence study. Further support and assistance by both academic and administrative staff to new university students is needed; for example additional orientation programs to help students become more aware of the extra pressures they face in the first semester of study, including the requirements for class, assessments and study.

For a few students an emphasis on the status attached to a tertiary qualification may assist, especially for those from a non English speaking background (NESB) (as defined by DEST), as these students often commence with low level prestige . Three of the four Commerce distance NESB students (75%) identified prestige as the reason for commencing tertiary study (Table 4.2 and 4.3) in the surveys, and also 3/13 Commerce on-campus students (23%), although 0/11 VET distance students felt prestige was relevant. Therefore prestige was only relevant as a reason to commence study for the Commerce distance students from a non English speaking background, as part of their culture.

Whatever the problems contributing to a student's decision to withdraw, it seems that more advice is needed on the requirements of courses and how to plan one's time, with further information about the assignment workload for each subject so that students can plan ahead in organizing their other commitments around their studies. As mentioned previously, the younger students such as all the Commerce on-campus (20 year old and two 21 year olds) who withdrew and two Commerce distance students (21 year old and 23 year old) may need further guidance with their initial choice of course.

Of course no matter how helpful and informative the advice, students will not always heed it. However, they would be better able to cope with unexpected issues such as illness or family problems if they understood more clearly the course requirements. From personal experience with tertiary students (both on-campus and distance mode) they do not appear to have an understanding of what action to take, or who to contact in regard to issues such as extended illness, late assignments, withdrawal without penalty and what provisions are available when such problems arise, so they could better deal with the immediate problems.

Recommendations

At a time when universities are under pressure to be more efficient and client-based, it is important to identify and introduce conditions to help students enjoy a satisfactory transition to tertiary study, thus helping to reduce student attrition (Hemmings, 1997). As a result of the findings of this study, the following recommendations are proposed to help address some of the problems and challenges students may encounter and can ultimately lead to the withdrawal of undergraduate students from tertiary study:

1. **Students chose the wrong course** *(Chapter 5)*: The University could endeavour to give students better and more accurate information on courses and career guidance, so students can make a more appropriate decision – perhaps introductory sessions prior to commencement for each new cohort, rather than students relying on the website. It is also important that regulations allow space for the credit of 'mistakes' in one program to be credited in another.

2. **Support from family** *(Chapter 4 VET section)*: Perhaps the opportunity could be available in this session for family of mature age students to also attend, giving them an understanding of the requirements of study. Thus questions can be raised and addressed and additional information given as there is not always a good understanding of the courses, the general demands of studying or the time factor by family members, to successfully complete undergraduate study.

3. **Support and interest from the university needed when students withdrew** *(Chapter 4 VET section):* "*when I withdrew there was no consultation, no lecturers called to find out why I withdrew, you were just a number not a person.*" When students ask to withdraw, a phone call or a counseling letter could be sent saying they would be welcome to enroll again in the future and giving them an awareness of the sources of assistance available and the name of a person to contact. Also some contact (either a phone call or letter) to those who obtained a leave of absence from study asking if they need help with the remainder of the course. This would give students a positive feeling about the university and clear up any confusion (Tremaine, 1979), also see 'Reflective Thinking' chapter 4.

4. **Challenges and concerns that students face during their first year of study** (*Chapter 4*)**:** The University could consider implementing some changes. As Hemmings (1997) suggests, students without formal qualifications for example HSC equivalent could possibly be helped by the introduction of an updated quality course preparing them for tertiary study so they understand what to expect (particularly mature age students). Whilst introductory courses are available from the University (for example see information on 'Studylink' Chapter 4) such information needs to be easy to locate on the website and should be clearly identified in the Information Booklets for commencing students – a number of students identified this challenge and were not aware that such information existed. One of the students who commented on this issue suggested:

"A Prep course which identifies the problems would be good.*" (45 year old female VET student with no dependents).

5. **Distance students identify the need for more support** (*Chapter 4*)**:** Comments from students who withdrew from study:

> *"Lack of support in the course, for example online classes. Didn't know all the complexities of taking on a university course, it was not explained if there is any support for distance students."* (35 year male Commerce DE student, with no dependents).

> *"Needs to be actual face to face help such as video conferencing for example with referencing. Confusing just to read the book as everything is not there, more is needed. Adult learners need quick fix they do not have the time."* (45 year old VET student with no dependents)

Further use of DVDs could be considered or other teaching enhancing technology such as Skype, vodcasting and podcasting (available end 2009), screen capture or captivate which could be useful for all teaching, but particularly worthwhile for distance students thus helping to break down the feeling of isolation that some students feel, and assisting them to experience a more direct communication than just relying on the printed packages. Telephone (online) classes for one specific VET subject have recently been commenced, perhaps this could be expanded to cover a number of the VET subjects where this type of help is needed most.

Conclusion

The study gives information about the circumstances under which students do not complete their tertiary studies. Rather than being the result of academic weakness on the part of the student, the study suggests that non-completion is the result of a

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* As part of the School of Commerce's welcome to new students in the Bachelor of Business courses (both internal and distance), a first year student information booklet has now been prepared and is available from January 2009 for commencing students. This booklet should help clarify many issues outlined by students during their interviews, including relevant contact people when various problems occur. It has also been noted that the Faculty of Education will be presenting a two day Vocational Education and Training (VET) Orientation Workshop one weekend at the commencement of the 2009 Autumn Semester.

complex range of factors such as personal issues, time factor/workload, wrong course, financial and other factors. A study instigated by the Department of Employment, Education, Training and Youth Affairs (Promnitz and Germain, 1996) identified the ranked importance of factors as an influence on withdrawal from tertiary study. Factors given high importance ranking were similar to those identified in the current study, especially when combining personal, family and health into one item as in the current study.

It was also shown that many of the students who withdrew retained a strong commitment to tertiary education, as they believed they could successfully complete study and hoped to return to the university in the future. In actual fact, of the twenty two students who had withdrawn from study, thirteen indicated their intention to recommence study in the future and five were unsure (Table 4.11). To date (January 2009) five have already returned to study in a different course: two from Commerce distance, none from VET distance, and three (the total number who had withdrawn) from the Commerce on-campus group.

The research questions designed to determine the factors which may play a part in student withdrawal, solicited the following answers in this study:

1. **Why do students withdraw from their course, particularly in their first year of study?**

   Generally, students do not withdraw for one specific reason, but rather due to multiple reasons. Those specifically identified in the study are mainly personal issues (such as family, health), followed by the time factor (including unexpected workload), then the wrong course, financial problems and finally other issues (for example job loss) (Figure 4.1). Students with dependents tended to identify personal issues as the main reason for withdrawal.

2. **Are the reasons for student withdrawal based on institutional factors or personal factors? Or both?**

   From information identified within this study, student withdrawal is largely based on personal factors. However, there are also issues which the institution could address to assist students commencing study, such as providing a better

understanding of the workload involved, financial requirements and perhaps the institution having a payment system for fees (as not every students is supported by HECS), ensure lecturers are easy to understand, that content and number of assessments are relevant, and follow up with those students who have withdrawn or obtained leave of absence from study.

3. **What are the differences in withdrawal rate for distance study compared to on-campus study?**

Students studying by distance mode are more likely to withdraw from study as only 3.4% of on-campus students withdrew in this study (and each student later returned to study within a different faculty and course) compared to 7.7% of distance students. There would be a number of different reasons for this result: the most obvious would be that students studying by distance mode are generally mature age students with responsibilities (job/career and family). The lack of available interaction both socially and academically could also have an influence, even though the students interviewed did not identify this as a problem or challenge, as they understood how distance study operated before enrolling.

4. **What relevance if any, do the theories of motivation have?**

The study has identified that the theories of motivation do have an influence on students' study and in particular the reason for initially undertaking tertiary study. *Maslow*: Factors such as personal issues and finance (lower level needs) have been shown to have a major influence on whether students withdraw, which is consistent with Maslow's hierarchy of needs theory. Also reasons for undertaking study such as career opportunities and better job and pay relate to the higher level of needs or self-actualisation. These link to fulfillment of the lower level needs before addressing the high level needs.

Herzberg: The relationships here are with the main challenge identified by students as choice of course; whether studying by distance mode or on-campus; and what the university has to offer or student expectations being satisfied - as these can be either a 'satisfier' or 'dissatisfier' and influence the motivation to continue with study.

Motivation can sometimes make the difference between withdrawing or not – under the same set of circumstances for two different students, motivation can help students' persistence to complete the course.

Profile:

Information from this study suggests a profile of the student most likely to withdraw could be:

A female aged over 31 years of age, generally from an English speaking background either with or without dependents. The mode of entry to study was either HSC results or as a mature age student but there was most likely no previous tertiary study; however the decision to study was motivated by a desire to further career prospects. The mode of study (whether part time or full time) showed that all distance students who had withdrawn only studied part time (working full time), and two of the three on-campus students who had withdrawn studied full time but did not work. The student felt quite well prepared for study on commencement, though on reflection the understanding of the subject, the workload, and the demands of study was only marginal to satisfactory, however the understanding of the assessments and their requirements was satisfactory. The student experienced a number of challenges for example workload, financial problems, but the main reason for withdrawal was personal issues or possibly time factors depending on the student cohort. At this stage the intention is to resume study at a later date (see Table 6.1 for further explanation).

Table 6.1: Profile of student most likely to withdraw

Student background	Pre-university information	University experience	Future intentions
Female 31 years or over	HSC or mature age entry (only means identified in responses)	Understanding of assessments was satisfactory	Resume study at a later date
Dependents 0 – 2	No previous study	Challenges – workload and financial	
Married	Felt prepared for study	Withdrew in first 6 months	
English speaking	Felt understood demands of study	Reason for withdrawal – personal issues or time factor	

When comparing these findings of undergraduate students with the discontinuing student profile offered by Burgess and Sharma (1999) in a study also undertaken in an Australian university, the result was:

> The discontinuing student is most likely to be an older student with dependent children, and either a part-time or external student. They would most likely be married and have the majority of financial responsibility (Refer to Table 6.2 below).

Table 6.2: Discontinuing student profile

Discontinuing Student Profile
More older students
More likely to have dependent children
Had the majority or greater amounts of financial responsibility
More likely to be married
More likely to be part-time or external students

Source: Burgess and Sharma (1999)

It is clear there are similarities between these two studies. For example four of the five items identified in the study conducted by Burgess and Sharma, were also identified in the current study.

Two examples of the profile put forward can be found from those interviewed who had withdrawn from the Commerce distance and VET distance courses:

> *Commerce distance*:
>
> 'M' is a 56 year old female who is married with two dependents and works full time. Her motivation for commencing tertiary study was to assist career opportunities, and she gained entry to university through her previous work experience. 'M' felt she was prepared for study, and had a satisfactory understanding of the subject, the assessment items, and workload as well as the demands on her homelife and family. However the expectations she had of tertiary study were not met (though she was reluctant to say more specifically what the problems were) and the workload was much greater than anticipated. She experienced satisfactory levels of academic interaction but not social interaction though she did not anticipate interaction socially as this was distance study. 'M' decided to withdraw within the first 3 or 4 months,

and her reasons were lack of time due to family and commitments, and 'other' but she would not elaborate on what other was; there were also difficulties experienced with the lecturer for the subject. She is interested in recommencing study at a later date, comments she made which may help the university to improve the program, were:

'The university needs to use competent lecturers, especially for a first year subject such as MGT100'.

VET distance:

'H' is a 46 year old female who is married with two dependents and works full time. Her motivation for commencing tertiary study was to assist career opportunities, and she gained entry to university as a mature age student who is over 31 years of age. 'H' felt she was prepared for study, and had a good understanding of the subject, the assessment items, and the demands on her homelife and family. She also liked studying by distance mode. She did not experience satisfactory levels of academic interaction or social interaction though she did not anticipate anything different as this was distance study. 'H' decided to withdraw within the first six months, for personal reasons due to family issues and also lack of time. She is also interested in recommencing tertiary study in the future.

Whilst these examples from Commerce and VET distance cohorts support the findings of the student most likely to withdraw, the result is different for the Commerce on-campus students. It must be remembered that these are a different group of students, they are young and in most cases have just completed their schooling, with support from family, and less responsibilities than the older distance students have.

There seems to be a significant change taking place in the relationship between universities and their student groups; this is particularly noticeable in the new relationship between tertiary study and work, the increasing market-like focus of institutions and the new expectations and priorities of the actual students. From the research conducted here student expectations do seem to be changing, for example

only 45 out of 264 respondents did not work whilst studying and these were almost exclusively the younger on-campus students who had just finished school.

Most of those interviewed who had withdrawn from study worked full-time and this includes on-campus students, which results in the declining willingness of many students to take part in university life to any great degree (James, 2001), although two of the three on-campus students who withdrew during this project did not work. The understanding students had of the workload and the demands of study were quite diverse. At the lower end of the scale there were some students who were only prepared to contribute 1-2 hours per week whereas for others the hours ranged between 10 and 14, with one student allocating 20 hours per week (the University recommends approximately 10 hours per week). These results indicate that there were a number of students who were not adequately prepared for the demands of tertiary study.

This study has shown the need is not to just prevent or reduce withdrawals but importantly, to give students the background information needed to enable them to make appropriate choices and cope with various situations which can arise. The findings agree with Christie et al., (2004) that further attention should be given to the relationship between information, methods of providing information, those providing this information, and the decision-making processes. Also as Hemmings, Boylan, Hill and Kay (1996) suggest, counsellors need to have an understanding of how various factors impact on different kinds of students, for example overseas students, those from isolated rural backgrounds and mature age students.

Studies conducted of Australian first year students show that the initial experiences are important (McInnes, James and Hartley, 2000), and they can also influence students' persistence in tertiary education. However the issue of the experience of first year undergraduate students is ongoing. Whilst adjustments and changes might be made to meet the needs and expectations of current university students, these needs and expectations are also continually changing so that we will never get the first year experience right. We need to continually monitor how our students are experiencing first year programs and continue to change and develop these programs (Pitkethly and Prosser, 2001) to follow the trend.

One important finding from this study has been: if students must undertake study as a requirement of their continued employment (such as TAFE teachers), it is extremely unlikely that they would withdraw from this study – in fact none of the cohort researched in this study withdrew.

Finally, student withdrawal is a complicated issue involving a number of factors, and cannot be specifically related to either pre-university or post-admission issues, rather it can be a combination of both. However research suggests many of the problems that students' experience can be resolved or at least reduced, given the right kind of intervention, guidance, support and courtesy from the university.

In summary, the evidence presented here provides some useful findings about why undergraduate students do not complete their degree, although indicating that there is further opportunity for additional study with a different focus. The study has shown that similar factors impact adversely on both distance mode and on-campus students. It has also shown that many continuing students have faced similar problems to those who ultimately withdraw.

Limitations of the study and Future Research

When considering the results it is important to understand that this study is not without its limitations. According to Tobin and Fraser (1998) any methodology used to explore learning environments will produce a landscape that is incomplete and represents only one of the possible portraits which is likely to be relevant to different stakeholders. In this study, due to the required size of the paper research was limited in its scope, focusing on two faculties within a regional university in Australia rather than a wider study covering each faculty in the university or perhaps comparing other universities.

Other gaps have been shown in the research, for example we need to understand what makes the same pressures bearable for one student but not for another (Christie et al., 2004). This is especially relevant at a time when rising fees and increases in the cost of living are likely to increase and place yet further pressures on students. Also, persistence and resilience could be an interesting area to consider in future research.

Future research could involve a longitudinal study, consisting of a formal survey of workload expectations to further explore the anticipated workload issue raised in this study.

Review of Australian Higher Education

The Hon Julia Gillard MP, Deputy Prime Minister and Minister for Education released the final report of the Bradley Review of Australian Higher Education on 17th December 2008. This report will have far-reaching implications for universities and particularly regional institutions such as Charles Sturt University.

Among other recommendations the Review Panel called on the Government to set new targets for participation by regional and remote students in higher education. It recommended an increase in the number of Australians who hold a bachelor degree or above to 40% of 25 to 34 year olds, and to raise the number of students from low socio-economic groups to 20% of undergraduate enrolments including increased financial support; and to also increase public investment in teaching and learning. The Review also proposed a new national quality and regulation framework for higher education be established and universities would be accredited (Bradley, 2008).

The recommendation of the Review further strengthens the urgent need to better understand reasons for students withdrawing from tertiary study and measures which may be taken to help reduce student attrition.

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CHARLES STURT
U N I V E R S I T Y

INFORMATION SHEET - QUESTIONNAIRE

Project Title:	**Undergraduate student retention: Key influences**

Project Manager: Dawn Edwards
School of Commerce
Charles Sturt University
PO Box 588
Wagga Wagga   NSW   2678
(02) 6933 2974   dedwards@csu.edu.au

Principal Supervisor: Dr Peter Rushbrook
School of Commerce
(02) 69332564   prushbrook@csu.edu.au

My name is Dawn Edwards and I am completing a Doctor of Education degree (Course Code 8051) which involves writing a thesis for which I have chosen the title *'Undergraduate student retention: Key influences'*.

I am now attaching a **survey questionnaire** which I would appreciate you completing as quickly as possible, then return the survey form in the enclosed self-addressed envelope.

As mentioned previously, your responses to this questionnaire are very important as they will help identify the key influences affecting the academic success rates of undergraduate students within two faculties at Charles Sturt University.

The results of this study will be particularly useful for developing a profile of the student 'most likely to succeed' in their first year of undergraduate study (eg. key characteristics/factors influencing success), and assist the University to design courses which increase the chance of student success, and perhaps give other forms of assistance to students. The theory of motivation will also be examined in conjunction with non-academic issues such as finance, work, family, commitment and the part the institution can play. The first step of the study was to review what relevant academic literature has to say; the study now needs to move on to conduct surveys from undergraduate students.

Surveys should be anonymous and contain no identifying name etc; they will be stored securely and separately and treated confidentially by Dawn Edwards, the Principal Researcher; her contact details are (02) 6933 2074 or dedwards@csu.edu.au. Your completion of this survey will indicate your willingness to take part in this research.

This project has also been approved by Charles Sturt University's Ethics in Human Research Committee. If you have any complaints about the ethical conduct of this project, you may contact the Committee through:

The Executive Officer
Ethics in Human Research Committee
The Grange
Charles Sturt University   Phone: (02) 6338 4187
BATHURST NSW 2795   Fax: (02) 6338 4833

I appreciate your help by completing the survey form which is attached.

Dawn Edwards

Dawn Edwards

CHARLES STURT
U N I V E R S I T Y

STUDENT QUESTIONNAIRE

Project Title: Undergraduate student retention: Key influences

An Information Sheet has been attached to this Questionnaire outlining the research I am currently undertaking as part of my Doctor of Education Course, and your help was sought by completing a Student Questionnaire. I would now appreciate your completing this Questionnaire, and returning this completed form within the next 7 days in the enclosed self addressed envelope. Your responses to this questionnaire will help identify the key influences affecting the academic success rates of undergraduate students within two faculties at Charles Sturt University.

STUDENT INFORMATION

(Please tick the box which most closely applies)

1.   **Age:**
- ❑   Are you aged between 16-20 years?
- ❑   21 – 30
- ❑   31 and older?

2.   ❑ **Male?**   ❑ **Female?**

3.   **Marital status:**
- ❑   Married   ❑   Single
- ❑   Divorced   ❑   Widow

4.   **No of Dependents**:

❑

1.   **Background: Are you -**
- ❑   Australian
- ❑   From a non-English speaking background
- ❑   Aboriginal or Torres Strait Islander
- ❑   Other _____

6.   **Do you need to work to help support your study ?**   ❑ Yes   ❑ No

- ❑   Part- time
- ❑   Full-time

7.   Have you had previous workplace experience?
- ❑   Yes
- ❑   No

How many years?   _____

8.   Have you completed previous tertiary study?
- ❑   Yes
- ❑   No

9.   Do you study
- ❑   full-time or
- ❑   part-time?

COURSE INFORMATION

10.   What specific Course are you studying? _____

11.   Are both On-campus & Distance modes of delivery for your Course?
- ❑   Yes
- ❑   No

12.   What was your choice?
- ❑   On-campus
- ❑   Distance Education

13.   Do you study :
- ❑   Full time
- ❑   Part time

14.   What was the mode of entry to the course?
- ❑   Scholastic results (eg. HSC, previous study)
- ❑   Previous experience in the workplace
- ❑   Special consideration (eg. equity group)

15. **What influenced you to study at University? IDENTIFY IN ORDER OF PREFERENCE ie 1** (most important**) to 7** (least important).

_____ Career goal
_____ Independence from home
_____ Future good job/money
_____ Prestige
_____ Family influence
_____ Other: _____

16. **When you commenced study at University, you had certain expectations about university and university life. What were some of these?**

❑ High achievement academically
❑ Good social life
❑ Quality University services
❑ Other: _____

17. **Please indicate the extent to which you believe these expectations have been met?**

1	2	3	4	5
Very Strongly Agree	Strongly Agree	Agree	Disagree	Strongly Disagree

Tick the box which most closely relates to your experience

18. **What sort of challenges have you experienced at university so far?**

❑ Heavy workload   ❑ Financial (need to work)
❑ Social experiences   ❑ Wrong choice of course
❑ Expectations not met   ❑ Other _____
(specify)

19. **Did you find your University experience to be what you expected?**

❑ Yes
❑ No   *If NO – why not?*

Explain the difference

_____

_____

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20.   **Have you experienced social integration (take part in activities/fitted in) at University?**

    ❑   Yes
    ❑   No

21.   **Did you experience integration academically ?**

    ❑   Yes
    ❑   No

CONTINUING STUDY

22.   **Are you currently enrolled at Charles Sturt University?**

    ❑   Yes
    ❑   No

23.   **Do you intend to continue studying at CSU?**

    ❑   Yes
    ❑   No

24.   **If __NO__ – what prompted your decision to discontinue studying?**

    ❑   Finance
    ❑   Family
    ❑   Employment opportunity
    ❑   Dissatisfaction
    ❑   Other: _____ (explain)

CHARLES STURT
U N I V E R S I T Y

INTRODUCTORY LETTER - INTERVIEWS

As part of my Doctor of Education degree (Course Code 8051,) I am writing a thesis titled 'Undergraduate student retention: Key influences', I believe you have probably received information about this already.

However as the final part of this research I will be interviewing students who have withdrawn from the course over the last 12 months, to gain a better understanding of the challenges and difficulties students face, including the main reason/s they decided to withdraw from study.

An opportunity to include an interview with you would be highly valued.

I would like to include your comments and am attaching a brief list of the type of questions to be followed up in the interview for your information. I will contact you at your home/after hours phone number within the next four weeks to conduct this phone interview of about 5 minutes' duration. If there is a problem and you do not wish to take part in this please let me know by return – probably email is the quickest method.

Remember your participation is important as it will help identify the key influences affecting the academic success rates of undergraduate students within two faculties at Charles Sturt University.

The information gathered will remain anonymous and contain no identifying name etc; they will be stored securely and separately and treated confidentially by Dawn Edwards, the Principal Researcher; her contact details are (02) 6933 2074 or dedwards@csu.edu.au*. Your completion of this survey will indicate your willingness to take part in this research.*

This project has also been approved by Charles Sturt University's Ethics in Human Research Committee. If you have any complaints about the ethical conduct of this project, you may contact the Committee through:

The Executive Officer
Ethics in Human Research Committee
The Grange
Charles Sturt University   Phone: (02) 6338 4187
BATHURST NSW 2795   Fax: (02) 6338 4833

I appreciate your help by agreeing to take part in this phone interview.

Dawn Edwards

Dawn Edwards

Project Manager: **Dawn Edwards** School of Commerce Charles Sturt University PO Box 588 Wagga Wagga NSW 2678 (02) 6933 2974 **dedwards@csu.edu.au**	Principal Supervisor: Dr Peter Rushbrook School of Commerce (02) 69332564 prushbrook@csu.edu.au

CHARLES STURT
U N I V E R S I T Y

PROJECT INFORMATION

'Successful undergraduate study: key influences'

The information gathered for this research will remain anonymous and contain no identifying name etc; it will be stored securely and separately and treated confidentially by Dawn Edwards, the Principal Researcher; her contact details are (02) 6933 2074 or dedwards@csu.edu.au. Your completion of this survey will indicate your willingness to take part in this research.

This project has also been approved by Charles Sturt University's Ethics in Human Research Committee. If you have any complaints about the ethical conduct of this project, you may contact the Committee through the Executive Officer:

The Executive Officer
Ethics in Human Research Committee
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Charles Sturt University   Phone: (02) 6338 4187
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Project Manager: **Dawn Edwards** School of Commerce Charles Sturt University PO Box 588 Wagga Wagga NSW 2678 (02) 6933 2974 **dedwards@csu.edu.au**	Principal Supervisor: Dr Peter Rushbrook School of Education (02) 69332564 prushbrook@csu.edu.au

CHARLES STURT
U N I V E R S I T Y

SAMPLE STUDENT INTERVIEWS

Student Name: _____

Location:_____

STUDENT INFORMATION

1. **Do you have dependents?** (eg. children, caring for aged parents etc)
❑ No ❑ Yes – If yes:

No. of Dependents: ❑

2. **Background information:**
❑ English *is* the main language spoken at home
❑ English *is not* the main language spoken at home

3. **Are you currently working?**
❑ No
❑ Yes - if yes, do you work: Number of hours per week?
What type of work?
o Full-time
o Part-time

4. **Your understanding of the content of the COURSE/SUBJECT before you commenced study was:**

Very Good 1	Good 2	Satisfactory 3	Marginal 4	Unsatisfactory 5

Where did the advice come from?

Role of school/parents?

Do you feel you were adequately prepared for tertiary study? (eg. writing ability, spelling)

Each subject is designed with a minimum workload involved in total and for specific assessments in mind.   10/40 hr per week – 4 subjects

5. **What hours do you feel you put in to study for this subject – also for each assessment you completed.**

6. **Your understanding of the WORKLOAD needed to pass this subject, was:**

Very Good 1	Good 2	Satisfactory 3	Marginal 4	Unsatisfactory 5

7. **Your understanding of how this would fit in with other demands (such as the need to work and social activities), was:**

Very Good 1	Good 2	Satisfactory 3	Marginal 4	Unsatisfactory 5

8. **Your understanding of the requirements for the ASSESSMENTS for this subject was:**

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Very Good 1	Good 2	Satisfactory 3	Marginal 4	Unsatisfactory 5

YOUR EXPERIENCE

9.   When was your decision to discontinue study at CSU made:

1 Shortly after Commencing study	2 By the 1st Assignment	3 Other – Specify _____

10.   The reason why you decided to discontinue study was:

☐ Personal (eg. family, illness, lack of time)

☐ Financial (eg. need to work to support study)

☐ Lost interest in the course

☐ Other reasons eg. Problems with assignments
Interpersonal conflict

_____

YOUR FUTURE INTENTIONS

11. What is your intention in regard to YOUR study in the future?

Continue study at CSU	Study at another University? … Which one?	Unsure at this stage	No further study intended

12. Is t   ur   o   or
Ed   o   cl   ed   at
the University?

_____

eg. – structure of teaching

- staffing (easily understood)

- groups with mainly older/younger people

- grouped with overseas students (or different cultures)

13. **Do you have any final comments that will help improve the Subject or the Course?**

_____

CHARLES STURT
U N I V E R S I T Y

OFFICE OF ACADEMIC GOVERNANCE

3 August 2007

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Panorama Avenue | Fax: +61 2 6338 4194
Bathurst NSW 2795 | www.csu.edu.au
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Ms Dawn Edwards
School of Commerce
WAGGA CAMPUS

Dear Ms Edwards,

Thank you for the additional information forwarded in response to a request from the Ethics in Human Research Committee.

The Committee has now approved your proposal entitled *"Successful undergraduate study: Key influences"* for a twelve month period beginning 3/08/07. The protocol number issued with respect to the project is **2007/199**. Please be sure to quote this number when responding to any request made by the Committee.

You must notify the Committee immediately should your research differ in any way from that proposed.

You are also required to complete a Progress Report form, which can be downloaded from **www.csu.edu.au/research/forms/ehrc_annrep.doc**, and return it on completion of your research or by 3/08/2008 if your research has not been completed by that date.

Please don't hesitate to contact the Executive Officer telephone (02) 6338 4628 or email ethics@csu.edu.au if you have any enquiries about this matter.

Yours sincerely,

Julie Hicks
Executive Officer
Ethics in Human Research Committee

Cc Dr Peter Rushbrook

www.csu.edu.au

The Commonwealth Register of Institutions and Courses for Overseas Students (CRICOS) Provider Numbers for Charles Sturt University are 00005F (NSW), 01947G (VIC) and 02960B (ACT).