HIGH SCHOOL STUDENTS' EXPERIENCES IN AN EARLY ENTRY TO UNIVERSITY COURSE AT AN AUSTRALIAN REGIONAL UNIVERSITY

A Thesis submitted by

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ABSTRACT

In most health systems, nurses serve as the "front line" workforce. A decrease in the nursing workforce jeopardises efficient and effective healthcare systems. Poor patient outcomes may arise from this shortage, emphasising the importance of maintaining a strong nursing workforce. Recruiting students to higher education is an important process for all universities and is a significant strategy for increasing the number of qualified Registered Nurses to contribute to health care delivery. Australian universities are experiencing difficulties of their own with a decrease in retention and increase in attrition. Improving the transition experience, reducing attrition, and increasing graduation rates is fundamental to contribute to the future nursing workforce. The purpose of this study was to explore the experiences and perceptions of high school students in a nursing related early entry to university subject. This was aimed to better understand influencing factors and consequently use this understanding to inform the development of strategies that might best support transition to and retention in higher education. This study was guided by Tinto's Student Integration Model. Six participants were recruited from a large regional university in Australia. Data from semi-structured interviews were analysed using a qualitative descriptive and reflexive thematic analysis approach, in accordance with Braun and Clarke's six phases. Four main themes were generated: (1) making adjustments, (2) getting a taste of university, (3) discovering self and (4) empowering independence. The key themes hold an important

relationship with ensuring high school students are prepared and have a smooth transition to higher education, promoting retention in tertiary education, degree completion and a contribution to our declining nursing workforce.

CERTIFICATION OF THESIS

I, Jessica Elliott, declare that the Master's Thesis, entitled *High School Students' Experiences in an Early Entry To University Course at an Australian Regional University*, is not more than 40,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references, and footnotes. The thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Date: 27.01.2023

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CHAPTER 1: INTRODUCTION

1.1 Introduction

Due to their engagement in the various facets of illness prevention, provision of primary healthcare, treatment, and rehabilitation, registered nurses represent a crucial component in healthcare systems. All educational programs that equipped registered nurses for entry into practice were moved from the healthcare industry to higher education throughout the middle of the 1970s to the beginning of the 1990s (Daly et al., 2000). As a result, academic institutions have been providing nursing education; as a result, students must engage in the Bachelor of Nursing programme in order to receive a degree (Middleton et al., 2021). Completing a bachelor's degree (in nursing) involves a minimum of three years of full-time study (Australian Government, 2022e) with university pedagogy geared towards deep learning with a theoretical orientation that encourages critical thinking, reflection and action (Northall et al., 2016).

Whilst a degree is needed to become a registered nurse, there are multiple entry pathways into higher education when career aspirations are to become a Registered Nurse in Australia. These entry pathways can commence from as early as high school, through undertaking a specific nursing related early entry to university course. According to Australian statistics, there is an estimated 10–40% attrition rate for nursing degrees (Middleton et al., 2021). Given the predicted scarcity of nurses in the labour market nationwide, this is especially crucial. In general, projected shortages are fuelled by a decrease in retention and increase in attrition

within the nursing higher education program, an ageing workforce and an aging population (Canzan et al., 2022; Huntington et al., 2012; Middleton et al., 2021; World Health Organization, 2020).

There is a growing burden being placed on the healthcare system due to an ageing population and associated comorbidities and the need for a dynamic workforce supported by nurses working within a seven day a week, 24-hour capacity. Over the next four years, the Australian population is predicted to increase by approximately 2% annually, nearly doubling by 2066 (Australian Bureau of Statistics, 2018). A nursing shortage reduces the effectiveness of any health care system because nurses are the "front line" employees in the majority of comprehensive health systems (Australian Government, 2014). The projected shortfall of nurses in Australia is approximately 85000 nurses by 2025 (Health Workforce, 2014), with more recent statistics collected from the World Health Organization identifying a shortfall of more than 100,000 nurses by 2025, and 123,000 by 2030 (World Health Organization, 2020). A maintainable nursing workforce is necessary for a sustainable health care system to give optimal health care, as nurses make up most of the health workforce (AIHW, 2020). Poor patient outcomes may arise from this shortage, underscoring the importance of maintaining a strong nursing workforce (Tower et al., 2015). These problems demand multi-faceted solutions, and public officials are required to develop various strategies to address the situation. New nursing graduates are one workforce supply stream.

Increasing the number of graduate nurses depends on successful recruitment of potential students at the front end and successful degree completion at the back end. However, Australian universities are experiencing difficulties of their own with a decrease in retention and increase in attrition in first year nursing students (Canzan et al., 2022). Regardless of the entry pathways into tertiary studies, part of the solution to overcome poor retention and attrition rates is the successful transition and positive first year experience of university. What is less known, is how from the potential student's perspective, these multiple entry to university pathways and other factors might influence decisions to attend university for high school students in an early entry to university pathway. The purpose of this study was to explore and understand the experiences and perceptions of high school students in a nursing related early entry to university course to better understand the influencing factors, and consequently use this understanding to inform the development of strategies that might best support transition to and retention in higher education.

The current coronavirus 19 (COVID-19) pandemic has had significant impacts on research and recruitment (Abdulhussein et al., 2022). Lockdowns during the pandemic and the mandatory closure of schools and universities has resulted in direct effects. It must be acknowledged that this research was conducted during the global COVID-19 pandemic. The ability to achieve milestones for this research, was impacted in relation to data collection being delayed and decreased

recruitment of participants. Whilst Abdulhussein et al., (2022) argues that in research it is important that the sample size is representative of the target population, it was also acknowledged that lower response rates to research was known with research conducted during the COVID-19 pandemic. This could be a major reason for the low participant numbers recruited for this research.

1.2 Researcher's Relationship to Topic

I consider myself a novice researcher with a three-year full-time capacity history in academia, however an experienced nurse with twenty years' experience. It is for this reason that I was guided by my supervisor's experience and expertise. This area of research interested me based on hallway conversations with my colleagues. Little was known about this cohort pathway into the university, and furthermore, academics were at times unaware of whether these students were enrolled in their class. I thought that this student cohort was underrepresented and thought that more could be done to understand their experiences.

It must be stated that this research journey has resulted in many learnings. For example, the methodological approach to this research was reconsidered after first analysis of the data. Original planning of this research was to take a hermeneutic phenomenological approach, however after data had been analysed, a description of the influencing factors

based on the participants perspectives was provided. After review of feedback from experts in the area (three examiners) and further discussion with my two supervisors, it was determined that the data was better suited to a qualitative description approach and was more appropriate to address the research questions. Colorafi and Evans (2016) alluded that the use of qualitative description is frequently encouraged in master's level higher education as it allows the novice researcher to explore the research topic and allow for the relationship between the research question and direct findings be made.

1.1.1. The higher education landscape in Australia

Otherwise known as tertiary education, higher education in Australia includes all formal education beyond high school. Universities are multifaceted, multiproduct corporations and represent large sectors of national economies, providing significant value to economic output and national income (Deloitte, 2015). Additionally, the higher education sector provides job opportunities for local communities directly through their operations, and indirectly through the students and researchers that they attract to their local regions (Szuwarzyski, 2022). The university sector is also a major contributor to export income by attracting students from abroad (Szuwarzyski, 2022). International students in Australia contributed a total of AUD$25.5 billion to the Australian economy in 2022 (Universities Australia, 2023). Additionally, according to the Australia Bureau of Statistics, in 2019-2020, the international student cohort

studying at an Australian university contributed AUD$37 billion to the Australian economy (Ferguson & Spinks, 2021). Important to note, a significant feature of the higher education landscape in Australia is the large proportion of international students, representing approximately 25% of all students enrolled at Australian universities (Australian Government, 2018). These students are not eligible for Australian government funding towards their higher education and can only apply for financial assistance through scholarships. As part of the National Workforce Strategy Framework, the National Skills Commission projects 52.6% of employment growth to November 2026 to be in occupations requiring at least a university degree (Australian Government, 2022c). A study conducted by the Regional Universities Network (2013) revealed the pivotal role played by regional universities in the economic, social, and cultural development of the regions they serve around Australia. Regional universities provide jobs, collaborate with local industry to innovate, fill gaps in regional health care and provide pathways to expand access to higher education for students from a low socioeconomic background and for First Nations students (Regional Universities Network, 2013).

The Australian education system is notable from numerous other countries by the Australian Qualifications Framework (AQF). In 1995 the AQF was established and is a national policy that covers qualifications from the higher education sector (Australian Government, 2022e).

University-level qualifications are considered the highest level of the AQF in Australia and can lead to a Bachelor (AQF Level 7), Masters (AQF Level 9) and Doctoral degree (AQF Level 10) (Australian Government, 2022d, 2022e). Universities are registered by the Tertiary Education Quality and Standards Agency (TEQSA) (Australian Government, 2022e). TEQSA was established by the Australian government to regulate and monitor university higher education against a set of standards designed by an independent higher education standards panel (Australian Government, 2022e). Australia has 43 universities (38 public, three private and two foreign universities (Szuwarzyski, 2022), six of which were placed in the top 100 of the Times Higher Education World University Rankings for 2021 (Australian Government, 2022e; Jocelyn et al., 2021). According to the 2021 census data, almost 1.6 million students chose to study at one of Australia's universities (Australian Bureau of Statistics, 2022a).

The funding system of Australian public universities has changed over the past few decades. Initially, it was a supply-driven system where the government set the number of undergraduate students in total and at each university, and funding was provided through block grants (Norton, 2020; Szuwarzyski, 2022). However, individual universities decided which courses to offer and how many students to enrol (Norton, 2020). When the demand-driven financing system was fully introduced in 2012, universities had an unlimited number of undergraduate places for which they received funding (Norton, 2020). However, from 2017 onwards, a

withdrawal from the demand-driven system and a return to the supply-driven system were observed (Norton, 2020). This change was intended to lower government spending, assuming that the subsidy in the following years would be commensurate at the level in 2017 (Norton, 2020; Szuwarzyski, 2022). Norton (2020) concludes that demand-driven funding was the policy trigger for rapid enrolment increases in Australia between 2009 and 2014. University fees are subsidised for Commonwealth-supported positions through several Australian government funding programs. The Australian government provides funding to Australian universities through the Commonwealth Grant Scheme (CGS), the Higher Education Support Act (2003) [HESA, 2003] and through the Higher Education Loan Program (HELP) (previously called the Higher Education Contribution Scheme (HECS) (Universities Australia, 2022a).

The Australian university system follows various academic calendars including semesters, blocks, and trimesters. The university in which the research was conducted in uses the semester teaching period. Semester one often starts each year in late February / early March with the teaching semester on offer finishing in late May / early June. This is then preceded by a few weeks of examinations and then semester recess. Semester two commences in July with teaching continuing until late October until another formal examination period before recess (Irving, 2021). Not all Australian universities offer a semester three (summer

semester), and if offered it is delivered often during November until February the following year with recess during the Christmas and New Year holiday period (Irving, 2021). Students study in a full-time or part-time capacity. While many students study full-time on campus, others balance a part-time load with family or work responsibilities, and many combine on campus and online study for maximum flexibility (Australian Government, 2022e). Depending on the university there is certain terminology that are used interchangeably to reflect a similar meaning. One set of terms often mistakenly used interchangeability include 'program' and 'course'. The use of the terminology 'program' refers to the award (degree) that the student is working towards, and the terminology 'course' is the syllabus being offered (Australian Government, 2022e). This description outlines how this terminology has been used for this study. Additionally, of particular importance terminology includes the terms unit, subject, and course, of which all refer to a component of the program that covers one subject area in detail (the syllabus) (Australian Government, 2022e). Courses generally comprise of lecturers, tutorials, residential school/laboratory teaching sessions, along with assessments and examinations (Australian Government, 2022e). It must be acknowledged that the use of these terminologies is not consistent across all education institutions, therefore for the purpose of this study, the term "subject" will refer to the unit / subject / course that is being undertaken.

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According to the Australian Bureau of Statistics (2022b), in 2022 2.1 million people aged 15-74 years were studying for a non-high school qualification including a certificate or diploma at technical and further education (TAFE) (61%) or a degree at university (39%). Another noticeable difference of students is a growing trend for older students to engage with study. In 2022, around 49% of people studying for a non-school qualification were aged 15-24 years (Australian Bureau of Statistics, 2022b). This compares with 52% of all students a decade earlier in 2012, and 54% of all students in 2002 (Australian Bureau of Statistics, 2022b). The field of study was varied with 22% studying for a qualification in the field of society and culture (15% of male students and 28% of female students), 18% were studying management and commerce (19% of male students and 18% of female students), 17% were studying health (11% of male students and 22% of female students) and 11% were studying engineering and related technologies (20% of male students and 3% of female students) (Australian Bureau of Statistics, 2022b). Statistics specifically focusing on students studying in science, technology, engineering and mathematic (STEM) related studies include a total of 442,000 students in 2022 with almost three-quarters (73%) of current STEM students men (Australian Bureau of Statistics, 2022b).

1.1.2. Student recruitment and retention

Recruiting students to higher education is an important process for all universities. Student recruitment can be defined as the process of searching for prospective students and encouraging them to apply for the educational programs of the institution (Awudu et al., 2019). Students are the key to the success of a university; without students, government funding would not occur (Universities Australia, 2022a). One of the most effective recruiting practices and strategies employed by universities targeting future students includes decreasing Australian Tertiary Admission Rank (ATAR) acceptance cut-offs, increasing on campus activities, providing engaging orientation programs and targeted marketing, as well as fostering close collaborations with high schools (Awudu et al., 2019). Just as important as recruiting students is to retain the students throughout the duration of their studies.

Universities all face the challenge of student attrition, with this rate significant to university success and their efficiency. Definitions of attrition can vary widely. One definition of attrition has been defined as the measure of the proportion of students withdrawing from higher education systems (Adusei-Asante & Doh, 2016). More specifically, TEQSA defines attrition as 'the ratio of first-year higher education commencing students in a year who neither completed nor returned to study in the following year, to the total commencing students in that year' (Australian Government, 2017b, p. 8). Additionally, the Australian Government (Australian Government, 2017b) measures attrition through a quantitative

calculation. Student attrition is identified by TEQSA as a major risk factor for higher education providers (Australian Government, 2017b). Universities receive government funding based, in part, on retention and graduation rates (Universities Australia, 2022a). In Australian universities, student attrition costs more than AUD$1.4 billion a year (Szuwarzyski, 2022).

Attrition rates in undergraduate programs fluctuate. Attrition rates within higher education can be influenced by several factors including financial difficulties, stress and other health related concerns, the studying workload demands, incorrect institutional selectivity or wrong choice of program and juggling work/life balance (Adusei-Asante & Doh, 2016; Szuwarzyski, 2022). These factors can be influenced by how prepared students are for study (Australian Government, 2020). According to Universities Australia (2022a), the average attrition rate in Australian undergraduate programs is approximately 14%. Research has indicated that attrition rates can be variable depending on the program in which the student is enrolled (Australian Government, 2017a). For example, attrition levels of undergraduate engineering (and related technology) in Australia was 10% (Australian Council of Engineering Deans, 2020), law students were 14% (Australian Government, 2017b), business students were 12% (Australian Government, 2017b), with information technology students attrition rates the highest at 15-20% (Australian Government, 2017b).

In the Australian context, attrition rates in nursing degrees are estimated to be approximately 10-40% (Middleton et al., 2021). In contrast to this, international attrition rates in nursing degrees vary from 33% attrition in Italy (Canzan et al., 2022), 25% in the United Kingdom (Mulholland et al., 2008) and 33% in the United States of America (Van Mulligen, 2022). Retention rates for the Bachelor of Nursing at a large regional University in Queensland are around 81% (USQ, 2021a). If recruitment and retention rates do not meet the number leaving the workforce, nursing shortages are likely to rise (Huntington et al., 2012; Middleton et al., 2021).

1.1.3. Transition and pathways to university education

Transition to higher education is challenging. Transition into higher education can be defined as the internal process occurring when students move to the unfamiliar while adjusting to higher education (Perry & Allard, 2003). Age, personal beliefs, life experience, and stage of life are all significant differences between high school graduates and mature age students in terms of what drives them to study (Swain & Hammond, 2011). A student over the age of 21 is frequently regarded as a mature-aged learner (Open Universities Australia, 2022). If a student entered higher education after completing their senior year of high school but not immediately after, they are referred to as a mature aged student (Open Universities Australia, 2022). Research in this area has shown that mature age students are influenced by a variety of motivations, including

self-transformation and unrealised potential, validating prior knowledge and experience with institutionalised credentials, individual interest, and changing their life's course (Askham, 2008; Fredman, 2014; Reay et al., 2013; Willans & Seary, 2011). Although these motives have been classified as intrinsic (such as a personal interest in a topic) or extrinsic (related to the utilitarian value of a work, such as getting a better job), research has shown that these have a significant correlation when pursuing academic pursuits (Fredman, 2014). Therefore, these connected reasons for wanting to pursue a higher education are crucial for mature students.

The transition for many students from high school to higher education is difficult, as students are encultured to new academic obligations to which they must adapt. More specifically, transition defines students who have experienced a significant change in their social or learning environment such as attending higher education (van Herpen et al., 2019). The transition from school to university is widely recognised as a significant stage towards more independence, and personal and academic autonomy (Thompson et al., 2021). Transition in this context, can be described as the movement from high school education into university education (van Herpen et al., 2019).

Prior educational and life experiences (Ozga & Sukhnandan, 2002), expectations of higher education, and readiness all influence how students react to the many changes associated with higher education, such as new learning environments, altered finances, social changes, and academic

changes (Cheng et al., 2015; Lowe & Cook, 2003). All of these could pose difficulties for both institutions and students (Dove, 2017). A successful transition from high school to university includes the capacity to overcome academic obstacles like managing a heavy workload or acquiring new academic abilities (Dove, 2017; Thompson et al., 2021). Students are less likely to continue in higher education if this transition is not successful (Thompson et al., 2021). As a result, transition and how it is handled are crucial to both the student and the university (Dove, 2017; Thompson et al., 2021).

There are multiple pathways to university entry. For domestic school-leavers residing in the state of Queensland (Australia), the most common pathway is applying through the Queensland Tertiary Admissions Centre (QTAC). School-leavers applying for the first time or prospective mature-aged students, all need to apply for tertiary enrolment through the QTAC process which, while this pathway of entry continues to be effective for many, is not the only way to access higher education.

Within Australia, alternative pathways to university entry include bridging programs, tertiary preparation programs, enabling programs and early entry to university subjects. Some pathways offer foundational skills training designed to prepare the student for their future higher education, and on successful completion offer a university place. Key features of the various pathway programs for entry types of programs are discussed briefly below with more details presented in Appendix A.

1.1.4. Bridging programs

Bridging programs assist the student to meet prerequisite requirements for admission to their chosen degree. Bridging programs have been used internationally, including in Australia (Chambers et al., 2014; Ellis et al., 2001; Gordon & Nicholas, 2013; Whannell et al., 2010; Whannell & Whannell, 2014), the United States of America (Allen & Bir, 2012; Buck, 1985; Dove, 2017; Myers & Drevlow, 1982) and Europe (Deo, 2011).

The principle objective of bridging programs has been to assist students with the transition to university and provide them with essential academic skills and communication skills prior to commencing their first year of higher education (Allen & Bir, 2012; Whannell & Whannell, 2014). The delivery and content of bridging programs vary from each tertiary institution, however their common aim is to reduce the number of underprepared students entering higher education (Dove, 2017). Bridging programs have been designed as a preparation styled program, designed to provide basic knowledge in selected topics, such as mathematics and chemistry, or to a gain a university place/offer, but do not carry any credit towards a university subject (Chambers et al., 2014; Dove, 2017; Whannell et al., 2010; Whannell & Whannell, 2014).

1.1.5. Tertiary preparation programs

Tertiary preparation programs focus on preparation skills. If students are accepted into programs but are lacking satisfactory academic

preparation or English language skills, the probability of them passing these subjects is reduced and the likelihood of withdrawing from their studies is amplified (Australian Government, 2020). There are many advantages of tertiary preparation programs including the fact that they are typically fee-free, and, that if a student achieves a passing grade, they are subsequently offered a guaranteed enrolment place at the tertiary institution (Hellmundt & Baker, 2017). On a practical level, tertiary preparation programs can enhance a student's preparation skills (such as mathematics, academic writing, and digital and information literacy) for university learning and ideal if the student has not previously graduated from high school (Asmar et al., 2011; Habel, 2012; Hall, 2015).

Tertiary preparation programs specifically focus on academically preparing the student for university, rather than on a specific program's theoretical content. Tertiary preparation programs are targeted at students expressing an interest to study science, technology, education and mathematics (STEM) disciplines (Deo, 2011) and focus on key elements including academic English for university study. Generally, students in these programs are over 18 years of age (Deo, 2011).

1.1.6. Enabling programs

Enabling programs are another alternative pathway to university enrolment. As defined by the Baker et al., (2020) the Higher Education Support Act (HESA) , enabling programs are programs of study which are

specifically preparatory-styled subjects that do not result in an award or certificate at the completion of the program. Enabling programs are free and upon completion, the participant is assured direct entry into selected undergraduate programs at the same institution, without having to apply through QTAC (Baker et al., 2020). Enabling programs, initiated in 1974, have been designed to specifically focus on foundation skills such as literacy, numeracy and critical thinking (Baker et al., 2020; Morrison & Cowley, 2017).

Generally, enabling programs are industry-focused rather than a focus on providing an entry pathway into university study (Pitman et al., 2016). In 2016, enabling programs were offered in 35 of the 38 Australian public universities (Pitman et al., 2016) with this number continually growing by 4.4% in 2020 (Universities Australia, 2022a). University-based enabling programs deliver a tertiary pathway for up to 20% of undergraduate enrolments at Australian universities (Morrison & Cowley, 2017).

Bridging programs, tertiary preparation programs and enabling programs have similarities. When comparing all three, they are all similar in that they are designed to provide the student with preparatory skills such as mathematics, reading and academic writing (Dove, 2017; Whannell & Whannell, 2014). A bridging program allows a student to transition to tertiary study by providing them with university academic and communication skills (Whannell & Whannell, 2014). A tertiary preparation program allows a student to revise essential studying skills

including English language requirements, referencing and critical thinking and building knowledge and confidence in the subject areas (Deo, 2011). An enabling program does not lead to a qualification in its own right; rather it prepares the student to enter a tertiary program by providing them with requisite academic skills such as numeracy skills and academic writing (Australian Government, 2020; Pitman et al., 2016). These programs can lead to direct entry into selected undergraduate programs without having to apply through QTAC (Pitman et al., 2016). The similarity between a bridging program, a tertiary preparation program and an enabling program is that they are all considered a type of tertiary preparation towards higher education. The pathway which differs from these is the early entry to university subject.

1.1.7. Early - entry courses

Early entry to university subjects are different from the three pathways described above in that they offer more than university-level academic skills that are focused on bridging, preparation for university, or enablement. An early entry to university subject provides the student with the opportunity to get a feel for university life whilst discovering more about a potential degree. However, the educational delivery approach can be quite different to that to which a high school student may be accustomed.

Educational approaches in high school and higher education can be quite different. Whilst it can be used during higher education, the

common teaching method often used within high school education is didactics whereas adult learning pedagogy is more commonly used within university education. High school education approaches normally follow methodologies that inform how the teacher teaches their student (Banning, 2005; Siri et al., 2016). This is referred to as a didactic teaching style and is structured and teacher-focused, often centred on the teacher delivering the lessons to the high school student (Banning, 2005). Adult learning pedagogical approaches, commonly used in the delivery of higher education, encompass the belief that the adult learner is self-directed and takes responsibility for their own learning, may bring with them an extensive depth of knowledge and life experience that helps form their self-identity, and are often actively engaged in the learning process (Kenner & Weinerman, 2011; Vereijken & van der Rijst, 2020). More specifically pedagogy approaches are based on the work of Malcolm Knowles. American educator, Knowles, is known for his adult learning model highlighting six assumptions or characteristics (adults' self-concept, learning experiences, readiness to learn, motivation, need to know, and problem-centred learning) that are proposed that when implemented in their teaching will assist adult learners to understand their own learning needs (Purwati et al., 2022).

There are specific differences between didactics and adult learning pedagogical approaches. Didactics tends to be teacher led such as a high school teacher presenting a lecture directly to the student whereas an adult learning pedagogical approach can have an asynchronous delivery

approach such as a pre-recorded lecture (Banning, 2005; Kenner & Weinerman, 2011; Siri et al., 2016; Vereijken & van der Rijst, 2020). Adult learning pedagogical approaches are learner-centred and involve consideration of teaching strategies that focus on how specific students learn in different ways (Kenner & Weinerman, 2011; Vereijken & van der Rijst, 2020). Another key difference between the two learning methods is that didactics are knowledge-oriented, while adult learning pedagogical approaches are process-oriented (Banning, 2005; Kenner & Weinerman, 2011; Siri et al., 2016). Teachers who use the didactical approach focus on directly transferring their knowledge to their students. Teachers who use the adult learning pedagogical approach aim to transform the way in which students see the world and the disciplinary knowledge that they are studying (Vereijken & van der Rijst, 2020).

Other key differences between high school and higher education, as outlined in the literature, include compulsory attendance in high school tutorials compared to non-compulsory attendance at university level, a structured timetable at high school compared to a flexible schedule at university and regular homework which is graded in high school compared to recommended reading at university which is not graded (Banning, 2005; Siri et al., 2016; Vereijken & van der Rijst, 2020).

As teaching within a high school program is thought to be considered more of a didactical approach, often in a face-to-face environment, the transition to university can be viewed as extremely challenging for some students as they attempt to adjust to a different

teaching style and possibly even a different delivery format than high school (Ferrara & Flammia, 2018; Urquhart & Pooley, 2007). A pathway of unfamiliarity in the university environment can place the student in a position of heightened vulnerability whilst attempting to circumnavigate the pressures of university life and re-claim some consistency within the new environment (Urquhart & Pooley, 2007). Vulnerability refers to uncertainty, risk and emotional exposure (Jackson, 2018).

Early entry to university subjects makes higher education possible for students with university aspirations, due to their open admission policy and offer of lower tuition costs. Further research in early entry to university subjects, within an Australian nursing program context, has the possibility to significantly improve the understanding of this important pathway for student entry into higher education, in terms of both student academic results and retention. To date, of the 43 Australian universities, 19 (45%) offer some form of early entry to university subject targeting high school students (see Appendix B). Using the terminology described previously between course and subject, early entry to university courses will now be referred to as university subject/s.

1.3 Problem and significance

The early entry into university subjects is an area where there is a present gap in the literature. There is scant research on the effectiveness of early entry to university courses that is available to the public because most of the data collection is still in its infancy and/or data is only held

locally at the institutional level. To ascertain whether an early entry to university subjects is effective and supports high school students to enter the Bachelor of Nursing undergraduate degree at higher education facilities, it is necessary to explore early entry programs from the perspective of high school students. To date, there is no published research that has been conducted within Australia in relation to the early entry experiences of students and in particular those undertaking select nursing subjects. Positive first-year experiences in higher education and a smooth transition are key contributing factors to retention and attrition rates (Tower et al., 2015).

Nurses are the 'front line' staff in most comprehensive health systems, and a nursing shortage weakens the efficiency of any health care system (Australian Government, 2014). As nurses consist of the greatest portion of the health workforce, a sustainable health care system delivering optimum health care depends on a maintainable nursing workforce (AIHW, 2020). With a growing decline in the nursing workforce, a decrease in the nursing workforce jeopardises efficient and effective healthcare systems. This insufficiency can result in poor patient outcomes, therefore emphasising the need to maintain a healthy nursing workforce (Russell et al., 2017; Tower et al., 2015). It is anticipated that a positive first year will encourage nursing students to continue their studies, leading to eventual degree completion, and graduate nurses subsequently entering the nursing workforce.

The purpose of the study was to identify important factors to inform strategies that might best support transition to and retention in higher education, particularly related to starting and completing a university nursing degree.

1.4 Aims and objectives

The aim of this research was to explore the experiences and perceptions of high school students in a nursing related early entry to university subject. This key objective was to better understand influencing factors and to inform development of strategies that might best support transition to and retention in higher education.

1.5 Research Question

The main research question is:

What are the experiences of high school students who undertake an early entry to university subject within the Bachelor of Nursing and what influencing factors might contribute to retention and attrition in higher education?

1.6 Overview of the thesis

Chapter 1 outlined the background and current context of early entry to university subjects within an Australian higher education context. This chapter also discussed the significance and scope of this study. Chapter 2 contains the literature review, which provides a theoretical and

conceptual overview of the literature surrounding the context of university retention, recruitment, and the nursing workforce shortage. Chapter 3 provides an overview of the theoretical framework that underpinned this research: Tinto's Student Integration Model. Chapter 4 describes and justifies the methodology used in this research. The chapter discusses the reasoning for the use of a qualitative descriptive approach for this research. Inclusive in this chapter is an introduction to the participant group, the inclusion criteria, the research setting, data collection strategies, ethical considerations, and data analysis processes. This chapter also discusses how Tinto's Student Integration Model informed this qualitative study, with interview questions derived from this model's features. Chapter 5 presents the findings of the research in an interpretative form. The chapter includes findings from participants specifically outlining their experiences in the early entry to university subjects with the use of Braun and Clarke's thematic analysis. The themes that are presented across the data include (1) making adjustments, (2) getting a taste of university, (3) discovering self and (4) empowered independence. Chapter 6 presents a discussion of the findings with reference to current and past literature along with the limitations of the research. Chapter 7, the final chapter, presents recommendations for practice and opportunities for future research.

1.7 Conclusion

This chapter has summarised aspects of the Australian university system, including funding, student cohorts and Australian Qualification Framework classifications. It has also outlined the multiple pathways to university entry within an Australian higher education context and the impact that a smooth transition into higher education can have on retention and attrition rates of our future nursing workforce. The next chapter discusses concepts in relation to a smooth transition into higher education. Undergraduate students must successfully make the transition to higher education if they are to succeed academically. By facilitating the transition to university, higher education institutions can enhance students' chances of success and result in higher retention rates and lower attrition.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The previous chapter outlined the significance and scope of this study identifying the future nursing workforce shortage and the need for more nurses to complete their higher education studies to contribute to this declining workforce. Higher education institutions can improve students' chances of success by easing the transition to university, which will lead to higher retention rates and lower attrition. Higher education institutions must keep abreast of the changing landscape and the various expectations of how they should respond to a rapidly changing environment to attract and keep students. The degree to which students are prepared for the subjects they attempt and the degree to which the admissions criteria accurately reflect the background knowledge and abilities necessary to effectively finish each subject offered have an impact on retention rates.

There is no denying the first year of university may be challenging. Undergraduate nursing studies are quite demanding, requiring a great deal of independent study, having a heavy study workload, and an understanding of the new language of medical terminology. It has been indicated that a smooth transition to higher education during the first year promotes students' overall satisfaction with their undergraduate experience as well as increases the likelihood that they will complete their degree (Tower et al., 2015). Transition pedagogy has been thought to

have a substantial impact on student recruitment, retention, and attrition to assist a positive transition (Kift, 2015; Kift & Nelson, 2005).

2.2 Transition

The change between high school to higher education has a transition period as one starts to generate decisions about their future career. Transition can be defined as the internal process occurring when students move to the unfamiliar while adjusting to higher education (Perry & Allard, 2003). Credé and Niehorster (2012, p. 134) defined student adjustment to higher education as "the ability to effectively adapt to the various challenges encountered in the new university environment". Students are creating their own identities and deciding on their future directions while also engaging in world exploration and engaging with fresh experiences and perspectives (Coates, 2010). Early involvement in the transition process has been acknowledged as essential, not just for maintaining student retention but also for establishing strategies that promote learning throughout higher education (Chester et al., 2012). A successful transition to higher education is required for undergraduate students to achieve academic success (Goldring et al., 2018; Strayhorn, 2019). By facilitating a smooth transition to university, higher education institutions can increase the likelihood that students will succeed.

In order to maintain student retention and progression, researchers have emphasised the significance of effective transition strategies

(Edward, 2003; Tinto, 1993). An established method for assisting first-year transition is peer mentorship. As a result, most universities now provide mentorship programs, which are a crucial component of best practice transition programs (Egege & Kutieleh, 2015). Peer mentoring, which involves using a more experienced student as a mentor, has been linked to improved communication and organisational skills as well as providing a sense of belonging (Egege & Kutieleh, 2015). Peer mentoring (also known as peer transition programmes, peer tutoring, or PASS: Peer-assisted study sessions) have been identified as the most effective intervention strategies to reduce university attrition and as an indicator of best practice in transition and retention strategies by the Hobson Retention Project, mixed methods report of 17 institutions in Australia providing an overview of Australian tertiary education student experiences and engagements in university, technical and further education (TAFE) and higher education private providers on student retention (Adams et al., 2010). Findings showed that retention increased when academic performance was measured by grades achieved in the first-year subject where peer mentorship took occurred (Adams et al., 2010; Chester et al., 2012).

2.3 Career making decision

Research has focused on student decision-making, particularly when deciding on an educational or career path (Mzobe, 2014). Economic rationalism has made students become independent decision-makers who

choose whether to enrol in higher education, which degree to choose, and which institution to attend (Ozlen, 2013). International literature provides evidence about some of the many factors influencing a high school student's career decision-making. A longitudinal study conducted in Switzerland (Bieri Buschor et al., 2014) focused on female high school students wanting to transition to higher education, specifically within the Science, Technology, Engineering, and Mathematics (STEM) stream. It was identified that family are significant in influencing career decision making. Similarly, Mzobe (2014) in South Africa, found the significant role family members can have in the career decision making of students going into higher education from high school. Abe and Chickoko (2020) concluded that family members also have a significant role in this decision making. Another study conducted in South Africa (Abe & Chickoko, 2020) focused also on STEM-related transition from high school to higher education, identified passion as a significant influential factor for transition. Self-efficacy was a key factor within a South Korean study involving 660 participants focusing on a career after high school in engineering (Kim & Seo, 2014). Interestingly, this study was noted to have almost 80% of the participants being male (Kim & Seo, 2014). Sense of belonging was a significant influential element from a mixed method study conducted in the United States of America, related to STEM career-focused students articulating from high school (Rainey et al., 2018). This study reported that women of colour were least likely to report a sense of belonging when compared to all other students (Z =

2.37) (Rainey et al., 2018). These findings highlight how crucial it is to consider how race, culture and gender intersect in any investigation like this one. These influential factors could be of significance when understanding reasons for the attraction and recruitment of students into higher education.

2.3.1 Attraction and recruitment of students in higher education

For universities in Australia, attracting and recruiting students is vital. Higher education is now a global product with institutions worldwide competing for students and finding ever more creative ways to satisfy student needs and preferences. Australia has 43 universities (38 public, three private and two international universities (Szuwarzyski, 2022), in which more than 1.6 million students are currently enrolled and undertaking higher education study at one of these universities (Universities Australia, 2022b).

To attract and retain students, higher education institutions around the world must meet a variety of expectations for how they react to a fast-changing environment. In order for higher education institutions to attract and motivate students to enrol, the promotion of excellence is currently framed as a key strategy (Frølich & Stensaker, 2010). Student recruitment is crucial for fostering diversity and elevating quality. Graduates play a critical role in establishing the reputation of a higher education institution since they are not only the custodians of society's diverse body of knowledge but also advocates for their alma mater

(Frølich & Stensaker, 2010). Therefore, it is becoming more crucial to analyse the strategic procedures involved in student recruiting.

The traditional governance and management structures of higher education institutions are changing because of the increased interest in strategy formulation within these institutions. Additionally, there is more attention being paid to how research, teaching, and learning is being conducted (Allen, 2003; Frølich & Stensaker, 2010). Studies on recruiting students frequently concentrate on the behaviour and thought processes of the participants, including the students' selection of the university (Ho et al., 2001; Ho & Hung, 2008), the information sources they use to inform their decision, and the students' loyalty to and level of satisfaction with the institution where they are enrolled (Bonnema & Van der Waldt, 2008). Greenbank (2006) examined the ways higher education institutions in the United Kingdom have attempted to respond to national policy measures including the recruitment of students with low grades and admission scores to fill places in a subject, rather than a desire to widen participation. Student recruitment tactics are typically not esoteric or futuristic. They are primarily based in the institutional organisation's identity or are greatly influenced by the environment (Frølich & Stensaker, 2010). Additionally, student appeal and recruiting techniques are frequently based on rather technical and quantitative evaluations of current or recently recruited students and their attributes, which are nonetheless equally crucial.

The affordability of higher education can contribute significantly to attracting and recruiting students into higher education. Australia's government, like many other developed nations, are aiming to increase participation in higher education (Australian Government, 2023). The Australian Government is the primary funder of higher education. Higher education organisations faced two substantial funding issues in 2020 (Australian Government, 2022a). First, COVID-19 travel restrictions prevented foreign students from entering Australia for study, resulting in a 5.1% drop in enrolment and a 23.2% drop in commencements from December 2019 – 2020 (Universities Australia, 2021). According to Universities Australia, its members would experience a AUD$1.8 billion revenue loss in 2020 compared to 2019 and AUD$2.0 billion in losses in 2021.

The Higher Education Support Amendment Act 2020 (JRG Act), which was passed in October 2020, subsequently legislated a decrease in the average funding per student for domestic Commonwealth-supported students (Parliament of Australia, 2020). Beginning in January 2021, this Act also included other changes considered important to learning and teaching funding programs (Parliament of Australia, 2020). The fact that a significant amount of funding is provided in the form of income-based loans is an important feature of the Australian government's involvement in education provision in the higher education sector. Due to rising income tax rates, a sizable portion of what this report characterises as education provision will be repaid (Australian Government, 2022b). Education

provision refers to what a higher education facility provides for the students to support their learning and progress in the program, including the curriculum and content, resources and any enrichment activities (Australian Government, 2022d). The student contribution is known as HECS-HELP and the tuition fee is known as FEE-HELP (Australian Government, 2022b).

2.3.2 Retention and attrition in higher education in Australia

Retention and attrition rates in higher education have long been a focus of research. Retention and attrition in undergraduate programs is not a new phenomenon, with a number of studies undertaken on this topic (Cao & Gabb, 2006; McInnis et al., 2000; Rose-Adams, 2013; Tinto, 1993; Troxel, 2010) along with recommendations published to improve retention and attrition (McInnis et al., 2000; Rose-Adams, 2013). In Australia, higher education retention refers to the number of students who enrol and continue an undergraduate program to completion within a single institution (Mason & Matas, 2015; Mitchell et al., 2021).

In a systematic review conducted by Aljohani (2016), the most influential factors associated with student attrition included family background, family income, student-related factors, social factors, economic factors, students' goals, institutional experience, and institutional factors. Furthermore, Aljohani (2016) added the quality of students' institutional experiences and their level of integration into the

academic and social environment of their academic institutions as also important influential factors.

Retention rates are affected by how well students are prepared for the subjects they attempt, and how well the selection criteria for admission identify the background knowledge and skills required to successfully complete each subject offered (Mitchell et al., 2021). Tower et al., (2015), conducted a prospective study involving 223 nursing students, and found retention rates had decreased by over 3%, from 83.82% to 80.57% over a subject of a year, with a full-time study load and academic unpreparedness being the main contributing factors. While the populations of these studies are all different, the results are the same in that tertiary preparation, in whatever form, increases a students' chance of continuing university.

Whilst a quantitative calculation for attrition seems straightforward, this approach may not reflect students who defer and return in later years or students who transfer to another institution and continue their studies. It is important to comment that definitions of attrition could vary as it is believed they are based on the assumption that a traditional university academic calendar is structured over a one year period, therefore attrition is based on two semesters of study forming an academic year (Australian Government, 2017b). As such, higher education facilities can have a trimester model (three semesters in a one-year period) which could void the original definition which is based on a bi-semester model.

Combining knowledge of patterns of attrition with an understanding of the drivers of withdrawal (leaving a program) facilitates effective student management and retention strategy development. The literature on student withdrawal from university undergraduate programs supports a conclusion that student withdrawal is a multifaceted and often very individualised procedure concerning the relationship of personal, social, and institutional factors (Cabrera et al., 1992; McInnis et al., 2000; Taylor & Bedford, 2007). Research on student withdrawal from undergraduate programs has tended to separate the apparent reasons for non-completion into institutional factors such as the quality of subjects, teaching, and student support provided, on the one hand, and factors arising from the personal circumstances of individual students on the other (McInnis et al., 2000; Taylor & Bedford, 2007).

There has been a concomitant tendency for education institutions to regard factors related to students' personal circumstances as being beyond institutional control (Taylor & Bedford, 2007), and thus as being beyond any institutional responsibility or ability to respond to. However, regarding personal factors and institutional factors as being independent of each other, this may appear too simplistic. For example, in a mixed method study by Ramsay et al., (1996), on attrition of first-year undergraduates, there was rarely any single factor involved in students' decisions to withdraw; and that withdrawal was frequently influenced by a range of institutional, sociological, and personal factors.

Research by Vincent Tinto has emphasised the importance of the role of the institution in promoting an environment for greater student persistence (Tinto, 1975; Tinto, 1993). Tinto's Student Integration Model (Tinto, 1993) hypothesized that successful academic and social integration of the student into the higher education institution determines persistence behaviour. Tinto (1993) identified the importance of the role of the institution in promoting an environment for greater student persistence, arguing that the higher the levels of integration, the more likely the student is to persist. According to Tinto's Student Integration Model, a student's probable commitment to the university of choice and subsequently retention and attrition rates can be influenced by their family backgrounds, personal characteristics, and pre-university education (Tinto, 1993). According to Tinto's Student Integration Model, academic and social integration improves the likelihood that individual and institutional goals will be met, which in turn affects attrition and retention in the setting of higher education.

2.4 Retention and attrition in undergraduate nursing

Nursing is the largest single health profession in Australia. Workforce planning is critical to ensure the alignment of nursing supply with demand, to create a sustainable nursing workforce for Australia (Australian Government, 2020). It is predicted that there will be a significant shortfall in the total nursing workforce by 2030 (Australian Government, 2020). The World Health Organisation (WHO) has foreseen

a shortage of 18 million healthcare professionals by 2030, whereby half of the need are nurses (WHO, 2016). Therefore, it becomes of the utmost importance to understand in a more focused way the main reasons behind the attrition phenomenon in nursing students, to be able to favour student retention and prevent further depletion affecting the health force. To become a Registered Nurse, Australian students must complete a minimum of 800 hours of placement-based, work-integrated learning (WIL) across several healthcare settings. The term WIL refers to the provision of work-based experiences within a curriculum that provide opportunities for students to apply theoretical learning in practice (Karlsson et al., 2022; Urwin et al., 2010). Lack of public transport, financial difficulties, and geographic distance plus loss of earnings have all been cited as factors that affect health profession students' WIL experiences (Karlsson et al., 2022; Urwin et al., 2010). Non-academic pressure is the second main category of factors influencing a nursing student to leave the undergraduate nursing program (Canzan et al., 2022; Urwin et al., 2010). Non-academic pressure including a lack of financial support, poor wellness and health on admission and during the program, wrong career choice, and two demographic factors i.e., namely age and gender, as common factors influencing whether a nursing student to leave the undergraduate nursing program (Canzan et al., 2022). Retention in tertiary and hospital-based nursing programs has been a challenge for many years (Merkley, 2016).

It is important to firstly acknowledge however that some students enrolled in a nursing related program withdraw because it may be a regretful career choice with them identifying that nursing is simply not for them and that this could count for some levels of attrition. According to Palese et al., (2009) this concept is referred to as the natural phenomenon of 'awakening'. Palese et al., (2009) explains that students begin their academic journey and afterwards, often during their first year of enrolment, decide they are not suitable for the nursing profession and withdraw from their studies. Urwin et al., (2010) further explains that this awareness can be considered positive as it ensures students remaining in the nursing program are highly committed to their profession, supported with their decision to remain in this area of study. Other reasons for retention and attrition seem to include various academic obstacles and non-academic-related factors (Canzan et al., 2022; Eudy & Brooks, 2022).

In other international studies, similar findings have been found. For example, Canzan et al., (2022), conducted a qualitative study of 31 nursing students in Italy, and their results indicated that academic obstacles included high workload demands, stress from examinations and a lack of critical thinking. Eudy and Brooks (2022), in a retrospective review conducted in the United States of America on 351 nursing students, outlined non-academic related factors as being demographic related characteristics, including race ($X^2 = 10.84$, $p = 0.01$) with white students demonstrating greater successful completion than African

American students; and demographic living location ($X^2 = 0.07$, $p = 0.78$), with students living closer to the university more likely to complete. Interestingly, both studies reported that failure to succeed academically was one of the main reasons why nursing students withdrew from an undergraduate nursing program (Canzan et al., 2022; Eudy & Brooks, 2022). Retention rates for the Bachelor of Nursing at a large regional University in Queensland are around 81% (USQ, 2021a). There are known challenges such as economic burden whilst studying (Canzan et al., 2022), making a regretful career choice (Roos et al., 2016) and personal circumstances (Hamshire et al., 2019).

2.4.1 First-year experience in higher education

First-year experiences in higher education are a well-studied phenomenon dating from the 1950s (Chambers et al., 2014; Deloitte, 2015; Grattan-Institute, 2018; Hillman, 2005; Holden, 2016). A positive first-year experience is vital for students to engage in their studies and progress through their program. The first year has been labelled as the time which has the greatest amount of academic failure and attrition (Deloitte, 2015; Hillman, 2005) with literature expressing the first year as significant in forming persistence (Vargas et al., 2017).

There is no doubt that the first year of study in higher education can be very demanding. For students, this can include time management, adjusting to a new learning environment, the financial cost associated with the study, and external pressures (Kift, 2015). A study of 578

participants conducted in a regional university in Northern New South Wales (Australia), from disciplines all across the university identified academic writing and referencing difficulties, family commitments, poor time management and assessments as other contributing factors to withdrawing from their first year of higher education (Neiuwoudt & Pedler, 2021). With a strong emphasis on the importance of lifelong learning, the first year is a critical progress point, one that may influence values, attitudes, and approaches to learning, towards remaining in higher education and withdrawing (Grattan-Institute, 2018; Kift, 2015).

Transition pedagogy has also been considered as having a significant impact on student attraction, retention, and attrition. The work of Kift and colleagues (Kift, 2015; Kift & Nelson, 2005; Kift et al., 2010) on transition pedagogy, has had a significant impact on the Australian higher education sector (Bradley et al., 2008). Transition pedagogy is a framework for the deliberate and scaffolded development of curriculum to support the success of first-year university students from diverse backgrounds (Birbeck et al., 2021; Ovens et al., 2016). Within this transition pedagogy approach, there are considered three levels, including first generation /first-year experience approach, second generation and final year experience. One example of a first generation approach, is the provision of a range of services including university counselling services, learning and academic advising officers and orientation sessions (Kift et al., 2010). Focusing on the curriculum, an example of a second generation first year experience approach in transition pedagogy, includes

assessment tasks that have clear instructions and assessments that are aligned with subject learning outcomes (Kift et al., 2010). Kift et al., (2013) later expanded transition pedagogy to the final year experience to prepare students to enter the professional world.

2.4.2 Demands of undergraduate nursing studies

Undergraduate nursing studies are very demanding with a heavy workload, contain medical terminology to comprehend and involve a great deal of independent study. Nursing programs consist of a combination of theoretical and practical learning experiences that enable nursing students to acquire the knowledge, skills, and attitudes for providing nursing care (Nabolsi et al., 2012). Sources of stress are common to all students, including exams and financial worries, but nursing education can produce different stressors, for example, patient death, encountering bodily fluids, medication calculations, and anatomy and physiology components of the program (Birks et al., 2013).

2.5 Transition to tertiary studies

Whether it is due to the potential pressures and stress experienced by students during the final years of their high school certificate, the first year of higher education may likewise be an opportunity to assess how prepared they truly are and whether they need to be better supported in their higher degree studies (Kift, 2015). The transition to higher

education can be a daunting and often overwhelming experience and nursing students are not immune to these challenges. Transition in the higher education literature is often described or defined as the internal process occurring when students move to the unfamiliar while adjusting to higher education (Perry & Allard, 2003).

Successful transition to the higher education environment, within the first year increases students' overall satisfaction with their undergraduate experience as well as increasing the likelihood of degree completion (Hillman, 2005). Successful transition defines the areas of the student experiences with the curriculum that should be addressed to aid a smooth transition for first-year students to the very different learning environments offered in higher education (Gale & Parker, 2014). University life and study is new and different for all first-year students, and it cannot be assumed that students have the knowledge and support to adjust to this new learning environment. While some students adjust quickly, other students require significant support to succeed.

Successful transition is not just academic but also has cognitive and social elements (Gale & Parker, 2014). An example may include more of a self-responsibility / self-accountability for learning (Gale & Parker, 2014). A successful transition can be affected in students who do not feel connected to a university through social support or integration (Hillman, 2005). Successful transition ensures the student has embraced the whole university life, not just the formal institution (Ecclestone et al., 2009; Gale & Parker, 2014).

2.5.1 Transitioning strategies/programs to tertiary studies

Whilst high school students may understand that university learning and pedagogy is different to high school, some students expect the same forms of support they experienced at high school (Ferrara & Flammia, 2018). High school students may be exposed to a didactical approach, a more structured daily lesson plan over four terms, with routine written and examination-styled assessment items, whilst being surrounded by people of similar age (Epstein & Sheldon, 2002; Ferrara & Flammia, 2018). Additionally, high school attendance to tutorials is mandatory with students being marked absent when not attending daily, differing from tutorial attendance at higher education, which can be non-mandatory and with attendance not always recorded (Ancheta et al., 2021; Ferrara & Flammia, 2018).

Studies have recognised the discrepancies that occur between the students' academic abilities contrasted to those anticipated of them by their tertiary lecturers (Black, 2012; Burnett & Larmar, 2011; Deloitte, 2015). These discrepancies can prompt pressures within the student that hinder their advancement and bring into question their capacity to effectively finish their university studies.

Within the literature, there is a small number of quantitative (Allen & Bir, 2012; Habel, 2012; Whannell & Whannell, 2014) and qualitative studies (Buck, 1985; Morrison & Cowley, 2017) exploring bridging,

tertiary preparation and enabling programs with the majority of studies using a mixed methodology approach (Dove, 2017; Hall, 2015; Hellmundt & Baker, 2017; Johns et al., 2016). Several studies conducted in Australia have focused on student retention, attrition, and experiences (Habel, 2012; Hall, 2015; Hellmundt & Baker, 2017; Johns et al., 2016; Morrison & Cowley, 2017; Whannell & Whannell, 2014). Students who participated in a bridging program demonstrated increased retention rates in comparison to other student populations with similar demographics (Myers & Drevlow, 1982).

Publications on tertiary preparation programs frequently concentrate on barriers for students not completing tertiary preparation programs and retention (Habel, 2012; Morrison & Cowley, 2017; Whannell & Whannell, 2014). The subject of retention in tertiary preparation programs is one of considerable concern. There is a strong suggestion that by providing targeted preparatory support the attrition rates may be decreased by 10% (Willans & Seary, 2018). Literature on enabling programs is generally focused on details regarding how the program is delivered and the demographic data of students undertaking these programs (Hall, 2015; Johns et al., 2016; Whannell & Whannell, 2014) with no relationship made to any nursing-specific programs.

Early entry to university is not well documented in Australia with limited publications identified, however, a similar pathway is offered in the United States of America. The Early College High School Initiative (ECHSI) was established in 2002 by the Bill and Melinda Gates

Foundation, along with the Carnegie Corporation of New York, the Ford Foundation, and the W.K. Kellogg Foundation (Song & Zeiser, 2019). These programs target students from years eight to 12 and provide them with university subjects to complete whilst still at high school with offerings of credit points towards university education (Song & Zeiser, 2019).

Several studies have been undertaken on this program with promising results including attending higher education and degree completion. A longitudinal study of 10 schools offering the ECHSI program found that students enrolled in an early entry to university subject were significantly more likely to graduate from high school, attend university and complete their degree when compared with students not enrolled in the program (Berger et al., 2013). The national graduation average in the United States of America is 78% of students, compared to 90% of students enrolled in the initiative graduating from high school (Berger et al., 2013). One in five students graduated high school with an associate degree or higher (Berger et al., 2013). Sixty three per cent of students enrolled in university by the end of high school, with two in five students completing their university degree within four years (the typical length of an undergraduate degree program in the USA) after their high school graduation (Berger et al., 2013). Other positive outcomes found in retrospective studies (Song & Zeiser, 2019), experimental designs (Edmunds et al., 2020), randomised controlled trials (Song & Zeiser, 2019) and qualitative studies (Morgan, 2015) include increased

engagement (Morgan, 2015), increased attendance and retention (Edmunds et al., 2020) and higher graduation rates (Song & Zeiser, 2019). This indicates these programs have been successful and valuable to the student.

2.6 Conclusion

The transition from high school into higher education can be described as a difficult process. Research supports that through a smooth and well supported first year experience, degree completion statistics rates increase. The research also identified multiple influencing factors on high school students making career decisions including family influence, passion and self-efficacy. Research demonstrates the financial implication on the Government from low retention and attrition with these figures being quite high in nursing programs. Research frequently concentrates on the preparation levels generated from tertiary pathways including bridging programs, tertiary preparation programs and enabling programs, which contribute to improving retention and attrition levels. However, it is not known whether early entry to university subjects provide any better preparation to high school students. The theory behind the current research approach, Tinto's Student Integration Model, is discussed in the next chapter.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1 Introduction

The previous chapter outlined the relationship between preparedness and tertiary education completion. Importantly, the previous chapter identified the gap in the literature with the level of preparation that an early entry to university course provides the high school student. This chapter discusses the theoretical framework Tinto's Student Integration Model that has been used to guide the current study methodology. Tinto's Student Integration Model was developed to establish a longitudinal framework that would explain all the elements and processes that went into a person's decision to drop out of university as well as how these processes combined to cause attrition (Tinto, 1975). Tinto made a distinction between various departure behaviours and the influence that features, such as familial history, personal characteristics, and social and academic integration. This chapter outlines the specific features within the Tinto's Student Integration Model that could influence conceptualising retention and attrition in higher education studies.

3.2 Tinto's student integration model

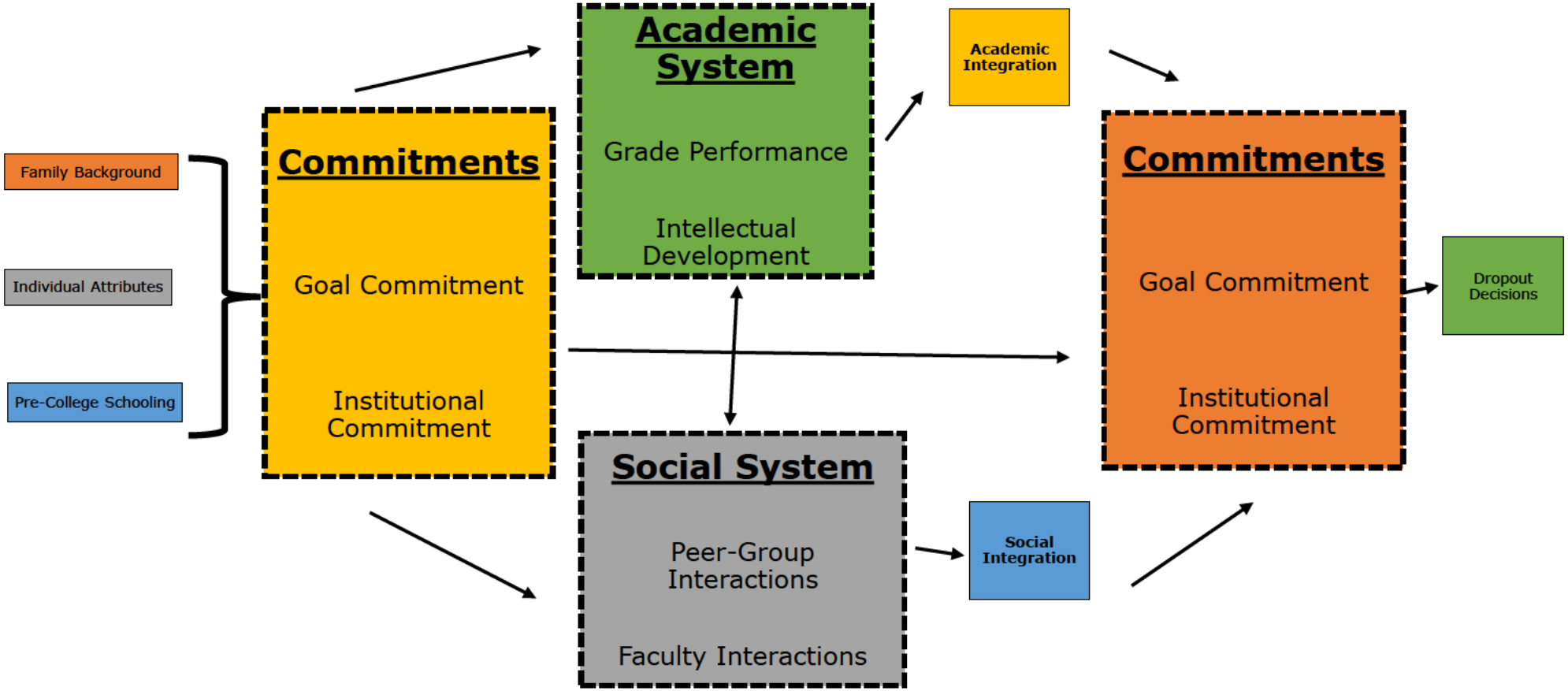
Vincent Tinto was a theorist who focused on processes, reasons and influences for students withdrawing from university (Draper, 2003; Tinto, 1993). Tinto examined Durkheim's Theory of Suicide, where individuals who were inefficiently integrated into society, were perceived as being at a greater risk of committing suicide (Tinto, 1993). Durkheim's Theory of

Suicide emphasised that suicide is caused by social influences, such as a decrease in social integration, and not psychological influences such as depression, stress, and anxiety (Pescosolido & Georgianna, 1989). Tinto was able to relate these social influences to impacts on tertiary study progression (Tinto, 1993). Specifically, Tinto applied this theory to retention and student success in the university and withdrawal from university, developing Tinto's Student Integration Model.

Tinto's Student Integration Model was created to provide a longitudinal framework that would explain all the factors and processes that contributed to a person's decision to withdraw from higher education as well as how these processes interacted to lead to attrition (Tinto, 1975). Tinto tried to distinguish between various departure behaviours. This is crucial because there are numerous scenarios in which a student may decide to drop out of university or be forced to do so (Tinto, 1975). Academic failure, voluntary disengagement, permanent dropout, temporary dropout, and program transfer are some of the several leaving behaviours that Tinto discovered (Tinto, 1975). According to Tinto's Student Integration Model, the degree of academic factors, such as grades, motivation, values, and roles, as well as social integration, particularly friendships, connections, and interactions made while pursuing higher education, have a significant impact on a student's decision to drop out or continue with their enrolment (Manyanga et al., 2017). Tinto's Student Integration Model is presented in Figure 1.

Figure 1

Tinto's Student Integration Model



Tinto's Student Integration Model (SIM) Tinto (1975).

According to Tinto's Student Integration Model, a student continues their study when they are academically and socially assimilated into the higher education community (Braxton et al., 1997). Numerous longitudinal studies carried out in the United States of America, were the first to successfully validate Tinto's Student Integration Model in the university context. These longitudinal studies have included 6018 participants entering a four year university degree as a full time student in Connecticut (Munro, 1981), 1457 participants enrolled in a four year university degree in New York (Pascarella & Terenzini, 1980) and 120 freshman participants enrolled in a another New York university (Terenzini & Pascarella, 1977). The findings from Munro's (1981) research, suggested that goal commitment has the greatest impact on persistence in higher education, which is in line with Tinto's Student Integration Model's findings. The particularly significant contributions of student-faculty relationships were thought to be effective in identifying possible first-year voluntary dropouts during the second semester of the first year, according to Pascarella and Terenzini (1980). Similarly, according to research by Terenzini and Pascarella (1977) higher education students socialisation and integration into the academic and social systems of the institution may depend more on informal interactions with faculty than is currently assumed by the Student Integration Model.

Tinto's Student Integration Model is based on numerous individual features that can influence a student's pre-enrolment commitment to achieving higher education and the institution they intend to attend. Both

social and academic integration have been recognised as challenges experienced by students trying to progress into the higher education environment (Tinto, 1993; Whannell & Whannell, 2014). Tinto studied contextual features of individuals that illuminate student determination and withdrawal in higher education. These contextual features include students' family backgrounds such as social status, individual attributes i.e., age, gender, ethnicity and pre- university experiences such as grade point average and academic attainments (Aljohani, 2016; Yu & Richardson, 2016). Researching contextual features, including individual attributes possessed prior to higher education having commenced, identified that predictors of student success can be influenced by gender, parental education, academic ability and ethnicity (Tinto, 1993). Tinto assumed that these features unambiguously influenced an individual's commitment to higher education and the likelihood of quitting or failing university.

Tinto's Student Integration Model influenced the design of this current study as it focused on student behaviour. Tinto's Student Integration Model used a combination of student features and the extent of their academic, environmental, and social integration in an institution to establish possible reasons for studying success (Tinto, 1993). Tinto's Student Integration Model informed this qualitative study with interview questions informed by the models' key constructs.

Tinto's Student Integration Model has been supported, critiqued and revised over the last 30 years and has significantly influenced how

researchers view undergraduate retention and graduation, outlining individual features possibly contributing to this (Braxton et al., 2000; Whannell & Whannell, 2014). Research started to concentrate on both on campus and online higher education institutions in the 1980s (Pascarella & Chapman, 1983; Williamson & Creamer, 1988; Young, 1989). These studies found that the retention behaviour of online students is not equally affected by academic integration and social integration. Academic integration and background factors had a bigger impact on retention than social integration in on campus and online higher educational contexts, according to research that distinguished between institutional settings (Pascarella & Chapman, 1983; Young, 1989). Williamson and Creamer (1988) discovered that whereas social integration had little to no effect on retention, academic integration had a beneficial impact.

Additionally, the component missing from Tinto's Student Integration Model, according to Manyanga et al., (2017), is the influence of elements on student retention that are outside the higher education institution. Similarly, Braxton et al., (2004) proposed that the understanding of how student retention and persistence applies at diverse types of institutions is another criticism of the Student Integration Model. The validity of Tinto's Student Integration Model for online higher education institutions was questioned by Braxton et al., (2004), who also raised concerns about institution size. According to Braxton et al., (2004), a smaller higher education institution may not have the resources necessary to deliver an effective intervention when compared to a larger

school, but it may also offer a more welcoming environment with more individualised environment.

By conducting this current research, Tinto's Student Integration Model was used as a theoretical lens to conceptualise the study, with further insight obtained regarding the perspective of high school students enrolled in the university subject. Yet, despite the Tinto's Student Integration Model related to university students, given that this study included elements of transition to university but with high school students, this model was considered aligned with the aims of the current study. From this, improvements and enhancements can be made to improve the support, experience and quality of future courses offered to students currently still enrolled at high school.

3.3 Conclusion

This chapter has summarised Tinto's Student Integration Model. This model outlines certain features that have been found to be common when higher education students withdraw from their planned studies including family backgrounds, individual attributes, and pre-university schooling. The model posits that through academic and social integration personal goals and institutional goals are more likely to be achieved, thus resulting in retention and attrition in the higher education context. Tinto's Student Integration Model asserts that withdrawal from higher education occurs because the individual is insufficiently integrated into different aspects of university life. It has long been argued that the first-year

university experience has a critical influence on a student's intention to complete their undergraduate studies. The next chapter outlines the methodology used to undertake this research.

CHAPTER 4: METHODOLOGY

4.1 Introduction

The previous chapter outlined the theoretical framework, the Student Integration Model by Tinto, that was used to guide the study. This model included key factors known to influence student attrition typically when university students discontinue their intended study and therefore contribute to the attrition rate.

The methodology used for this study is described in this chapter. To explore the experiences of high school students enrolled in a university subject, a descriptive qualitative approach was adopted. The setting was a regional university with participants being current high school students. The recruiting method used for sampling was a homogeneous purposive sample strategy with personalised invitations (Palinkas et al., 2015). Semi-structured interviews with appropriate probing were used to gather the data. Data was analysed using reflexive thematic analysis in accordance with Braun and Clarke's (2006) six phases.

4.2 Research approach

The purpose of this study was to explore the experiences and perceptions of high school students in nursing related university subjects. It is for this reason that a qualitative methodology was chosen for this research. The qualitative methodology identifies the participants' motives, attitudes and reasoning to undertake something (Liamputtong, 2017) and draws “heavily on words or stories that people tell” (Liamputtong, 2017,

p. 274). The intention of a qualitative study is to provide a comprehensive understanding of the participants experience in an early entry to university nursing subject, whilst concentrating on the individual participant's perceptions and experiences. Qualitative research offers a way of learning more about the why, or what is, that cannot be extracted from pure quantitative datasets; rather it is about a voice and the meanings that can be gained (Creswell, 2013). This research used a qualitative description approach. Qualitative description is particularly useful when the researcher aims to describe the participants experiences, rather than exploring a deeper theoretical context (Kim et al., 2017). Giving plan accounts of perceptions within an area of research that has not been explored before, is a common justification for using descriptive techniques (Sandelowski, 2009). Qualitative description aims to present the findings in a way that closely resembles or directly reflects the initial research question and research concept (Kim et al., 2017; Sandelowski, 2000). Sandelowski (2000) states qualitative description provides a 'comprehensive summary of an event in the everyday terms of those events' (p.336). Sandelowksi (2000) additionally contributes that researchers using qualitative description are more likely to stay closer to their data and to the spoken words of their participants compared to other approaches. Qualitative description is a thorough account of experiences had by an individual that demonstrates a dedication to researching something in its natural setting (Lambert & Lambert, 2012; Sandelowski, 2000). Several researchers (Sandelowski, 2000; Sullivan-Bolyai et al.,

2005) agree that qualitative description is a legitimate and acceptable label for a qualitative research design that is known for having little to do with a theoretical framework.

Studies of a phenomena, a process, or the viewpoints and worldviews of the people involved are all examples of qualitative research (Bradshaw et al., 2017; Kim et al., 2017). When time and resources are scarce and information must be obtained directly from persons who are experiencing the phenomenon, the use of qualitative description is especially pertinent (Bradshaw et al., 2017). Bradshaw et al., (2017) outlines three assumptions 1) philosophical assumptions, 2) ontological assumptions and 3) epistemological assumptions. Philosophical assumptions define what knowledge is and how phenomena should be examined (Kim et al., 2017; Sandelowski, 2000, 2009), guiding researchers in defining the forms of evidence required, how to get it, and how to evaluate and apply it. The inductive process (Bradshaw et al., 2017), which was supported throughout data analysis, described a picture of the phenomena being examined and can add to knowledge. This is one of the philosophical assumptions mentioned by the researcher. Another philosophical assumption that the researcher identifies is subjectivity. Subjectivity involves each participant having their own perspective, and each of these individual perspectives mattering (Bradshaw et al., 2017),

Ontology is defined as the study of 'being' and is concerned with what is possible in the world and the social relationships within it (Al-Saadi, 2014). Additionally, ontology refers to the worldview on the nature

or form of existence, truth, and reality (Creswell & Poth, 2018). The ontological position of naturalistic research is relativism, which holds the view that reality is subjective and varies from person to person (Kivunja & Kuyini, 2017) and this is evident in the reporting of findings from qualitative description. Realities are influenced by senses and emerge when consciousness engages with objects, which already have meaning for the individual (Neubauer et al., 2019). Based on this view, there are many realities, and no one reality can exist as individuals ascribe their own interpretation and meaning to the phenomenon. The use of an interview allows the participants to express their opinions, experiences, and feelings on their experience (Kim et al., 2017) as a high school student enrolled in a university subject.

In contrast, epistemology refers to the assumptions made based on expectations about the type or form of knowledge (Al-Saadi, 2014). Creswell and Poth (2018) described 'epistemology' as the belief in how knowledge is acquired and the justification of knowledge development. Subjectivism, which is based on real-world events and holds that the world does not exist independently of our understanding of it, served as the epistemological orientation for this study (Grix, 2004). Subjectivism emphasises the role and contribution of the researcher and recognises the reality of all things; it does so in a way that is consistent with the qualitative description (Bradshaw et al., 2017). A qualitative descriptive approach acknowledges that there are several ways to perceive reality, and that what is presented is a subjective view that is bolstered and

confirmed by references to participant verbatim quotes. Since the knowledge of reality is considered to be socially produced from a naturalistic point of view, as is the case in qualitative description, it is acknowledged that an objective reality cannot be discovered or replicated by others (Bradshaw et al., 2017).

The axiology of the researcher included a commitment to scientific rigour and to ensure to always act ethically as a researcher. The use of qualitative description in this research aids in ensuring the researcher's axiology is reflective of ensuring the voice of the participants are heard, free of judgement. Additionally, the researcher was actively involved in the study process and became a part of the phenomena by conducting the participant interviews and speaking with the participants directly.

Semi-structured interview questions were used as the method of obtaining data. The use of audio recordings provided an accurate account of the participants responses and highlighted any possible contextual pauses made (Watson, 2015). Watson (2015) further explains words are the primary interviewing currency in qualitative interviews and are open to analytical interpretation. When an interview is being recorded, the interviewer can concentrate on maintaining eye contact, listening, questioning, and following up with the subject of the interview. According to Watson (2015), recording interviewees' statements ensures that their emotional tone, expressions and metaphors from the interview stay available for a long time after the actual interview. Due to the researcher

conducting this research being considered as a novice, this was only briefly included through hand written notes such as ‘enthusiastically’.

Qualitative description was appropriate for this research as it identifies and explains the nuances of internal and external influences on decision making and it grounds the participants experiences within the specified research context. The purpose was to provide a description of the participant experiences describing an event from the perspective of more than one participant.

4.2.1 Setting

This study was conducted in Queensland, Australia at the third largest regional university in Australia (Regional Universities Network, 2023). In 2020-2021, the university had 24,872 students across three campuses and three community education hubs (USQ, 2022). The university has a diverse population including 7.6% international students, 3.9% Indigenous students, 67.6% of students enrolled externally, 27.9% students who have identified as having a socioeconomic disadvantage, and a mean enrolment age of 30 years (USQ, 2021a).

University attrition overall was recorded at 23% in 2021 (USQ, 2022). Between 2017-2020, 25.8% of students had completed more than one nursing early entry to university course (USQ, 2021a). Domestic student attrition rates were elevated by 2.4% between 2019 and 2020 (USQ, 2021a), which in part may have been attributable to the COVID-19

pandemic. Retention rates for the Bachelor of Nursing at the research setting is around 81% (USQ, 2021a).

4.2.2 The university

The university is classed as a regional university with three campuses, Toowoomba, Ipswich and Springfield, and offers flexible modes of enrolment through external, online and on campus learning, with full-time and part-time delivery options (USQ, 2020a). Students are often the first in their families to attend higher education with the university serving many communities that have relatively low rates of higher education attainment (USQ, 2020a). The university conducts a range of programs involving high school students, as a pathway into higher education upon graduation from high school, one of which is a university program titled 'HeadStart'. This early entry to university program commenced in 2005 however program dashboard data is only available from 2011 (USQ, 2020a).

4.2.3 Context and description of early entry

During the time of the study, there were six early entry to university subjects offered to high school students within the Bachelor of Nursing program. These subjects are summarised in Table 1.

Table 1

Overview of HeadStart Subjects

Course Code	Course Title	Semester Delivery	Learning Component	Course Offered	Synopsis
BIO1203	Human Anatomy and Physiology	1 and 3	• Theory / Clinical simulation (residential school - highly recommended) (18 hours)	On Campus / Online	Introduction to the anatomy and physiology of the human body including the structure and function of human cells, tissues and organs (USQ, 2021b).
NUR1000	Introduction to Nursing	1	• Theory / Clinical simulation (residential school - compulsory) (18 hours)	On Campus / Online	Introduces students to beginning nursing-related theory and clinical skills (USQ, 2021c).
NUR1102	Literacies and Communication for Health Care	1	• Theory	On Campus / Online	Introduces communication concepts and frameworks relevant to health care and prepares students for engaging in therapeutic communication in a variety of clinical and professional situations (USQ, 2021d).
NUR1120	Health and Illness	1	• Theory	On Campus / Online	Teaches the student to describe how health, illness and wellness can be conceptualised across the lifespan and how these concepts can be applied in terms of contemporary health models, theories and frameworks (USQ, 2021e).
NUR1201	The Patient Experience (Partnering in Care)	1	• Theory	Online	Emphases optimising the patient experience by partnering with individuals and families (USQ, 2021f).
NUR1202	Professional Identity	1	• Theory	On Campus / Online	Is explored within legal and ethical frameworks, professional relationships, leadership and management philosophies and boundaries with patients, families, and other health professionals (USQ, 2021g).

These courses have been offered to early entry students as they are considered foundational and are designed to introduce the student to the nursing profession, providing them exposure to clinical simulation, anatomy and physiology laboratories and an introduction to the nursing scope of practice. Of note, is that one of the six early entry to university subjects included in this research is also offered to non-nursing students who have a medical science interest (Human anatomy and physiology - BIO1203). This is considered a course shared across university programs meaning students enrolling in this course may not necessarily have a career expectation / desire to become a nurse. This consideration is explored further in the discussion of this research.

Of importance in this research is to understand the terminology of non-award students. Students enrolled as early entry students are grouped by the university, as 'non-award students', and are not financially charged tuition fees for their first early entry to university course. Students undertaking additional early entry to university courses in later semesters are charged AUD$410 per course, which is approximately 70% less expensive than a commonwealth-supported student enrolment position (i.e., a position where the government pays part of your higher education fees) (USQ, 2018). Students enrolled as a non-award student are completing a subject that does not lead to a formal award (degree) (Australian Government, 2022e). Upon successful course completion (i.e., achievement of at least a pass grade), credit points are provided towards the student's selected degree with a

guaranteed acceptance into university provided (USQ, 2018). What differentiates early entry to university courses from other tertiary entry pathways, is that these courses are not providing preparation for future study; instead, they are the same university course undertaken by other undergraduate students enrolled in that program.

In terms of student support, early entry to university students have access to designated peer support students, who are available for consultation regarding the content and learning objectives of the course; these are called meet-up leaders. Early entry course meet-up leaders are available to mentor early entry students. They provide opportunities for students to develop their learning skills and increase their knowledge and understanding of the core concepts in their chosen course under the support from another student who has previously completed the same course (USQ, 2018).

The early entry to university course also hosts an interactive online early entry to university course student orientation where students explore the learning management platform (USQ StudyDesk) and discuss student support services such as the library, study help, and available health and wellbeing services (USQ, 2018).

4.3 Population and sample

4.3.1 Population

The population in this study included high school students eligible for admission into a university subject. High school students currently

enrolled in years 10, 11 or 12, at either a regional, rural, or remote high school (i.e., either a public or private secondary education facility) are eligible for enrolment into an early entry to university subject. Students can enrol in the early entry to university subject during either semester one, two or three and need to have a minimum of a B grade ranking in their high school academic studies (USQ, 2018). This indicates that the student is above the expected schooling academic standards (Queensland Government, 2021).

In 2017-2019 there were 870 high school students enrolled in the early entry program across university courses (USQ, 2020a). There are 111 high schools from surrounding regions that had registered students enrolled in an early entry course as of 2020 data (USQ, 2020a). In 2021, there were 48 students enrolled directly into a course offered by the School of Nursing and Midwifery (USQ, 2021a). The entry requirement for an early entry course at the university included high school students starting from year 10 (third term) to year 12 students.

Inclusion eligibility for this current study included the successful completion of one early entry to university course offered in the Bachelor of Nursing within the previous six months.

4.3.2 Sample size

The sample size in qualitative studies can vary. Moreover, there are no general numerical directions in qualitative research (Guest et al., 2006), or clear rules or methods guiding the researcher on how to obtain

a properly sized sample (Boddy, 2016; Guest et al., 2006). Participant sizes in qualitative studies tend to be small (Vasileiou, 2018) and generally contain enough participants to achieve saturation of the data, resulting in no further identification of new thematic categories useful for answering the research question (Mocănașu, 2020). According to Fawcett and Garity (2009), an acceptable sample size is one that fully addresses the study topic while also obtaining examples that are rich in data. This means that any proposal outlining qualitative description can consider even estimated sample numbers. It was estimated that at least five to 10 participants would be used for this study. Whilst not focused research with the participants being high schools students, a systematic review conducted by Hennink and Kaiser (2021) confirmed qualitative studies can reach saturation at relatively small sample sizes. This sample size has also been estimated based on the small number of students identified as HeadStart students enrolled within the eligible early entry to university courses.

4.3.3 Sampling

Participants for this study were recruited using homogenous purposive sampling. According to the qualitative descriptive approach, the phenomena of interest is investigated with participants in a specific setting while the research question focuses on the significance of the experience (Bradshaw et al., 2017). Participants who have the necessary understanding and experience of the phenomenon under study make up

a purposive sample (Bradshaw et al., 2017). Homogenous purposive sampling focuses on one particular subgroup in which all the sample members are similar (Andrade, 2021). In this research, the participants shared a similar age and background i.e., being current high school students. Selecting high school students to discuss their experiences and perceptions of a nursing related early entry to university course, it is only suitable to sample those participants who have had this experience. Homogeneous purposive sampling is used when the goal of the research is to understand and describe a particular group in depth in order to provide as much insight as possible (Palinkas et al., 2015).

4.4 Recruitment and consent

Participants were recruited via a personalised invitation, distributed through the university Student Attraction and Communication Team. The invitation letter was accompanied by a participant information and consent form for both the participants and the parents or legal guardians. The participant information form included a hyperlink that the participant (and parents) was required to indicate their consent to the research study and nominate a convenient time to participate in an interview. The participant information and consent form can be found in Appendix C. the parent information and consent form can be found in Appendix D.

4.5 Data collection

Consistent with qualitative description , the use of semi-structured

interviews was used (Doyle et al., 2020). Semi-structured interviews are a primary source of data collection in qualitative description research as semi-structured interviews invite research participants into an ongoing conversation (Doyle et al., 2020) and allow for researchers to acquire in-depth information and evidence from interviewees while considering the focus of the study (DeJonckheere & Vaughn, 2019). Through encouraging depth and rigour, semi-structured interviews allow the researcher to explore concerns with participants and foster the creation of new thoughts and issues (Bradshaw et al., 2017; DeJonckheere & Vaughn, 2019; Doyle et al., 2020).

The advantage of semi-structured interviews is that they permit variability and flexibility as participants become permitted to disclose their individual and personal ideas, thoughts and opinions (DeJonckheere & Vaughn, 2019). The intention of semi-structured questions was to build rapport that inspired participants to recount their stories and talk about their encounters, thus sharing rich and significant data (DeJonckheere & Vaughn, 2019; Liamputtong, 2017). Other question structures, such as structured interview questions, would not be appropriate for use in this study as they could provide too much bias from the researcher, as the use of these questions does not allow for any of the lived experience to be expressed as they tend to limit participant responses (DeJonckheere & Vaughn, 2019). Similarly, an unstructured interview should be based on the type of participant (DeJonckheere & Vaughn, 2019).

All interviews commenced with a brief description of why the research

was being conducted and gaining an understanding of the participant's demographic background and exposure to the university subject. This direction was taken to establish trust and rapport with the participant. Research indicates that once trust and rapport are built between the participant and the researcher, a sense of connection is formed which encourages a degree of comfort allowing questions to be answered more openly and honestly (Prior, 2017; Zakaria & Musta'amal, 2014). Tinto's Student Integration Model was used to inform this qualitative study with semi-structured interview questions derived from this model's features. Appendix E displays the semi-structured questions asked during the interviews.

Probing was used as required to prompt participants to provide more detail on their experience so that clarity of understanding was able to be determined. Probing involves asking follow-up questions during interviews, particularly at times when a participant's response is not understood or may need further clarity (Houtkoop-Steenstra, 1996; Liamputtong, 2013). At times, specific questioning was required to enable the researcher to understand the context of the words used by the participant. It was this type of questioning that enabled clarity of data to be assured (Liamputtong, 2013).

Interviews were conducted at a time convenient to the participant, which often involved conducting interviews outside of school hours including weekends, and online via zoom due to COVID-19 restrictions. Interviews were via zoom and lasted around 35 minutes to one hour.

Interviews were digitally recorded, to ensure a complete transcript was achieved. For participant confidentially to be maintained, participants were de-identified in the transcript. The recordings were transcribed verbatim with any identifying material removed and pseudonyms generated.

4.6 Data analysis

Thematic analysis was carried out by the researcher to extract themes from the interview transcripts. To find and examine patterns of significance in interview data, a theme analysis strategy was used (Braun et al., 2019). During the data analysis, the researcher was immersed in the data, listening to the interviews, reading, and rereading the transcripts, then conducting a line-by-line analysis that allowed themes to be identified. Content and thematic analyses are the most commonly used data analysis techniques in qualitative description (Doyle et al., 2020). According to Vaismoradi et al., (2013), there are differences between the two approaches, with thematic analysis offering a richer and more detailed, purely qualitative account of the data while content analysis only allows for quantitative analysis. Qualitative description has the advantage that data analysis is more likely to stay true to participants' narratives and help ensure that the researchers' own views are transparent (Bradshaw et al., 2017). Repeated readings of the transcripts by the researcher allowed themes to organically develop. It is for this reason that a reflexive thematic analysis, following the steps outlined by Braun and Clarke, was followed to analyse

this data (Braun & Clarke, 2006; Braun & Clarke, 2023). Thematic analysis endeavours to characterise themes from interviews through cautious examination (reading and re-reading) of the interview transcriptions (Liamputtong, 2017; Tuckett, 2005).

There are six steps involved in undertaking Braun and Clarke's thematic analysis. The six steps include (1) familiarising yourself with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing the themes, (5) defining and naming themes and (6) producing the report (Braun & Clarke, 2006). Step one involved reading and re-reading the data, noting down initial ideas and becoming familiar with the data (Braun & Clarke, 2006). Prior knowledge of the data, as the primary interviewer, contributed to this familiarity. The second step was generated from an initial list of ideas about the content of the data and the interesting details identified. During this step, the participants' experiences were analysed to establish suitable coding and the initial construction of themes. The systematic way of organising and identifying meaningful elements of the data and how this then relates to the research question is called coding (Braun et al., 2019; Nowell et al., 2017). It is important in this phase to ensure that all actual data extracts are coded and then collated together within each code (Braun & Clarke, 2006). This is achieved using a semantic approach (looking at what participants say) (Braun & Clarke, 2006; Braun & Clarke, 2023). Coding set the stage for detailed analysis later, by allowing the researcher to reorganise the data according to the ideas that had been obtained throughout the process (Lester et al.,

2020). This step resulted in comprehensive codes of how data answers the research question. Step three was to collate codes into potential themes, gathering all data relevant to each potential theme (Braun & Clarke, 2006). The process of reflexivity should be described before the themes and coding processes. Researching oneself and considering one's personal values and beliefs as a researcher and as a member of the investigated group is what is meant by reflexivity (Alvesson & Skoldberg, 2017; Mauthner & Doucet, 2003). The researcher used reflexivity throughout the research process to increase dependability and trustworthiness. The researcher did this by placing themselves in the participants' social and emotional contexts (Alvesson & Skoldberg, 2017; Mauthner & Doucet, 2003). According to McGhee et al., (McGhee et al., 2007) reflexivity prevented the researchers' prior knowledge (in this case being a nursing academic however not having any contact with the participants prior to interview) from distorting their impressions of the data by adopting an ongoing and self-critical posture on the participants' beliefs and sentiments. This is important to consider with the generation of codes and themes. To ensure that the main themes revealed could be determined first by a manual process of naive reading followed by a process of structural analysis, data analysis involved both a manual and cross-checking phase (Byrne, 2022; Sundler et al., 2018). The data was manually coded without the use of software due to the manageability of the data that was gathered. In this research the cross checking of information involved research supervisors. Codes and emergent themes

were discussed and refined with my supervisors to aid in identifying bias in the interpretation. Through this process of cross-checking, the themes were found to be in accord, and the data analysis procedure was confirmed. From these codes, subthemes and then themes were identified. The codes were then organised into overarching themes (subthemes) that received attention throughout each interview and throughout the entire data set. The outcome of this step was to produce a list of themes for further analysis. Step four was where a thematic 'map' was generated, identifying if the themes worked in relation to the coded extracts (Braun & Clarke, 2006). This process involved moving back and forth between the acquired data was necessary in order to derive codes, grouping and regrouping categories and concepts while allowing for new ones. (Braun & Clarke, 2023; Braun et al., 2019). Data were coded inductively i.e., emergent themes in the qualitative data, to generate an inventory of subthemes to outline the experiences participants had when undertaking a university subject. Emergent themes were discussed by the research team and refined during the coding process to ensure consistency. Themes are conceptualised as patterns of shared meaning across data items, underpinned or united by a central concept, which are important to the understanding of a phenomenon and are relevant to the research question (Braun et al., 2019; Lester et al., 2020). This step allowed for the recognition of how themes were patterned together to tell an accurate story about the participants experiences. Subthemes, such as "employment related adjustments" and "learning context adjustments"

under “making adjusting,” helped to give more descriptive detail about the specific kinds of adjustments that were needed which were heard from the participants. Step five incorporated an ongoing review of the themes generating clear definitions and names for each identified theme (Braun & Clarke, 2006). This step encouraged a comprehensive analysis of the themes and what they contribute to the research. The codes, sub themes and themes that emerged throughout this phase of the analysis process provided a sense of trustworthiness. All the data was thoroughly analysed, resulting in the compilation of subthemes, and themes were ultimately created after the researcher highlighted sections of the transcripts that produced related content. Following their ongoing evaluation, highlighting, and compounding into significant components, which resulted in the identification and generation of the final set of themes, the themes were then examined to make sure they appropriately represented the data. The themes that emerged reflected the participants' experiences as a whole and had the feel, expression, and understanding that the participants had shared during the interview process. Four key themes were identified from thematic analysis of the interview data: (1) making adjustments, (2) getting a taste of university, (3) discovering self and (4) empowered independence. The final step involved the final analysis of selected extracts, relating them back to research question and producing a scholarly report of the analysis (Braun & Clarke, 2006). Details of codes, sub-themes and themes can be found in Appendix F. Appendix G represents an example of thematic analysis of the research

data, using Braun and Clarke (Braun & Clarke, 2023).

4.7 Ethical considerations

4.7.1 Confidentiality

The use of pseudonyms was used to provide anonymity to the participants. Information was stored and maintained within a password-protected electronic format with access only by the researcher. No information on participant identities were released at any time to any unauthorised third parties. The verbally recorded electronic files remained stored in a separate file, password-protected again with access only by the researcher.

4.7.2 Participants as minors

Ethical standards are mandatory to safeguard participants' confidentiality, wellbeing, emotional safety, and interest. Undertaking a research study with participants considered to be minors, entailed many considerations with respect to ethics. As participants were under the age of 18 years old, parental consent was obtained before being enrolled in the study.

Researchers must respect the developing capacity of children and young people to be involved in decisions about participation in research (NHMRC, 2007). Informed consent to participate was acquired prior to the commencement of the research and was reconfirmed preceding an

interview. Informed consent has been described by Liamputtong (2013), as '... the provision of information to participants, so that the individuals can understand the information provided, and make a voluntary decision whether to participate or not'. Voluntary choice extends beyond the initial, explicit agreement to participate in research to the sometimes implicit and sometimes explicit agreement to continue participation on the basis of an understanding of one's right to withdraw (Field & Berman, 2004). It was clearly articulated in writing to the participant that there would be no distinct academic benefit towards their grades by being (or not being) a participant in this research. Prospective participants were notified that they could withdraw at any time/stage without consequence or penalty.

As an incentive, participants were provided with an AUD$25 movie voucher after they had been interviewed. Fair compensation and the awarding of incentives as inducements for participating in research are permitted under the National Statement on Ethical Conduct in Human Research (NHMRC, 2007). However, researchers must exercise caution to make sure that such compensation would not be so substantial as to be viewed as an inducement to participate in their research by encouraging a participant to take risks and/or potentially undermining voluntary participation in the research (NHMRC, 2007).

Ethics approval was gained from the University of Southern Queensland Human Research and Ethics Committee (H21REA154 v1). Appendix H provides a copy of the letter of ethical approval from the USQ HREC.

4.7.3 Trustworthiness

This research demonstrated a rigour and credible approach by ensuring an honest and accurate reflection was presented from the true voice of the participants. Participants were offered to review a transcript of their verbatim interview. Research rigour can be illustrated as including aspects such as transferability or applicability, confirmability, dependability, credibility and authenticity (Liamputtong, 2013). Transferability or applicability relates to the degree in which findings from the research could be generalised to the theoretical context (Liamputtong, 2013). During this research, this was undertaken through the consideration of both the setting where the research took place and the purposive sampling. Dependability refers to the accuracy and consistency of data collection and data analysis (Liamputtong, 2013). During this research, this was undertaken using semi-structured interviews with probing when needed and following Braun and Clarkes step by step approach to thematic analysis. Confirmability relates to the degree to which findings can be corroborated by others (Liamputtong, 2013). During the research, this was achieved with verbatim quotations from the participants and through requesting the participants to review the interview transcriptions. Additionally, this was also completed during fortnightly check in meetings with research supervisors where data was reviewed and reflected upon.

4.8 Conclusion

This chapter has outlined the methodological approach undertaken for this research. a qualitative description approach was used to explore the experiences of high school students enrolled in an early entry to a university course. Sampling was based on a homogeneous purposive sampling approach with recruitment being via personalised invitation. Data was collected using semi-structured interviews and probing when needed and was analysed by thematic analysis, following Braun and Clarke's six steps. The key findings from the participants are discussed in the next chapter.

CHAPTER 5: FINDINGS

5.1 Introduction

The experiences of high school students enrolled in an early entry to a university course were examined using a qualitative descriptive approach which was described in the preceding chapter. A homogeneous purposive sampling strategy was used to recruit participants and semi-structured interviews were used to obtain the data, and Braun and Clarke's (2006) six steps for reflexive thematic analysis were used. As discussed in the methodology chapter, these findings will be discussed in lines with qualitative description. This chapter provides the experience of six participants, aged 15-16 years who undertook one (or more) early entry to university courses. There were four main themes that generated from the data including (1) making adjustments, (2) getting a taste of university, (3) discovering self and (4) empowered independence.

5.2 Participant demographics

A total of six participants were interviewed for the study. Participant demographics include age, gender and parents' level of education. There were five female participants and one male participant. Participants' age ranged from 16-17 years at the time of the interview. Most of the participants had at least one parent who held a tertiary qualification. All participants lived within a 30 km radius of one of the university campuses. One participant had identified as being home-schooled. For participants' age, as the time of completing the early entry

to university subject, the year they were in at high school when completing this study and their parents' education levels, see Table 2.

Table 2

Participant Characteristics

	P1	**P2**	**P3**	**P4**	**P5**	**P6**
Sex	Female	Female	Female	Female	Female	Male
Age at time of course completion	15	15	16	16	17	15
Nursing related early entry to university course completed and Study period	BIO1203 (semester 3)	BIO1203 (semester 3)	BIO1203 (semester 3)	BIO1203 (semester 3)	NUR1100 (semester 1)	BIO1203 (semester 3); NUR1102 (semester 1)
Current early entry to university course enrolled in	CHE1101	CHE1101	CHE1101	CHE1101	CSC1401	PMC1000
Other completed early entry to university course / s		SCI1901	CSC1401			
At least one parent university educated	Yes	Yes	Yes	Yes	No	Yes
Distance from home to uni	30km radius	30km radius	30km radius	30km radius	30km radius	30km radius
Year in high	Year 10 (going	Year 10 (going	Year 11 (going	Year 11 (going	Year 12	Year 10 (going

school when taking course	into year 11)	into year 11)	into year 12)	into year 12)		into year 11); year 11
Enrollment method	External	External	External	External	External	External

There were several reasons why the participants completed a university subject including timing, opportunity and strategic decision making. A commonly reason for completing the course over the semester three timeframe was due to a more time being available to the participant, due to a less conflicting study schedule without the need to balance high school and higher education. Over half of the participants stated that they wanted the opportunity to explore the workload of higher education studies to explore the timing and dedication needed to complete this level of study. Additionally, participants stated they completed a university subject to explore if they would enjoy their potential career pathway before committing to enrolment into the Bachelor program. On the other hand, some participants stated that their reasoning for completing a university subject was completely strategic. They were aware of what career pathway they wanted to follow beyond high school and chose courses based on what pre-requisites were needed for enrolment at tertiary education after high school graduation. Additionally, through the completion of a university subject, their ATAR level was increased, which was also an influencing factor that was echoed from the participants.

Participants acknowledged several influencing people in making the decision to complete a university subject. These included school personnel such as career guidance officers, parents and students at their high school that were in a higher grade and had previously completed a course. All participants stated their parents / carers were supportive of their decision to undertake a university subject. From this, key themes were identified.

5.3 Key themes

There were four main themes that generated from the data including (1) making adjustments, (2) getting a taste of university, (3) discovering self and (4) empowered independence.

5.3.1 Theme 1: Making adjustments

The theme, 'Making Adjustments' considered the idea that participants involved in undertaking a university subject acknowledged that they needed to make changes to their everyday life, whilst studying both their high school qualification and a university subject. Adapting to the university environment required participants to make significant adjustments. Adjustments were made by the participants when they gave up something to prioritise their early entry related study. An example of an adjustment that was made by the participants included a decrease in high school subjects and a reduction in extra-curricular activities such as piano lessons and sporting commitments. Another adjustment that was

discussed by participants included work related employment commitments including paid and unpaid work.

Employment-related adjustments.

Employment-related adjustments can be described as the modification directly to the number of hours or days of the week dedicated to working before enrolment in the early entry to university course. Employment-related adjustments commonly involved decreasing or limiting set working hours or availability to work additional hours. Employment adjustment was related to both paid and volunteer work. One participant outlined the realisation of the university workload necessary during a university subject, which led to them needing to decrease their paid employment:

> *I was hoping to work over the weekends, but I had to really drop how much I was working on the weekend, or I was just too behind with where I was hoping to be for the HeadStart course based on the study schedule planner.*
>
> (Participant 1)

For another participant, they had to make the decision to give up paid employment altogether, as illustrated by the following: *'Everything [part-time employment] stopped when doing the HeadStart course as all my spare time would mostly go to study'* (Participant 6).

Another participant identified that with forward planning, their part-time employer allowed for working adjustments to facilitate early entry related study:

> *I would make sure that I worked when assignments weren't due also, so I wasn't stressing about having to do the assignment when I was at work. They were really good with dropping my hours. I didn't have the pressure to do work, school and uni [sic] all at the same time.*
>
> (Participant 3)

All participants suggested that although having to reduce or cut work hours altogether was unexpected, it was necessary for them to prioritise their time for early entry to university course study requirements.

School-related adjustments.

School-related adjustments related to juggling school subjects alongside university subjects. In the first instance, participants had to make changes to the number of high school subjects they could take so the student could fit in a university subject. All participants stated they were able to replace a high school subject with their early entry to university course for the semester they were completing the early entry

to university course, with one participant further stating in doing this *'...then during the teaching period each day I had time to work on my uni [sic]'* (Participant 3).

Despite the ability to substitute a high school subject with a university subject, participants highlighted the challenges with competing schedules. One participant mentioned they were unable to attend the scheduled live online tutorials due to a conflict in teaching schedules stating, *'Classes [tutorials] were during school time'* (Participant 6). Another participant added that tutorials were often *'conveniently recorded'* however they *'…were unable to contribute to the live conversation'* (Participant 5). The participants suggested that although they may not have been able to attend live tutorials due to conflicting study schedules, adjustments to high school subject enrolments allowed them to prioritise time to complete their university course.

Extracurricular-related adjustment.

An adjustment to extracurricular activity relates to the choices students made with regards to activities in which they were involved that did not fall within the scope of the regular school or university curriculum, whether school-based, community-based, or private tuition. Participants made comments relating to the inability to complete both the university subject and their extracurricular activity at the same time, and often found themselves needing to choose between the two: *'I learn piano, but I didn't take that back up this year because I wanted to do the HeadStart*

course and just wouldn't have the time for both' (Participant 5). Participants expressed an awareness of the competition for time between their outside of school activities and undertaking the university course, acknowledging that they could not simply add the university course to their already busy lives: *'I do choir, netball and touch football but it was a bit busy with study and my sports so I had to choose, and I couldn't do it all and focus on my study, so my study won'* (Participant 2). Another participant described a similar experience of the necessary adjustments and changes to extracurricular commitments, to prioritise their university subject study, *'Everything really stopped outside of normal school as all of my spare time would go into study'* (Participant 6). In most cases, participants prioritised university study over selected extracurricular activities, reflecting a conscious decision to give up something to carve out time dedicated time to the university subject.

Learning context adjustment.

Learning context adjustment means changes needed to adapt to the way in which the education is delivered and assessed. Specific to this study, these adjustments included swapping from a face-to-face teaching delivery to an online teaching delivery, along with assessments needing to be completed online within a set timeframe. All participants except one, stated that they had had a brief exposure when at high school of online learning, stating their experiences were no longer than a few weeks in length. The participant who had no previous exposure to online learning

was unsure of how this teaching was delivered. They commented: *'My school didn't do online learning, so it was good to see how that worked'* (Participant 3). One participant made a comment on the learning context adjustment regarding the 48-hour online examination window period that was requested for their university subject. They made the comparison to their current high school examination period which had set classroom times to complete this:

> *You could complete your quiz by a set timeframe, and it isn't like school where during your science class you have to do the exam no matter what. I completed it after I had dinner one night, so I didn't have to miss any school to do it.*
>
> (Participant 1)

Whilst not all higher education assessments are assessed in an online capacity, participants made comment about this being the case in their chosen university subject. One participant commented on the online examination delivery suggesting preplanning was needed for when they would complete this examination due to possible internet issues they may have if completing the examination at home:

> *There was an online exam which I haven't completed an online exam before so it was scary with it not being due on the one day so I had to plan to do it during one of my uni [sic] class*

times at school so I knew the internet would be good and is more stable than my home one.

(Participant 5)

One participant stated when they completed their assigned online examination that both of their parents were involved in this process and stated, *'Dad had all the computer worked out and we knew the university's ICT [Information and Communications Technology] number if we had troubles and mum helped me organise my study notes because it was an open book exam'* (Participant 1). From this participants experience, parental assistance was needed in several elements, indicating that family support was important University learning offers the student more independence and autonomy. Unlike high school, the higher education environment has a self-directed variability on the amount of time spent studying the content offering the student flexibility. This level of independence, by contrast, was described by one participant as a daunting experience and something that was very unfamiliar to them:

At High School you get directed to what to study by a certain date. At uni [sic] you have everything on the StudyDesk and then you either do it or you don't. The lecturers are not pushing you to do it – it is up to you. It was quite daunting in the beginning as it was up to me to do the study each week.

(Participant 1).

From this, it was clear from another participant that independence and autonomy allowed them to control the amount of study they completed each week on their university subject: *'I liked being my own boss with studying. I liked that I was in control of how much I did each week'* (Participant 3). Another participant welcomed the independence that was being offered however did acknowledge that this did take time to get more familiar with:

> *It was different how you don't see your teachers every day. If nothing is scheduled, then you don't join a class for the sake of joining a class as there is no class. This took a bit to get used to.*
>
> (Participant 4)

Another participant also added the convenience of recorded lectures and tutorials which was not available in their high school education: *'I could watch something multiple times at a time that suited me, until I understood it. I wish this was at my school now'* (Participant 3). Most of the participants made some comments regarding the flexibility and independent learning context that they needed to explore when completing their early entry to a university course.

Communication to students completing higher education may be delivered in a variety of ways and can differ between tertiary facilities. At

the study site, communication to students was via a designated student email regarding specific enrolment concerns or campus related maintenance and through an online platform called Moodle. Moodle is a online learning management system (LMS) which is commonly used in STEM related education (Gamage et al., 2022). This platform is a form of asynchronous communication with enrolled students through online forums titled announcements which is specific messages from the lecturer and discussion boards for a more asynchronous communication strategy to be delivered. Specific to this study site, the discussion board is an online space within the university's LMS where students can contribute to discussions on a topic/question set either by the lecturer or another enrolled student. Contributing to these discussion boards is referred to as creating a "forum post". Several participants made comments about the discussion boards. One participant was daunted by this experience and stated, *'Just going through that [forum posts], within the first day there was more than 100 responses, which is a bit daunting – I don't even have 100 students in my grade at school'* (Participant 1). Whilst a possible daunting experience for one participant, another participant stated that the forums were *'convenient'* (Participant 3), further stating:

> *It was also good that on the discussion boards if you posted a question that you would receive several responses from other students really quickly which also made me feel at ease that it wasn't just me that maybe didn't understand something. Other*

students had similar problems as me and they posted their questions and then either other students replied or the teacher, so the question was then answered for me.

(Participant 3).

With respect to adjusting to when to study, most of the participants chose to undertake their early entry to university course over the semester three period the main reason for this was possibly more time to study as they did not have to undertake their high school and early entry program study concurrently. According to one participant the main reason for completing their early entry to university course over semester three was because, *'I thought it'd be too much work and stress'* (Participant 2), with another participant stating this was a strategic timing-related decision and stated *'During semester 3, I was on holidays from school, and I knew I had more time'* (Participant 1). Another participant stated it was a simple reason for doing their early entry to university course over semester three as they *'…didn't want to feel I had to choose what studying I had to do'* (Participant 4). Most participants suggested that learning context-related adjustments were necessary to study the early entry to university course like other enrolled students. They outlined possible daunting and stressful situations that were experienced when they were exposed to a more flexible and self-directed online learning study platform.

5.3.2 Theme 2: Getting a taste of university

The theme 'Getting a Taste of University' considered the idea that participants involved in undertaking a university subject couple sample and experience key aspects of what occurs at university including a preview of workload demands, campus social interaction and associated financial considerations. Participants were asked in the interview '*What did you like best about the course?*' and '*How often they come onto campus?*'.

Workload demands.

With a more flexible and self-directed learning context, the workload requirements for higher education can be perceived as more than that of high school education. This experience was a common theme identified among participants. It was evident that several participants completed the university subject to experience the workload related to the university subject. One participant stated: *'I just wanted to get a little taste about what university is. I wanted to understand what the workload was and how much effort you had to put into it'* (Participant 5). One participant alluded to this concept further and wanted to compare the workload with the possibility of working at the same time to prepare themselves to see if this was possible when they enrolled into full time study: *'I know roughly how much time I have to study for when I am there [University] full time so I can see if I can work part-time at the same time as studying'* (Participant 2).

Another participant acknowledged that being exposed to university life has helped them prepare for the time after their high school graduation, commenting on feeling more prepared for future enrolment to higher education studies: *'I feel more prepared for uni [sic] after doing HeadStart. I know the workload now'* (Participant 3). Those participants that commented affirmed the notation that early exposure to the higher education workload can provide preparation for students who wish to continue with their education beyond high school.

Campus social integration and interaction.

Campus climate includes the experience of individuals and groups on a campus—and the quality and extent of the integration and interaction between those various groups and individuals and the higher education environment. It is important that future students can experience campus social integration and interactions including on campus residential schools and orientation experiences. If the university subject had a mandatory on campus residential school, then all students needed to attend, and in the case of nursing residential schools, all students are required to wear a clinical uniform.

A sense of belonging was expressed by participants appearing in the same uniform during the residential school. One participant stated: *'I felt like a nursing student, as I had to buy the USQ clinical shirt and the navy pants and attend the res school wearing them, just like everyone else'* (Participant 5). When discussing their experience of the residential

school, another participant stated: *'We had to wear white lab coats and eye goggles like everyone else'* (Participant 4).

Social interaction was experienced through the attendance at orientation sessions. Over half of the participants attended an online orientation session, which lasted around two hours. Normally within the orientation session, academic staff are introduced, students can meet other students and students can become familiar with campus services. One participant stated, *'Orientation was really good because they walked through the StudyDesk and where to find assessments and they also went through how to find things through the online library which was really good for preparing me for the course'* (Participant 3). Half of the participants stated one or both of their parents attended the online orientation session with them. Parental attendance may have been extended due to the nature of the early entry student profile and the recognition that parents need help also with managing the transition from high school into university life. One participant stated:

> *Mum was also there online with me [at orientation] and was able to ask questions so it wasn't just the students who had an input which was good as mum is involved in my study just as much as I am.*
>
> (Participant 1)

Despite the COVID-19 restrictions and direction to move to online teaching during 2020, not many of the participants commented about this. One participant made the comment about their desire for social interaction: *'I think I would have gone if there were on campus sessions as it would have been a good opportunity to just meet other students that are the course'* (Participant 2). Another participant made this comment:

> *I would have liked more time on campus. When I was on campus for the 3-day res school, I looked around the campus and in the library. I wish there was more on campus activities however due to the pandemic [COVID-19] I understand why this hasn't occurred.*
>
> (Participant 5)

Those participants that commented confirmed that social integration and interaction can provide preparation for students who wish to continue with their education beyond high school.

Financial considerations.

The financial consideration of undertaking an undergraduate degree can be a costly experience. Students enrolled as early entry to university students at this organisation are not charged any tuition fees for their first university subject and subsequent subjects are charged a lower fee. Almost all participants made the comment that the first course was

'…free'. A participant took advantage of this cost-effective measure to explore university options and completed three university subjects in total, stating *'It was a good opportunity to try it cheaply and explore what I wanted to pursue cheaply before committing to one career'* (Participant 2).

Additionally, to a 'cheaper option' to explore a university subject, other participants commented on the financial impact that completing a university subject could have on their future higher education studies. These participants enrolled in their university subject strategically, saving money by doing the subject at a discounted rate than when they are enrolled in the program as a university student: *'Doing it now meant I did not have to pay a fortune later'* (Participant 3). With most participants commenting on the financial considerations associated with undertaking a university subject it should be considered a cost-efficient measure in future studies.

5.3.3 Theme 3: Discovering self

The theme 'Discovering Self' considered the idea that participants involved in undertaking a university subject were part of an academic strategic endeavour, undertaking subjects they needed to fulfil their future career or used this experience to explore possible career pathways.

When completing a university subject, students had the opportunity to immerse themselves in their area of study before embarking on their full or part-time higher education journey. It is important that prospective

students can explore their future career decisions through self-discovery. Of the six participants, half of them chose their university subject strategically, with their clearly identified career in mind and enrolled in necessary university courses needed to achieve this. The remaining participants either explored their options completely as they were undecided about their future career direction or wanted more experience in one career pathway and were seeking clarification. One participant had intentions of a medical career and stated, *'I want to do medicine at uni [sic] later and I didn't understand what it involved so this helped expose me to a taste of uni [sic]. I wanted to get a feel for different subjects'* (Participant 1). Another participant with a similar career aspiration stated:

> *I have wanted to be a surgeon since I was in year 8 at school, and I have been picking my subjects for school based on what I need to get this, so I thought why not get experience in these fields that I'm already interested in.*
>
> (Participant 6)

Further to this, another participant used their selected university subject as a self-discovery to seek confirmation into their career pathway before committing to the degree and stated: *'I did the course because I want to do medicine and I wanted to make sure that medicine is what I wanted to do'* (Participant 4). A participant also alluded to a similar self-discovery and stated, *'before getting into a degree I just wanted to see if I*

would actually enjoy going down that path before pursuing it as a career' (Participant 2).

Whilst one participant stated they knew they had always wanted to be a Nurse; other participants were still undecided about their future career pathway and chose their early entry to university course in a more exploratory manner, stating *'HeadStart kind of widen my options, test out to see if nursing's good… so I thought I'd give that a shot'* (Participant 6). Another participant had similar intentions stating: *'it gives you some good ideas about possibilities for life after high school. It also allowed me to start understanding my passion and what it may cover regarding the human body'* (Participant 5). All participants commented on their intention to discover their future career pathway, whether this is through a more strategic approach or a more exploratory or clarification approach.

However, there were some participants who used their enrolment in a university subject as more of an exploratory manner and used this experience to explore future career options as their current career decisions was unknown:

> *I really liked how you're allowed to taste test the course before putting all your eggs in the basket kind of thing; so, if I don't like it then I haven't wasted a whole uni [sic] semester where I am then put back by one semester in my program.*
>
> (Participant 3)

Whether the decision for their university subject was a strategic decision, one of self-confirmation or a more exploratory decision, the completion of this subject aided the participants to be more prepared for their future career planning.

5.3.4 Theme 4: Empowering independence

Empowering independence can be described as giving someone the authority to undertake a task that is free from control and influence from another person. The theme 'Empowering Independence' considered the idea that participants involved in undertaking a university subject wanted to be acknowledged just like any other student enrolled in the course. Participants were asked in the interview '*How did you first hear about the HeadStart course*?', '*Did you know anyone else doing the course at the same time as you?*' and '*Why did you choose to complete a HeadStart course?*'.

Students undertaking a university subject are faced with opportunities to direct their own learning and decision-making than when in high school. However, this can only occur if the social and academic environment appears inclusive. All enrolled students within the course were given the opportunity to introduce themself using the Moodle discussion board platform and when in a face-to-face capacity at the residential school activities. One participant stated:

I didn't want that HeadStart label. I didn't say that I was a HeadStart student [during residential school] because I didn't see that as important for my peers to know. I thought that they should see me as a student, not a kid doing this course. I didn't want any special treatment or extra attention.

(Participant 6)

Another participant shared a similar statement about the residential school they attended, *'I felt like the other students didn't care that I was a HeadStart student (well they never said anything to me to change that thought) – I felt like we were all students doing the course together'* (Participant 4). One participant similarly shared a comment related to this theme and their sense of inclusion as a university student in general and not necessarily an early entry student:

I may have been younger in age, but I was still considered a student enrolled in the course and never got any special treatment or anything which I think is good to prepare you to being a real full-time uni [sic] student. I just felt like any other uni [sic] student to be honest.

(Participant 1).

On the other hand, another participant who introduced themself during the residential school as an early entry student, provided the

reason for identifying as this cohort in their introduction as to avoid this being related to avoiding any possible awkward social situations that may occur during the residential schools' activities:

> *I didn't introduce myself as a headstart student so others would baby me or anything, more because I didn't want them to ask how old I was or ask if I want a drink when we went for lunch.*
>
> (Participant 2)

Students attending BIO1203 related residential school activities were instructed to sit at tables of up to six people. Comments about seating arrangements within the residential school were described as *'…an open floor plan'* (Participant 6) and most participants stated that could sit *'…anywhere within the room they wanted to'.* One participant shared a different experience, alluding to mixed feelings about being identified as an early entry student and they were requested by the academic team to sit only with other early entry students. The participant expressed a level of comfort with sitting with other early entry students however also had an inner conflict with the need for inclusion:

> *I attended a res school with other uni [sic] students and there were a few other HeadStart students (that I didn't know) in the class and the teacher asked if all the HeadStart students*

could sit together in case we needed any extra assistance so the teacher could just explain it once, which I thought it was weird because what if other students also had the same question? To a degree it felt good to be with other students my own age but I also wanted to learn from others so I wouldn't have minded sitting with other uni [sic] students and not at a table with just headstart students.

(Participant 3)

One participant felt integrated within their subject, and a sense of belonging was often derived through feeling connected with others on their course:

In my class there really was a mix of just finished high school students and mature aged students, so it was good to see everyone in the room wanted to do nursing. Once we introduced our self an older lady, maybe in her 40's really worked with me when we had to do the practice, so I felt like I had a mum figure looking out for me during the res schools which made me feel really good and part of the team.

(Participant 5).

One participant felt empowered with the need to critically think and problem solve themselves. They compared the level of independence

provided through higher education goes far beyond the level at high school:

> *If I didn't understand something I couldn't just put my hand up and say 'can you explain this? I had to go through the textbook and find a different way that explained it or ask a question on the forum. This empowered me to search for the answer myself.*
>
> (Participant 1)

Another participant expanded on this sense of independence and their ability to oversee their own learning and stated, *'I really appreciated being treated as having my schooling as my responsibility instead of just a task dolled out'* (Participant 6). Most participants expressed the desire to be considered like any other student enrolled in the course and self-identified as any other student enrolled in the course.

It was clear from the participants that a sense of belonging and empowered independence allowed the participants to be socially more prepared for future tertiary study.

5.4 Conclusion

This chapter has outlined the findings from six qualitative interviews to reveal the experiences of high school students enrolled in an early entry to a university course. Four main themes (1) making adjustments,

(2) getting a taste of university, (3) discovering self and (4) empowered independence, were generated and illustrated with evidence provided from firsthand accounts from the six participants. In the context of this study, these findings identified the link in the preparation that was provided to participants for future higher education study. Whilst there were some differences in experiences and perceptions in those participants included in the study, there were common key findings in relation to preparation and early entry to university subjects. In the next chapter, the findings will be discussed.

CHAPTER 6: DISCUSSION

6.1 Introduction

Registered nurses are a known essential in healthcare particularly at a time when the workforce is depleting. As discussed previously, earlier, to become a registered nurse a degree from university is required. However, it is important more than ever that Australian universities maintain enrolment retention and attrition levels to further contribute to the future nursing workforce. There are numerous research and government reports that support the need for more nursing professionals to contribute to the declining nursing workforce. Literature supports the arguments that known preparatory styled pathways into university, including bridging programs, tertiary preparation programs and enabling programs and the influence they have in preparing a student for tertiary study and degree completion (Asmar et al., 2011; Chambers et al., 2014; Dove, 2017; Habel, 2012; Whannell & Whannell, 2014).

This chapter will discuss the findings from this study and outline implications on the transition into higher education when completing an early entry to university subject. Findings will also be discussed in relation to the application with Tinto's model.

6.2 Transition through a high school students' perspective

The transition for many students from high school to higher education is challenging, as students are confronted with an array of new academic requirements to which they must adjust. It was clear that

participants experienced challenges in trying to adjust when undertaking a university course, while keeping up with high school, work, and extracurricular activities. Students' degree of adjustment to their academic and social environment is believed to significantly influence their decision to persist or drop out of higher education (Tinto, 1993). It is known that there are several adjustments that may be needed when students commit to university study. The findings of this research indicate that through the recognition and acknowledgment of employment, school, extracurricular and learning context related adjustments, preparation for future higher education studies can be generated. These adjustments could contribute to a successful transition process to tertiary education beyond high school. University life brings academic, social, and institutional adjustments that students may not be necessarily familiar with (Wu, 2015). Previous research has shown that a successful transition necessitates effectively navigating academic challenges, such as managing a high workload or developing new academic skills (Thompson et al., 2021). Different types of adjustments can be more common depending on a student's demographics. For example, in a study of 38 students, exploring adjustments to higher education academically, socially and personally, Worsley et al., (2021) found that those participants aged less than 19 years old are more likely to have complex life transitions, financial pressures, and time constraints. Similar findings were additionally supported in a mixed-method study of 198 students investigating personal and emotional aspects of transition into higher

education, with results identifying similar constraints however were more prominent in international students and mature aged female students (Malau-Aduli et al., 2021). The findings from this research support the argument, demonstrating that in undertaking just one university subject, along with full-time high school education, students felt more prepared for the transition to tertiary education and were more aware of the possible adjustments that may be necessary to assist this transition.

As identified earlier, a transition into tertiary education is essential to maintain retention and attrition to contribute to our future nursing workforce. Participants within this study were all considered first year higher education students, with the literature supporting the fundamental impact a first year experience can have on a smooth transition (Tower et al., 2015). Making the transition from a high school to a university learning environment, with its focus on self-responsibility, can be challenging. The findings from this research indicated that as an early entry student, students perceived a positive perception and experience in being able to immerse themselves in their area of study as a continuing part of their own self-exploration and interests, allowing them to be better prepared for tertiary education. This is further supported in the literature through discussions of professional identity.

The safe and effective clinical practice of all health professions depends on maintaining one's professional identity (Matthews et al., 2019). A professional group's shared attitudes, values, knowledge, beliefs, and skills are referred to as its professional identity (Adams et al.,

2006). At this stage of a students' growth, it is crucial to comprehend professional identity as academic institutions have a significant impact on how students construct their professional identities (Matthews et al., 2019). Furthermore, Carvalho et al., (2021) adds that it is conceptualised as the sense of belonging to a certain social community that shares a particular body of technical and professional knowledge. If the higher education facility does not assist the student to form a bond with their profession and contribute to the formation of their professional identity, then retention rates may decrease, which will in turn further contribute to a decrease in the number of qualified nursing workforce.

Three factors that contribute to the development of a professional identity in higher education might be enumerated. Firstly, by identifying as professionals, the students start to acquire knowledge, abilities, attitudes, and values that are comparable to those of other professionals in their field (Carvalho et al., 2021). This was achieved in the study using academic integration through residential simulation related education sessions. Secondly, by doing so, they distinguish themselves from people who do not work in a certain field (Carvalho et al., 2021). This was also identified in the study with the need to wear the uniform as required by the profession. Thirdly, they declare themselves to be part of the group of those who work in that field (Carvalho et al., 2021). The participants' statements about not wanting to be identified as HeadStart students and their feelings of being like any other students enrolled in the course were clear indications of this. They did not want to be singled out as HeadStart

students – they wanted to be "like any other student". A significant portion of the development of professional identity takes place in the first year of the university program (Matthews et al., 2019). It should be considered that through the completion of a university subject that some form of professional identity is fostered. Students are exposed to the foundational skills of their relevant profession at this time. Ashby et al., (2016) examined the effects of various university curricula and their effects on the development of professional identities from the perspective of students.

The right career choice plays a major role in moulding a student's future. One interesting finding from this study, was the number of students who indicated an interest in pursuing a medical career, choosing to undertake a pre-entry nursing course. Subait et al., (2017) states medical related studies are highly competitive and attrition and retention can occur as they adapt to new methods of learning at university (Picton et al., 2022). Additionally, medical degrees are time consuming and expensive (Picton et al., 2022). As they can be highly competitive it could be considered that any incentive to enter university with a guaranteed place is important. Therefore, it can be argued that possibly due to the adjustments identified when undertaking higher education studies and medical studies being competitive in nature that early entry to university subjects may further contribute to retention and attrition levels.

It is also necessary to discuss the eligibility of students who are undertaking an early entry to university subject. As mentioned earlier,

participants needed to have a minimum of a B grade ranking in their academic studies (USQ, 2018). This means that student undertaking the HeadStart course are already at an above-average academic standards and likely to obtain a high ATAR (Queensland Government, 2021). Therefore, this grading system may provide an advantage for those who may be successful in their studies regardless and may possess a range of influencing factors which may contribute to success at university. Nevertheless, a survey of Victorian University students found that many low-ATAR students earned high marks in their first year, especially when they had adequate guidance from the institution in order to succeed (Messinis & Sheehan, 2015). A study conducted in higher education students who received a high ATAR at high school, and enrolled into an information and communication technology degree, did not successfully complete the study (Herbert & Herbert, 2018). The statistical analysis in the study revealed that ATAR may not be useful to forecast graduation or withdrawal rates of students attending university after high school (Herbert & Herbert, 2018). This is not unexpected given that earlier research has demonstrated that non-academic factors, such as workload demands, improper institutional selectivity, the wrong programme choice, and balancing work and family obligations, can significantly affect retention (Adusei-Asante & Doh, 2016; Aljohani, 2016; Szuwarzyski, 2022).

Early entry into university subjects may help students prepare for higher education, but this option is only given to those students who are

thought to perform well academically in a university setting. Equity professionals are aware that while the ATAR is a reliable and good indicator of academic accomplishment, it falls short of capturing all of a learner's abilities, goals, and potential (Messinis & Sheehan, 2015). As discussed previously, ATAR entry pathways sit alongside other entry to higher education pathways and for mature aged students the ATAR entry is not used at all (Joseph, 2023; Open Universities Australia, 2022). According to these estimations, 14% of school graduates are admitted based on ATAR alone, while 60% are admitted based on both ATAR and other criteria (Joseph, 2023). Therefore, this study has found that this questions the possible need to undertake an early entry to university subject when in high school to be then accepted into university.

6.3 Tinto's student integration model

Student preparation, particularly regarding higher education workload requirements, is one factor that could determine whether an individual experiences the transition as positive or negative. Participants from this study identified that in knowing the workload demands they were able to feel better prepared for when they graduate from high school and enrol as university students. Within Tinto's Student Integration Model academic integration and social integration may have a positive effect on the students' later goals and institutional commitments. If a student has early exposure to university study without being formally enrolled, then this might be similar to Tinto's concept of student goal commitments,

which aligns with the extent to which the student was motivated to enter university as an early entry to university student (Tinto, 1993). This motivation was generated from a feeling of being significantly more prepared for higher education and can impact on the students' institutional commitments, describing the extent to which they are committed to graduating from a particular university (Tinto, 1993). This suggests that early exposure to university life may lead to higher levels of commitment and persistence to their higher education. Pennington et al., (2017), identified that the development of realistic expectations upon entering university, i.e., workload demands, may heighten satisfaction. Furthermore, a study involving 88 first year undergraduate psychology students stated that realistic expectations upon entering university provide students with information about their course and university (Pennington et al., 2017). Consistent with this notion, a qualitative study of 62 undergraduate students demonstrated that students report feeling underprepared for university, highlighting unexpected workload and pressure associated with this a key denotator with higher education withdrawal (Bates & Kaye, 2013). Interestingly another qualitative study (Christie et al., 2013), involving 20, second and third year of a degree program at university, participants who had direct entry into university indicated that once admitted as higher education students, they received limited guidance early on in their course with regard to the skills required to become independent learners with an expectation that this should be common knowledge. It is therefore plausible that the utility of early entry

to university courses lies within their ability to prepare students for higher education by shaping expectations, facilitating appropriate institutional and course choices, and building engagement and belonging.

Campus social interaction, which during this research was indicated as being attendance to on campus residential schools and online orientation sessions, was found to be a positive experience that led to the exposure of university expectations. This finding is similar to other studies where three higher education intuitions, containing a total of 1346 first year higher education participants, identified that exposure to some type of social interaction in the form of an induction such as orientation, was a key strategy to assist students in settling into the university environment (Kane et al., 2014). This is also consistent with research conducted by Vinson et al., (2010), which related to the importance of early contact with academic leaders as being a fundamental element for exposure to the university environment.

The decision of what career pathway to undertake after high school graduation is not a new concept. Career indecision has been comprehensively researched since the 1950s (Super, 1957) and is portrayed as a difficulty that a person might experience throughout the career decision-making process (Galliott & Graham, 2015). The findings from this research indicated that half of the participants were self-aware of their future career pathway, whereas the remaining participants were either indecisive or seeking confirmation. Decisions regarding careers can be complicated and convoluted (Oztemel, 2013). Worsley et al., (2021)

identified that young people often have one or two elders advising them on every aspect of life and may have a similar pattern of reliance on teachers for help.

As in Tinto's model, the findings from this current research aligned with the construct that family background being significantly related to the students' initial goals and institutional commitments. The experiences of participants also reflected the parental involvement in making study decisions, helping with study techniques, and attending events such as online orientation. In a systematic review exploring the challenges of career exploration in high school, Chen et al., (2021) outlined the importance of the career exploration period (from 15 years of age) as an important preparation stage for students to not only get to know themselves but also explore their possible higher education pathways. Research on the influencing factors of career exploration when in high school focused mainly on family factors (including parental education levels and family economic status (Corey & Chen, 2019; Selleck-Harwell, 2004; Wang et al., 2019) and individual factors (including self-efficacy, personality and individual development (Wang et al., 2019). As students explore their environment and themselves, they make an active attempt to deal with the challenges of the decision-making process which may be helpful in their career pathway.

Career exploration should include environmental and academic/institutional factors (university information), along with social-orientated constructs including personal characteristics (such as personal

interests and desires). From this study, it was identified that several of the participants where not interested, or had no future intentions, in potentially enrolling into a nursing related tertiary program. For these participants it was more of a strategic decision to assist with increasing their ATAR or boosting their overall chance of being accepted into university beyond high school graduation.

One major challenge young people encounter is developing independence and a sense of belonging. In this current research, a 'sense of self' emerged as an important part of the higher education experience, indicating the acknowledgment as a university student, not as an early entry student. Strayhorn (2019) stated that independence and a sense of belonging are fundamental for the success of any higher education study. Strayhorn (2019) further explains that these elements can directly influence the students' degree of academic achievement, adjustment, desire to continue with higher education and future aspirations. Belonging can be defined as a feeling of connectedness, that one is important or matters to others (Hagerty et al., 1992). Of the participants who discussed this, most reported a desire to feel a sense of connection with the university and be recognised as a university student. Participants within the study voiced that they felt this connection by not being labelled as a HeadStart student because they needed to feel like any other enrolled higher education student. One participant in the study identified a lack of this when they were assigned separate seats from other enrolled

students, isolating them from other learning opportunities from these students.

Inclusive learning environments have been described in the literature as fundamental to developing a sense of belonging. A sense of belonging can be related to academic and social integration (Tinto, 1993). Tinto proposed that if academic and social integration is positive, commitment and motivation to attain a degree are enhanced. Tinto (1993) describes a sense of belonging as a generalised sense of membership that stems from students' perception of their involvement in a variety of settings and the support, they experience from those around them. Nieminen and Pesonen (2022) argued the need for group-based learning and facilitation of social integration with other peers are key activities essential to contribute to a sense of belonging in the higher education environment. Kane et al., (2014) stated sense of belonging is a result of positive engagements within the classroom. The participants expressed the need to be considered as any other enrolled student and wanted to maintain the professional identity as a university enrolled student, and not a 'HeadStart student'. Tinto speculates that students are more likely to remain enrolled in an institution if they become connected to the social and academic life of that institution (Tinto, 1993). Previous literature has identified that peer and social support mechanisms, such as such small group activities, emerge as key determinants in the formation of empowering independence (Vinson et al., 2010). Etter et al., (2000) support this premise, highlighting peer-group tutoring activities as a

valuable instrument in the integration process. A sense of belonging, rather a lack thereof, can undermine academic performance and even one's plans to stay in university (Strayhorn, 2019). Additionally, a sense of belonging has been linked to self-confidence and academic achievement (Kromydas, 2017; Pitman & Richmond, 2007).

6.4 Review of Tinto's student integration model

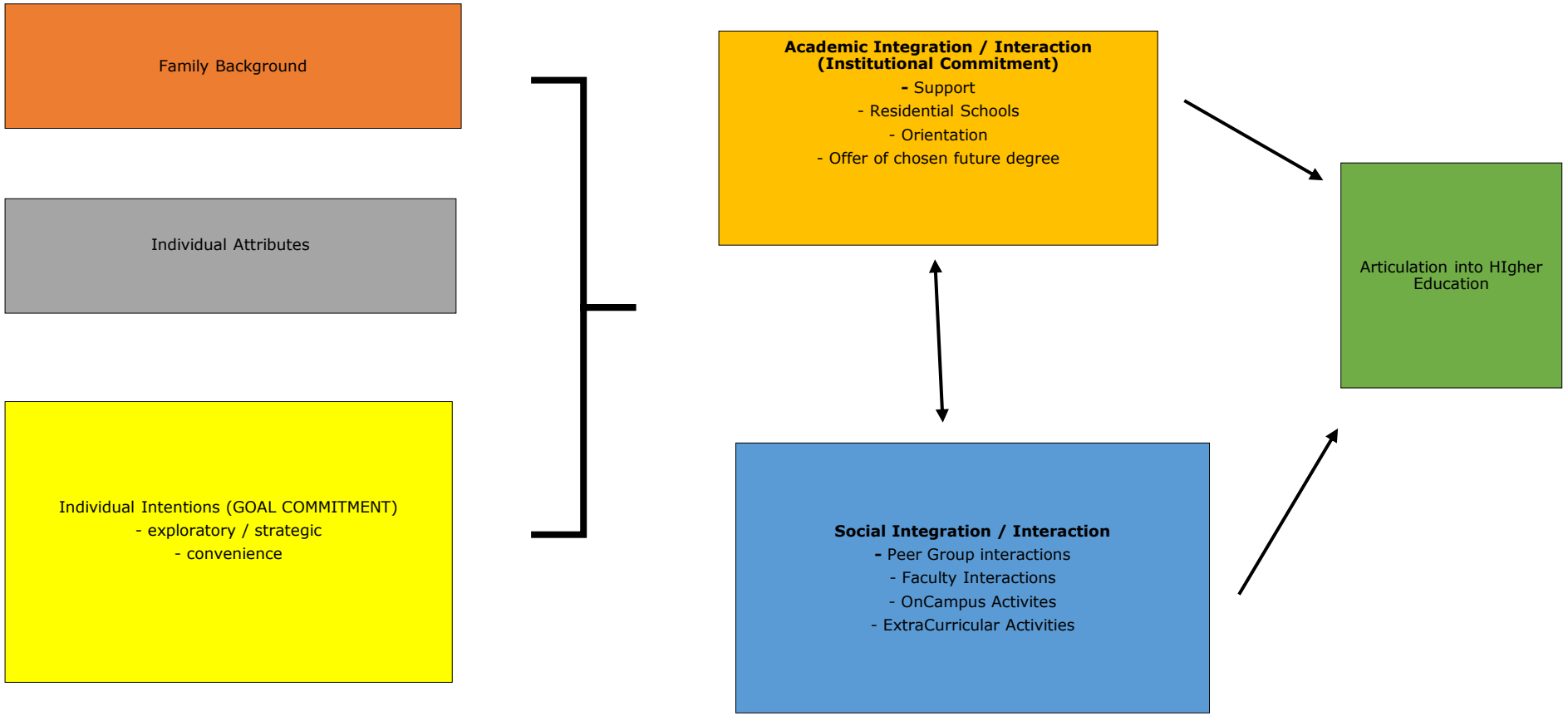
In this study, the application of Tinto's Model was used in high school students. Knowing if the participants will articulate into the university program upon completion of high school (subsequently complete their degree) is beyond the scope of this study. Nevertheless, the small participant group used in this study have identified some important points for discussion.

Whilst not all features of Tinto's Student Integration Model may be illuminated from the current study's findings, a modified model could be used to explain the unique experiences and influences on decision making about university attendance from the perspective of high school students. Of specific note, features including 'pre-college schooling' and commitments including 'institutional commitments and goal commitments' were not illuminated. It is known that successful academic and social integration of the student into the higher education institution determines persistence (Tinto, 1975). Tinto's Student Integration Model outlines the importance and relationship that academic and social integration has on retention; therefore, these features are important to focus on, however it

is unsure if they are relatable to a student at high school. Further adaptations to Tinto's model may result in a more practical model, that is, one that includes specific interventions to make the model more operational from a strategic stance. A modified version of Tinto's Student Integration model can be viewed in Figure 2. It must be acknowledged that this concept should be further explored in research that have a larger number of participants than what was included in this study.

Figure 2

Modified Tinto's Student Integration Model.



In the modified model, the family background and individual attributes remain unchanged because this was evident and found to be relatable in this research. These features can be used interchangeably between the existing model and a modified model, with research discussed earlier identifying these similarities. Individual intentions would be added to this modified version as it was apparent from this research the participants demonstrated different motivations to undertake the university subject. Some different motivations included cost, convenience of study times and guaranteed acceptance into university. These factors may be fundamentally important to ensure the student remains in higher education study and subsequently persists towards completing the degree. However, in the case of high school students, persistence would refer to articulation into the higher education study after high school completion.

It must be acknowledged that this research was conducted during the time of the COVID-19 pandemic. According to Tinto (1975), social and academic integrations are crucial for students to succeed in higher education, with a lack of social integration resulting in a lesser commitment to study-related activities. Higher education over time have had a shift towards distant online education in general, however the COVID-19 pandemic enforcing this even more, removing all weekly face to face on campus teaching. COVID-19 caused the campus environment to significantly change, as students transitioned from a face to face, in person campus to an online teaching platform, where they had less direct

contact with other students and lecturers (Resch et al., 2023). Although the transition to an online teaching platform has had some positive effects, such as greater flexibility in terms of time and space (Almahasees et al., 2021) it has also had negative effects, including fewer channels for communicating academic content and fewer opportunities for interpersonal interaction with peers and teachers (De Bruyn & Van Eekert, 2023). Whilst it should be acknowledged that this may have impacted on the applicability of the use of this model in the current times, social and academic integration still occurs to some degree within the synchronous or asynchronous online learning platform.

6.5 Limitations

The findings of this study must be seen within the context of some limitations. The first limitation was the limited recruitment of participants, which could be attributed to the ongoing COVID-19 pandemic. Originally, participants were proposed to be selected by purposive sampling; however, sampling was more by convenience. A convenience sample is drawn from a sampling pool that was conveniently accessible to the researcher (Andrade, 2021). In this study there was some diversity among participants, such as gender, age at the time of undertaking the early to entry subject, grade in high school and parental education background, which allowed for different perspectives to come through in the interviews. According to Lamb et al., (2001), the recruitment of adolescent aged participants presents a number of unique challenges.

These challenges can include legal issues with the interview of a minor, adolescent development including the participants ability to understand the research requirements and processes and ego development including the participation in research if influenced by another adolescent (Lamb et al., 2001).

A second limitation is related to the career aspirations of the population involved in this study, with the inability to capture more high school students who had a clear interest in pursuing a career in nursing beyond high school completion. It was evident from the participants sampled; they had a specific interest in pursuing medicine. Future research would be interesting to follow students longitudinally to see what career pathways they enrol into beyond high school, based on their completed early entry to university subject/s.

6.6 Conclusion

This chapter has discussed the key themes that were identified from the six participant interviews (1) adjusting, (2) getting a taste of university, (3) discovering self and (4) empowered independence. The findings from this current research are consistent with previous literature in relation to the transition from high school education to tertiary education which requires a range of adjustments. Additionally, the findings identify the relationship outlined in the literature that social and academic integration and interaction has on the development of independent, personal empowerment and retention. The findings and the

literature both support the need for higher education students to be academically prepared for the workload expected in higher education to become independent learners. The next chapter provides recommendations for best practice for the future such as the requirement for additional student assistance and the necessity of delivering the higher education curriculum outside of typical business hours so that a high school student can participate in the live teaching sessions. Additionally, it is recommended that student division be avoided, and that more instructional promotional materials be used.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

The previous chapter examined the challenges of making the transition to higher education. A successful transition requires the right navigation and balance that come from making adjustments, all of which can contribute to a level of preparedness for higher education. The important role of social and academic integration and interaction is of equal importance in preparing the high school student to undertake an early entry to university subject. This chapter provides recommendations for future practice including the involvement of academic staff and promotional material.

A growing decline in the nursing workforce in the not-too-distant future, calls for the Australian university system to consider pathways that will assist in attracting students to study the profession. Recruiting students to higher education is an important process for all universities and is a significant pipeline for generating qualified Registered Nurses to contribute to the health care delivery to our ever-ageing populace in Australia. However, it is evident that this future nursing workforce pipeline is at considerable risk of depletion. Australian universities are faced with retention and attrition challenges that could impact on, and further contribute to, the declining nursing workforce, impacting on patent healthcare outcomes. Positive first-year experiences in higher education and a smooth transition are the answers to reduced retention and high attrition rates.

This study has addressed the gap in the literature by exploring the experiences and perceptions of high school students simultaneously undertaking a university subject to better understand influencing factors and to inform development of strategies that might best support transition to and retention in higher education. Four main themes were generated: (1) making adjustments, (2) getting a taste of university, (3) discovering self and (4) empowered independence. The evidence suggests that retention and attrition levels are improved if students go into higher education study being prepared. According to the literature (Dove, 2017; Thompson et al., 2021), having realistic expectations for workload requirements upon entering university can increase satisfaction and assist with retention and attrition rates. Students' early experiences at university helps them form realistic expectations by exposing them early to adjustments that are made for higher education studies. Some participants stated that they wanted a taste of university therefore it could be stated that a high school students' early exposure to university life may allow them to be more prepared and will likely increase their dedication to and tenacity in their courses of higher education, thus increasing retention and decreasing attrition rates. Positive experiences with academic and social integration strengthen commitment and motivation to complete a degree, which in turn increasing retention and decreasing attrition rates. Social integration when at university, such as in simulation environments with other enrolled students, enable the student to better understand themselves and the distinctiveness of their

profession, adding to professional identity and a sense of belonging. It is through the implementation of guided recommendations that this transition into higher education is achieved. To accommodate a high school student participating in the higher education learning context, this chapter makes recommendations for future practice, such as the inclusion needed by academic staff, the need for more student support and the delivery of the higher education curriculum outside of typical working hours. Further recommendations are also presented, including the need to avoid student division and the use of more educative marketing materials.

7.2 Recommendations

Recommendations involve the inclusion of strategies specifically directed at academic staff and the use of promotional material.

7.2.1 Academic staff recommendations

The first recommendation relates to academic staff. As this current study has found, students appreciated and perceived a sense of belonging with other students when they were not separated during teaching activities with other 'HeadStart' students. In fact, students preferred to join in with non-HeadStart Students, citing a few benefits such as learning content from other student experiences and a sense of inclusion amongst the broader setting.

7.2.2 Promotional material

As the transition from high school to higher education has been identified as a period of significant change, greater communication between high schools and higher education facilities would be beneficial. The findings presented here support the recommendation to develop a joint approach between high schools and higher education to achieve continuity of support and guidance to future early entry to university students. It is recommended that the higher education provider deliver short and concise education sessions specifically targeted at high school students, so they can understand the needs and requirements that are expected when studying at university. To complement the involvement of the presentations given from past students who have completed an early entry to university subject previously would provide a real-life experience perspective that other students may be able to relate to. Previous students involved in delivering this education would be encouraged to deliver their experience not only to their own high school but also to other high schools within the communities they reside in. By being involved in education sessions to high schools outside of their own school will allow them to openly share their experience with their fellow peers. This will also allow them to provide their experience to peers so future students are not influenced by the person delivering the education but are in fact influenced by the content the student is delivering to them. Additionally, high schools could implement targeted education that assist with preparing the high school student for higher education including the

introduction of academic writing requirements and referencing requirements with similarity to the styles expected in higher education.

7.3 Further research

Further research on the effectiveness of early entry and other alternative university entrance pathways are recommended, using robust program evaluation methods to strengthen the evidence-base of these strategies aimed at increasing recruitment and enrolment.

Additionally, further research using longitudinal research designs that follow students from pre-university engagement to graduation to evaluate effectiveness of these strategies aimed at degree completion is highly recommended. It is also recommended that the longitudinal research designs be a multi-university study.

7.4 Conclusion

Although universities have implemented a range of strategies aimed at enhancing recruitment and retention of potential nursing students, without positive transition experiences from high school into higher education study and subsequent degree completion to maintain the workforce pipeline, the nursing workforce will continue to decline. In addition, immersion in university subjects while in high school are important to increase not only social integration but also academic integration and early development of professional identity.

High school students simultaneously undertaking university courses want to get a taste of university life. It is important that nursing academics are aware of not only this but also the multiple adjustments the students have to make, as well as the feelings of self-discovery and growing empowered independence when engaging with the students at the nexus of transition.

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APPENDIX A

Comparison of Different Pathways into University in Australia

	Bridging Program (Allen & Bir, 2012; Chambers et al., 2014; Dove, 2017; Whannell et al., 2010; Whannell & Whannell, 2014)	**Tertiary Preparation Program** (Asmar et al., 2011; Australian Government, 2020; Hellmundt & Baker, 2017)	**Enabling Programs** (Baker et al., 2020; Hellmundt & Baker, 2017; Morrison & Cowley, 2017; Pitman et al., 2016)	**Early Entry into University Course** (USQ, 2018, 2020a, 2020b)
Objective	Assists prospective students to meet program requirements, gain tertiary study skills and basic knowledge in a selected subject (chemistry, physics and mathematics). **Preparation style program.**	Provide a strong set of foundation skills – aims to prepare you for university learning. Ideal if you have not completed year 12. **Preparation style program.**	Gaining tertiary study skills (eg academic writing, referencing, literacy, numeracy, critical thinking), meeting entry requirements, getting a selection rank (ATAR). **Preparation style program.**	Allows high school students (from year 10) experience university life and undertake a university course whilst still studying at high school.
Length	Six months to one year	1.5 hours – one full semester (16 weeks) – usually runs over two semesters (one year in total)	One week to one year	One full semester (16 weeks)

Cost	From $100	Government funded – free to domestic students	Government funded – free to domestic students	First course free and then cost (from $400 per course)
Upon Completion	Increased confidence in the skill.	Depending on University which program has been completed generally guaranteed entry into selected degree	You can get direct entry to selected undergraduate courses at the same institution, without having to apply through QTAC.	University life experiences before completion of high school, 'saved' position in Program upon completion.
University credit towards degree	No	No	No	Yes

APPENDIX B

Overview of Australian Universities Early Entry to University Course Offered as of January 2023

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
Australian Catholic University (ACU)	Queensland, NSW, ACT, Victoria, South Australia	Yes QLD campus – through intensive blocks during the school holidays NSW University offered in school holidays preceding or during year 12 Victoria University – program new to 2021 (no details)	Uni Step Up	Year 11, 12 MUST have achieved satisfactory in English for 2 semesters	• Bachelor of Nursing • Bachelor of Midwifery • Bachelor of Paramedicine • Bachelor of Speech Pathology • Bachelor of Social Work. • Bachelor of Exercise and Sports Science • Bachelor of Exercise and Health Science	• Free • Conditional offer to university • Credit for course • Access to dedicated support services or access to regular university support services
Australian National	NSW, ACT	Yes	ANU Extension	Year 11, 12	• Sciences • Engineering • Computing	• Priority placement through the

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
University (ANU)					• Mathematics • commerce • Asian languages	Admission, Scholarships and Accommodation application system • May receive an early conditional offer of entry into an ANU bachelor's degree program • Credit towards a bachelor's degree
Bond University	Queensland	Yes	Student for a Semester	Year 11, 12	• Architecture and Built Environment • Business and Commerce • Communication and Creative Media • Health Sciences • International Relations and Humanities • Law	• Own Bond Student Mentor • May also be able to credit this towards your Bond University undergraduate degree (conditions apply)

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
					• Medicine • Psychology	
Central Queensland University (CQU)	Queensland, NSW, Victoria	Yes	Start Uni Now (SUN)	Year 10 (semester 3 intake only), 11, 12 B grade average	• PSYC11012 Foundations of Psychological Research • EDED11454 Education as a Profession • HRMT11011 Human Resource Management • LAWS11030 Foundations of Business Law • MGMT11109 Introduction to Business • AVAT11002 Basic Aeronautical Knowledge • LAWS11057 Introduction to Laws • NURS11159 Introduction Nursing	• May be eligible for direct entry into your course and credit towards your degree. • Completion of SUN units do not provide the student with automatic entry into an Undergraduate course - Students must apply either through the CQUniversity direct entry application process or through their relevant Tertiary Admissions Centre.

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
						• Students will receive additional credits toward their QCE for each SUN unit successfully passed. Units identified as having 6 units of credit will contribute 2 QCE credits, and those identified as 12 units of credit will contribute 4 QCE credits.
Charles Darwin University	Northern Territory, online	No				
Charles Sturt University (CSU)	NSW, ACT, Northern Territory, online	No				
Curtin University	NSW, Western Australia	No – offer 'AHEAD' activities which may				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		involve science laboratory experiments, sports facilities, virtual and augmented reality technologies, course-specific information sessions, library tours and research skills.				
Deakin University Australia	Victoria, online	Yes	Deakin Accelerate	Year 12 student	• Accounting criminology disability, diversity and inclusion economics health practice and research journalism (pending VCAA approval) • Law management	• 3-5 credit increment points to the ATAR aggregate • No tuition fees • Become familiar with tertiary teaching and learning styles, understanding

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
					• Marketing philosophy physical education and sport science psychological science • Public relations • Robotics and data science sport management sustainable engineering futures	what lecturers and tutors expect and how you learn best • Offer of peer mentored program assistance
Ducere Global Business School	online	No				
Edith Cowan University (ECU)	Western Australia, online	No Offer STEM program for high schools (a series of activities (from the School of Engineering) designed to support the teaching and				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		learning of STEM subjects for years 8-12). NO credit though				
Federation University Australia	Victoria	No				
Flinders University	South Australia, Northern Territory	No Offer STEM program for high schools (a series of activities (from the School of Science, Computering, engineering, mathematics and the environment) designed to support the teaching and learning of STEM				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		subjects for years 8-12). NO credit though				
Griffith University	Queensland	Yes	Griffith University Early Start to Tertiary Study (GUESTS) program	Year 11, 12	• Health • Science (engineering, chemistry and physics)	• Credit for degree courses - eligible for two (2) adjustment ranks for each successfully completed course.
James Cook University (JCU)	Queensland	No They do offer: JCU Summer Pre-program for Aboriginal and Torres Strait Islander students **(over 3 weeks – completed year 12)**				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		JCU Winter School for Australian Aboriginal and Torres Strait Islander Students **(over 5 days – to year 10, 11, 12)** Students live on campus and take part in academic lectures and team-building activities in an interactive program that provides opportunities to meet University staff and students and				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		form bonds with other students in the program.				
La Trobe University	New South Wales, Victoria	Yes	Achieve Plus	Year 12	• Law • Business • Humanities and Social Sciences • Life Sciences	• Boost your ATAR • Credit for these subjects • Subjects x 2 offered • Free • 100% online
Macquarie University	New South Wales	Yes	Gifted and talented entry program	Year 12	• Academic communication • Education and Teaching • Science • Security studies and Business studies • Environment • Society, Languages and Culture	• Early offer to university • Credit towards degree courses
Monash University	Victoria	Yes – to a degree Scholars are expected to	Monash Scholars	Year 10 – 12 (need to apply when in year 10 only)	• 'Range of courses' (not outlined)	• Enhanced Learning • Explore career ambitions

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		commit around 20 hours a year to the program; this will mostly involve attending on campus events after school hours and during the holidays.				• Building networks
Murdoch University	Western Australia	No Do offer 'Flexi-track High' for year 12, year 11 (B grade minimum) students which is $1200 for the year which offers students skills needed				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		to succeed at University				
Queensland University of Technology (QUT)	Queensland	Yes	Start QUT	Year 12, semester 2 year 11	• Building and Planning • Business • Creative Practice, communication and design • Education • Health and Community • languages • Law and Justice • Science, technology, engineering and maths (STEM)	• Free tuition costs • Credit into degree
RMIT Technology	Victoria	No				
Southern Cross University	Queensland, New South Wales, online	Yes	HeadStart	Year 11, 12	• Legal • Biology • Engineering • Communication in organisations • Visual Communication and Design	• Free • Credit

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
Swinburne University of Technology	Victoria, online	No Offers Vocational Education and Training for secondary students only				
The University of Adelaide	South Australia	Yes	HeadStart	Year 12	• Arts • Computer Science Economics Health and Medical Sciences Mathematical Sciences • Music • Psychology (Honours) Science	• Free • Credit into related degree
The University of Melbourne	Victoria	Yes	Extension Program	Year 11, 12 B+ average	• Advanced French • Advanced German • Advanced Japanese • Art History • Biology • Chemistry • Economics • French • Further Advanced Japanese • German	• Boost ATAR • Credit towards degree

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
					• Hebrew • History and Philosophy of Science • Indonesian • Italian • Japanese • Literature • Mathematics • Media and Communications • Philosophy • Physics • Planet Earth and Climate Change • Psychology	
The University of Newcastle	New South Wales	Yes	High Performing Students Program	Year 12	• Globalisation and International Management (BUSN1001) • Foundation Drawing and Painting (AART1500) • Object Oriented Programming (SENG1110) • Foundations of Health and	• $400 each course • Credit

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
					Disease (HUBS1417) • Introductory Chemistry (CHEM1010)	
The University of Notre Dame	New South Wales, Western Australia	No				
The University of Queensland (UQ)	Queensland	Yes	Enhanced Studies Program	Year 12	• Business and Economics • Languages of the World • People and Culture • Science, Maths and the Environment	• Free • Receive **one adjustment point** towards their UQ entrance rank • Number of courses are offered externally (off campus)
The University of Sydney	New South Wales	No – but are workshops (focusing on HSC subject selection, effective study skills, exam preparation,				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		writing persuasive scholarship applications, and creative problem-solving for years 10, 11, 12). STEM offered for engineering, programming and project management skills to years 11, 12				
The University of Western Australia (UWA)	Western Australia	No Have Broadway UWA which includes a number of schools in Western Australian schools which receive				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
		an automatic ATAR adjustment				
Torrens University Australia	Queensland, New South Wales	No				
University of Canberra	ACT	No				
University of Divinity	Victoria	No				
University of New England (UNE)	NSW, online	No				
University of New South Wales (UNSW)	NSW, ACT	No Offers STEM programs to year 10, 11, 12)				
University of South Australia	South Australia, online	No Offers STEM programs to year 10, 11 and 12 (generally 1–2-day intensive programs)				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
University of Southern Queensland (USQ)	Queensland, online	Yes	HeadStart	Year 10 (semester 2, 3), 11 (semester 1, 2, 3), 12 (semester 1, 2, 3) B average One course per semester	• Agriculture & Environment • Arts & Humanities • Aviation • Business & Management • Education & Teaching • Information Technology • Law & Criminology • Media & Communications • Nursing & Allied Health • Psychology & Human Services • Sciences & Engineering • Surveying & Built Environment • Visual & Performing Arts	• Entry straight into USQ • Gain Credit • Discounted courses • 2 credits towards Queensland Certificate of Education • First course fee, then $395 per course
University of Tasmania	NSW, Tasmania, online	Yes	High Achiever Program	Year 12 Year 11 (under extenuating cases)	• Arts • Law • Education • Health and Medicine • Science	• Courses free • Credit into relevant degree • Counting units towards the ATAR

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
					• Engineering	• Guaranteed offer of a place in a university degree program
University of Technology Sydney	NSW	No STEM: Do offer projects over 4 weeks (8 hours in total) (year 7 and 8 students in Engineering and IT – aims to increase confidence and interest) STEM: do offer projects over 4 x one hour workshops (year 9-10 students in Engineering and IT)				

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
University of the Sunshine Coast (USC)	Queensland	Yes	HeadStart	Year 11, 12	• Business, tourism and events • Communication, design and creative industries • Education • Environmental studies • Health sciences • Languages and linguistics • Law and Criminology • Psychology and social sciences • Science, IT and engineering • Sport and exercise science	• Credit towards degree • First course free then $400 each course
University of Wollongong (UOW)	NSW	No				
Victoria University (VU)	NSW, Victoria	Yes Is an apprenticeship and traineeship pathway	HeadStart	Year 11, 12	• Building • Construction • Community services • Health	• Payment of a fair training wage accounting to the industry award

University	Location	Offered	Branding	Eligibility	Courses offered	Benefits
						• VCE or CVAL certificate
Western Sydney University	NSW	No Offers 'Fast Forward' which includes high school students from year 9 in school workshops designed to enhance social and academic skills and assist the student in reaching their full potential.				

APPENDIX C

Participant Information and Consent Form

University of Southern Queensland
Under 18 years Participant Information Sheet
Interview
USQ HREC Approval number: H21REA154 (v1)

Project Title

High school students experiences in early entry nursing program.

Research team contact details

Principal Investigator Details

Mrs Jessica Elliott
Email: [redacted]
Telephone: [redacted]
Mobile: [redacted]

Supervisor / other Investigator details

Assoc Prof Sonya Osborne
Email: [redacted]
Telephone: [redacted]

Dr Lisa Beccaria
Email: [redacted]
Telephone: [redacted]

Description

This study is being conducted as part of a Masters project for Master of Science (Research – Advanced) through the University of Southern Queensland.

The purpose of this study is to explore the experiences of high school students in an early entry to university program so we can develop strategies to best support the transition from high school to university. You have been invited to participate in this study because you are enrolled in the Head Start program at USQ and undertaking courses in the Bachelor of Nursing program.

Participation

Your participation will involve an interview with you and one of the researchers. The interview can be face to face or online and will take 30-60 minutes of your time.

Questions will include for example: How did you hear about the HeadStart program at USQ?, Why did you enrol in the HeadStart program?

Your participation in this study is entirely voluntary. If you do not want to be involved in the study you do not have to be. If you do take part in the study and then change your mind later – that's okay also because you can withdraw at any time. If an interview has already been conducted with you, this information will be unable to be withdrawn after the data has been analysed but do not worry because nobody will know it was you who said it. If you do wish to withdraw from this study please contact the Research Team – Principal Investigator (contact details at the top of this form).

Whether you chose to take part in this study or not, it will in no way impact your current or future relationship with the University of Southern Queensland. The decision to withdraw from the study will not affect your academic progress or your academic marks or any academic teaching.

Expected benefits

It is expected that this study will not directly benefit you, however your shared experiences will help future students enrolled in the HeadStart program along with high school career guidance counsellors and USQ teachers. The findings from this study may provide recommendations to enhance early entry to university programs. By doing this study further, understanding is obtained regarding the experiences from other students like yourself enrolled in high school students completing early entry to University programs. Your experiences are vital to see what is working, how we can improve things and make things better for future students.

There are no money / gift vouchers / prizes being offered for inclusion in this study.

Risks

There are minimal risks to participating in the study and being interviewed except for maybe inconvenience.

Sometimes thinking about the sorts of issues raised in the interview can create some uncomfortable or distressing feelings. If this is the case, you can let the interviewer know and the interview can be stopped or postponed. If you need to talk to someone about any uncomfortable of distressing feelings, the interviewer will assist you in contacting the USQ Student Counselling and Wellness officers on 1300 932 483.

Privacy and confidentiality

All comments and responses are confidential unless required by law.

- Interviews will be recorded (audio only, no video), to ensure your experiences are captured and then transcribed in full. Transcribed means your interview responses will be typed out in words.
- During the interviews the interviewer will also makes notes. Your personal details (such as your name and / or contact details) will not be recorded. Disposal of research records will be in accordance with the Public Records Act 2002, and the relevant authorised Retention and Disposal Schedules (Section 7).
- The research team will be the only persons who will have access to the recorded interview.
- The recording will not be used for another purpose other than for transcribing into words and result analysis. The recording will not be shared with any other third party organisation.
- Any data collected as a part of this study will be stored securely, as per University of Southern Queensland's Research Data and Primary Materials Management Procedure.

All data will be collected and stored electronically on the USQ Research Databank (ReDBank): USQ MS OneDrive, Cloudstor and ReDBank local.

All published data will be de-identified (names removed) to protect your privacy. Findings from this research will be available on the University of Southern Queensland School of Nursing and Midwifery web page (BSNG Community Hub) and also in journals (such as *Nurse Education Today* and / or *Studies in Higher Education*) and at suitable conference presentations (such as *Students Transitions Achievement Retention Success (STARS)*).

Findings from this study may be utilised for future research purposes. If you would like a copy of the published findings you can contact the principal investigator via email and a copy will be provided to you. You can also ask for a one to two page summary of the results also from the principal investigator.

Consent to participate

Consent for participation in this study requires consent from both YOU and also the parent / legal guardian / parent of the participant.

Click the link below to access the consent form. This link will also provide you a calendar so an appointment can be booked for your interview to take place. It is up to you and your parent / legal guardian to decide if a parent / legal guardian will be present during the interview.

Questions

Please refer any questions you have or to request further information about this study to the principal investigator, Jessica Elliott on [redacted]

Concerns or complaints

If you have any concerns or complaints about the ethical conduct of the project, you may contact the University of Southern Queensland, Manager of Research Integrity and Ethics on +61 7 4631 1839 or email researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can address your concern in an unbiased manner.

Want to take part?

Click HERE to take part in this study.

Thank you for taking the time to help with this research study. Please keep this document for your information.

University of Southern Queensland

Under 18 years assent form

USQ HREC Approval number: H21REA154 (v1)

USQ HREC Approval number: H21REA154 (v1)

Project Title

High school students experiences in early entry nursing program.

Research team contact details

Principal Investigator Details

Mrs Jessica Elliott
Email: J
Telepho
Mobile: [redacted]

Supervisor / other investigator details

Assoc Prof Sonya Osborne
Email:
Teleph [redacted]

Dr Lisa Beccaria
Email:
Teleph [redacted]

Statement of consent

By signing below, you are indicating that you:

- Have read and understood the participant information sheet regarding this study and agree to participate. ☐Yes / ☐ No
- Have had any questions answered to your satisfaction. ☐Yes / ☐ No
- Understand that if you have any additional questions at any time during the study, you can contact the research team. ☐Yes / ☐ No
- Understand that any data collected may be used in future research activities. ☐Yes / ☐ No
- Understand that the interview will be audio recorded. ☐Yes / ☐ No
- Understand a parent / legal guardian must also complete a consent form prior to participation in this study. Click here to complete the parent / legal guardian consent form. ☐Yes / ☐ No
- After discussion with your parent / legal guardian click on this link to book in your interview. ☐Yes / ☐ No

Name (first & last)			
Signature		Date	

After completing the parent / legal guardian consent form and selecting an appointment please click here to submit your form. This form will be sent back to the Research Team who will be in contact with you shortly.

APPENDIX D

Parent / Carer Information and Consent Form

University of Southern Queensland
Parent/ guardian Participant Information Sheet
Interview
USQ HREC Approval number: H21REA154 (v1)

Project Title

High school students experiences in early entry nursing program.

Research team contact details

Principal Investigator Details	Supervisor / other investigator details
Mrs Jessica Elliott Email: Telephone: Mobile:	Assoc Prof Sonya Osborne Email: Telephone:
	Dr Lisa Beccaria Email: Telephone:

Description

This study is being conducted as part of a Masters project for Master of Science (Research – Advanced) through the University of Southern Queensland.

The purpose of this study is to explore the experiences of high school students in an early entry to university program so we can develop strategies to best support the transition from high school to university. Your child has been invited to participate in this study because they are enrolled in the Head Start program at USQ and undertaking courses in the Bachelor of Nursing program.

Participation

Your child's participation will involve an interview with you and one of the researchers. The interview can be face to face or online and will take 30-60 minutes of their time.

Questions will include for example: How did you hear about the HeadStart program at USQ?, Why did you enrol in the HeadStart program?

Your child's participation in this study is entirely voluntary. If they do not want to be involved in the study they do not have to be. If they do take part in the study and then change their mind later – that's okay also because they can withdraw at any time. If an interview has already been conducted with them, this information will be unable to be withdrawn after the data has been analysed but do not worry because nobody will know it was your child who said it. If your child wishes to withdraw from this study please contact the Research Team – Principal Investigator (contact details at the top of this form).

Whether your child choses to take part in this study or not, it will in no way impact their current or future relationship with the University of Southern Queensland. The decision to withdraw from the study will not affect their academic progress or your academic marks or any academic teaching.

Expected benefits

It is expected that this study will not directly benefit you or your child, however your child's shared experiences will help future students enrolled in the HeadStart program along with high school career guidance counsellors and USQ teachers. The findings from this study may provide recommendations to enhance early entry to university programs. By doing this study, further understanding is obtained regarding the experiences from other students enrolled in high school students completing early entry to University programs. Your child's experience is vital to see what is working, how we can improve things and make things better for future students.

There are no money / gift vouchers / prizes being offered for inclusion in this study.

Risks

There are minimal risks to participating in the study and being interviewed except for maybe inconvenience.

Sometimes thinking about the sorts of issues raised in the interview can create some uncomfortable or distressing feelings. If this is the case, you or your child can let the interviewer know and the interview can be stopped or postponed. If you or your child need to talk to someone about any uncomfortable or distressing feelings, the interviewer will assist you in contacting the USQ Student Counselling and Wellness officers on 1300 632 493.

Privacy and confidentiality

All comments and responses are confidential unless required by law

- Interviews will be recorded (audio only, no video), to ensure your child's experiences are captured and then transcribed in full. Transcribed means interview responses will be typed out in words.
- During the interviews the interviewer will also makes notes. Personal details (such as name and / or contact details) will not be recorded. Disposal of research records will be in accordance with the Public Records Act 2002, and the relevant authorised Retention and Disposal Schedules (Section 7).
- The research team will be the only persons who will have access to the recorded interview.
- The recording will not be used for another purpose other than for transcribing into words and result analysis. The recording will not be shared with any other third party organisation.
- Any data collected as a part of this study will be stored securely, as per University of Southern Queensland's Research Data and Primary Materials Management Procedure.

All data will be collected and stored electronically on the USQ Research Databank (ReDBank); USQ M5 OneDrive, Cloudstor and ReDBank local.

All published data will be de-identified (names removed) to protect your child's privacy. Findings from this research will be available on the University of Southern Queensland School of Nursing and Midwifery web page (BSNG Community Hub) and also in journals (such as *Nurse Education Today* and / or *Studies in Higher Education*) and at suitable conference presentations (such as *Students Transitions Achievement Retention Success (STARS)*).

Findings from this study may be utilised for future research purposes. If you would like a copy of the published findings you can contact the principal investigator via email and a copy will be provided to you. You can also ask for a one to two page summary of the results also from the principal investigator.

Consent to participate

Consent for participation in this study requires consent from both YOU and your child as the participant

Click the link below to access the consent form. This link will also provide you a calendar so an appointment can be booked for your interview to take place. It is up to you and your child to decide if a parent / legal guardian will be present during the interview

Questions

Please refer any questions you have or to request further information about this study to the principal investigator, Jessica Elliott on

Concerns or complaints

If you have any concerns or complaints about the ethical conduct of the project, you may contact the University of Southern Queensland, Manager of Research Integrity and Ethics on +61 7 4631 1839 or email

researchintegrity@usq.edu.au. The Manager of Research Integrity and Ethics is not connected with the research project and can address your concern in an unbiased manner.

Want to take part?

Click HERE to take part in this study.

Thank you for taking the time to help with this research study. Please keep this document for your information.

University of Southern Queensland

Parental/guardian permission form
Interview

USQ HREC Approval number: H21REA154 (v1)

Project Title

High school students experiences in early entry nursing program.

Research team contact details

Principal Investigator Details

Mrs Jessica Elliott
Email:
Teleph
Mobile

Supervisor / other investigator details

Assoc Prof Sonya Osborne
Email:
Teleph

Dr Lisa Beccaria
Email:
Teleph

Description

By signing below, you are indicating that you:

- Have read and understood the parental information sheet regarding this study. ☐Yes / ☐ No
- Have had any questions answered to your satisfaction. ☐Yes / ☐ No
- Understand that if you have any additional questions at any time during the study, you can contact the research team. ☐Yes / ☐ No
- Understand that the interview will be audio recorded. ☐Yes / ☐ No
- Am aware of the date and time that your child has chosen for their interview to be conducted on. ☐Yes / ☐ No

As a parent / legal guardian, I give the research team permission to interview my child_____

_____(name of child) and seek their consent to participate in the research project.

Name (first & last)			
Signature	xxx	**Date**	

Cick here to return to submit your child's consent to participate in this study. This form will be sent back to the Research Team who will be in contact with you shortly.

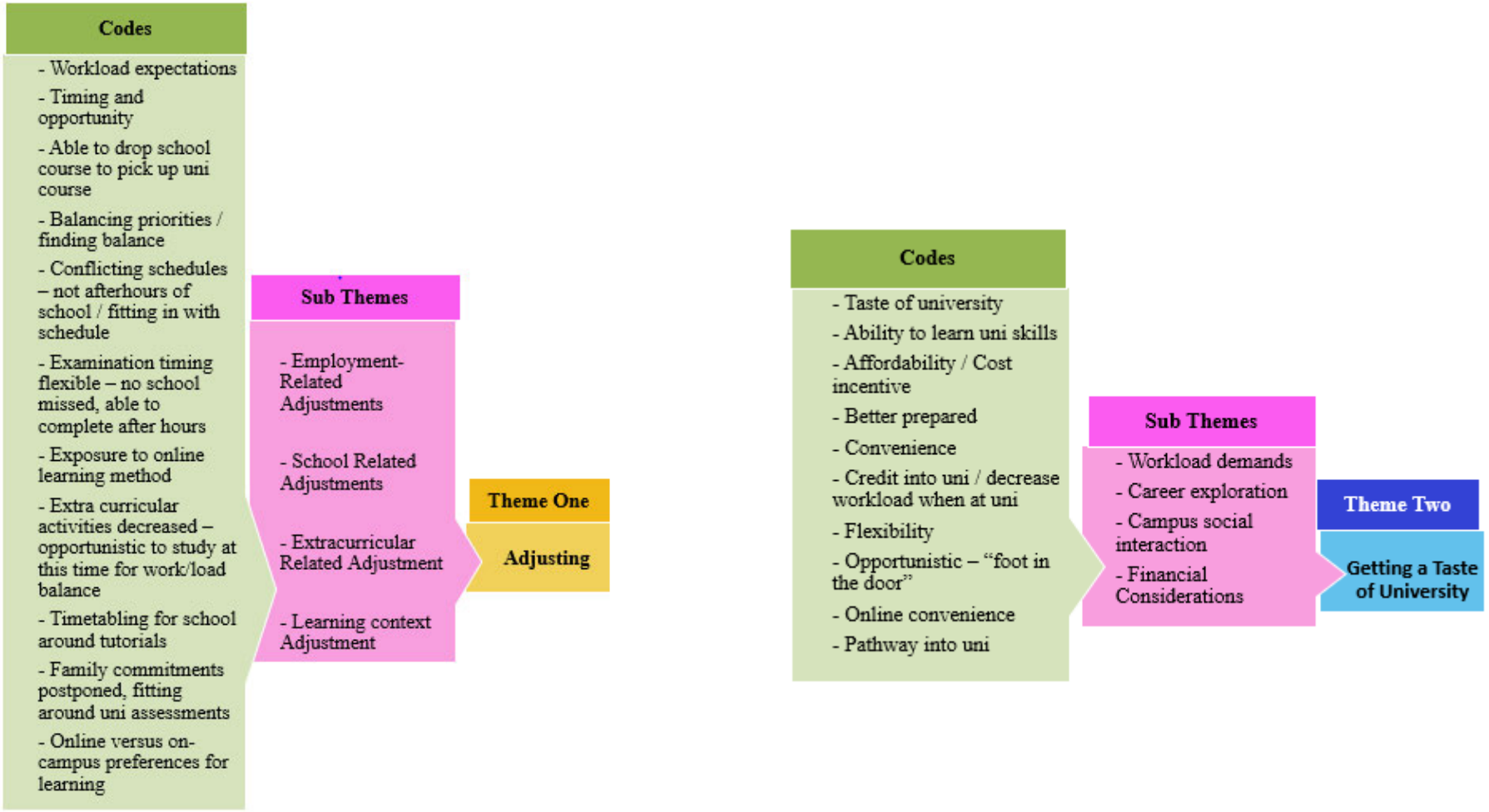
APPENDIX E

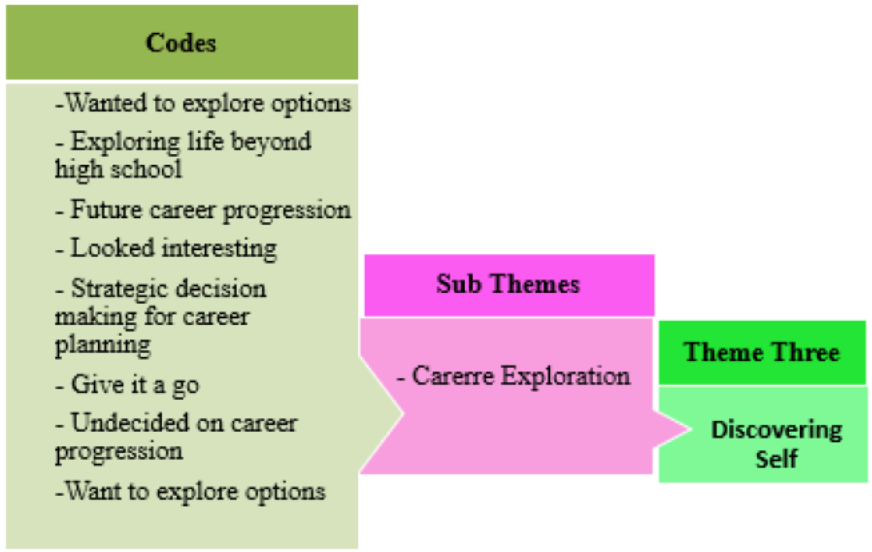
Semi Structured Interview Questions

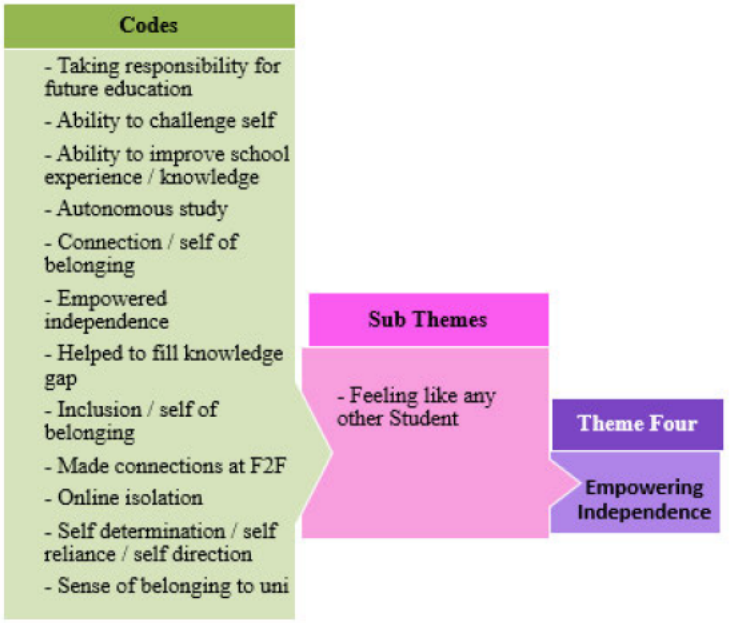
1. May I ask how old you are now? And what year are you in now?
2. What HeadStart course /s have your completed?
3. When did you complete this / these course / courses? And what grade were you in then?
4. You would have received an email and a hard copy letter advertising this project. Was it the email advert or the mail out advert that made you want to be involved?
5. How did you first hear about the HeadStart program at USQ?
6. Why did you enrol in a HeadStart course in the first place?
7. Has anyone in your family attended university before and if so who and want did they study?
8. How often do you come on campus for uni things?
9. Are you doing anything else besides high school and uni courses, for example working in a paid job or regular volunteering? Sports? Or anything else competing for your time?
10. What did you like best about the HeadStart program?
11. How could the program be improved?
12. Would you recommend the HeadStart program at USQ to other high school students (yes – why, no – why)
13. Are you coming to Uni when you finish high school and if so do you think the HeadStart courses that you have completed has helped prepare you for uni (if so – How?; What about just being at uni with other uni students?)
14. Is there anything you want to share that I haven't asked you about?

APPENDIX F

Codes, Sub Themes and Themes

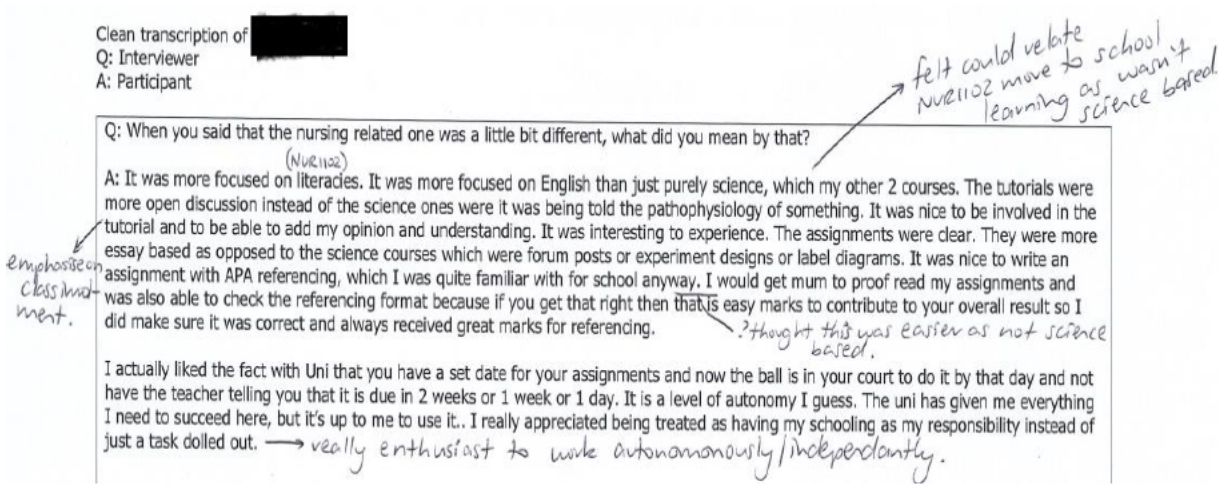


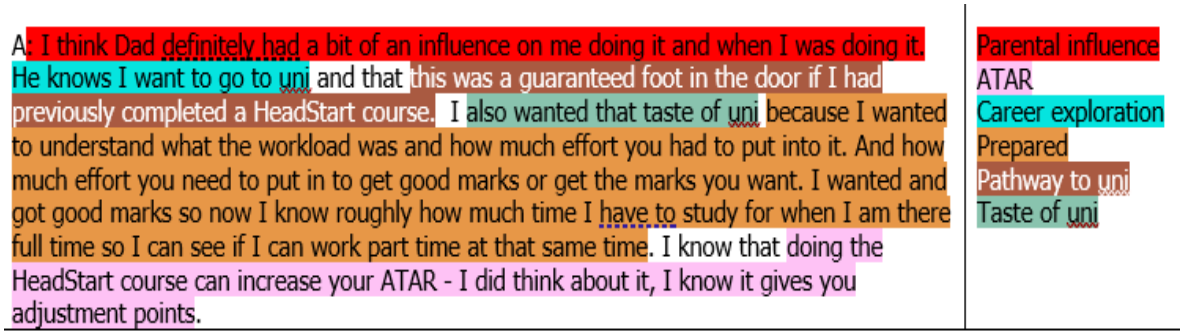
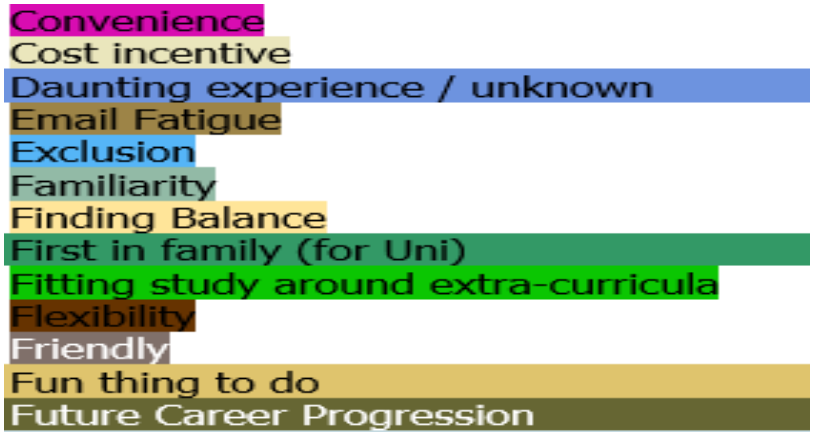

Codes
-Wanted to explore options
- Exploring life beyond high school
- Future career progression
- Looked interesting
- Strategic decision making for career planning
- Give it a go
- Undecided on career progression
-Want to explore options
Sub Themes
- Carerre Exploration
Theme Three
Discovering Self

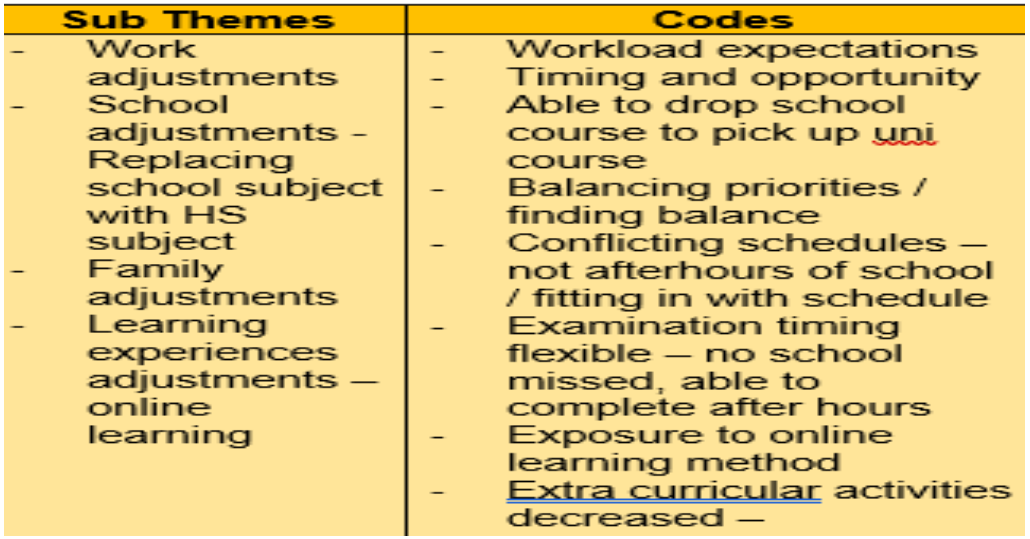

Codes
- Taking responsibility for future education
- Ability to challenge self
- Ability to improve school experience / knowledge
- Autonomous study
- Connection / self of belonging
- Empowered independence
- Helped to fill knowledge gap
- Inclusion / self of belonging
- Made connections at F2F
- Online isolation
- Self determination / self reliance / self direction
- Sense of belonging to uni
Sub Themes
- Feeling like any other Student
Theme Four
Empowering Independence

APPENDIX G

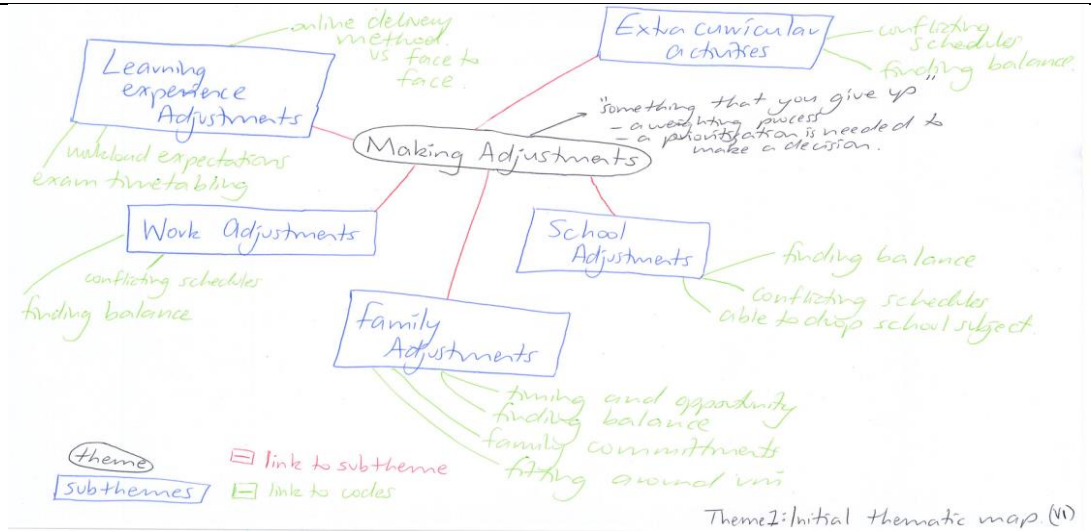
Braun and Clarke Thematic Analysis Example

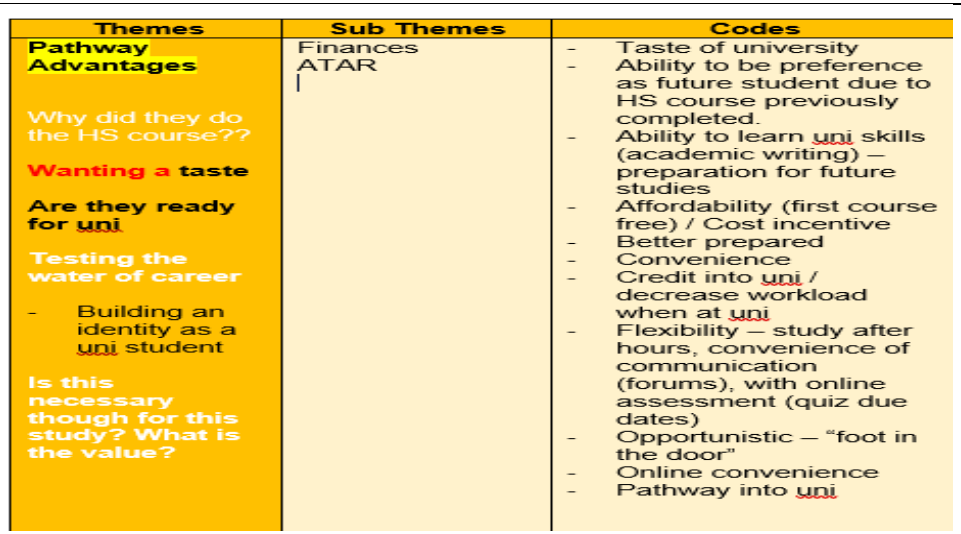
Braun and Clarke Step	Example from current research using Braun and Clark
Step One (familiarising yourself with the data)	I started by listening to each interview recording once before transcribing that specific audio to become familiar with the data. Upon re listening to the transcripts and following along with my verbatim versions I was able to apply some casual notes regarding interesting passages. This is an example of this on one of the transcript questions.  Clean transcription of [redacted] Q: Interviewer A: Participant felt could relate NUR1102 move to school learning as wasn't science based. Q: When you said that the nursing related one was a little bit different, what did you mean by that? (NUR1102) A: It was more focused on literacies. It was more focused on English than just purely science, which my other 2 courses. The tutorials were more open discussion instead of the science ones were it was being told the pathophysiology of something. It was nice to be involved in the tutorial and to be able to add my opinion and understanding. It was interesting to experience. The assignments were clear. They were more essay based as opposed to the science courses which were forum posts or experiment designs or label diagrams. It was nice to write an assignment with APA referencing, which I was quite familiar with for school anyway. I would get mum to proof read my assignments and was also able to check the referencing format because if you get that right then that is easy marks to contribute to your overall result so I did make sure it was correct and always received great marks for referencing. emphasised on classification. ?thought this was easier as not science based. I actually liked the fact with Uni that you have a set date for your assignments and now the ball is in your court to do it by that day and not have the teacher telling you that it is due in 2 weeks or 1 week or 1 day. It is a level of autonomy I guess. The uni has given me everything I need to succeed here, but it's up to me to use it.. I really appreciated being treated as having my schooling as my responsibility instead of just a task dolled out. → really enthusiast to work autonomously/independantly.

Step Two (generating initial codes)	This is an example of the coding that was applied to the transcribed interview.  This is an example of codes used and colouring that was used to code the transcribed interviews. 

Step Three (searching for themes)	After all data had been coded step three began.  A version of a thematic map starting to form from one of the themes.

Sub Themes	Codes
- Work adjustments - School adjustments – Replacing school subject with HS subject - Family adjustments - Learning experiences adjustments — online learning	- Workload expectations - Timing and opportunity - Able to drop school course to pick up uni course - Balancing priorities / finding balance - Conflicting schedules — not afterhours of school / fitting in with schedule - Examination timing flexible — no school missed, able to complete after hours - Exposure to online learning method - Extra curricular activities decreased —

	
Step Four (reviewing the themes)	This step required the expertise from my supervisors as discussions were had over the specific themes and the relevance of the themes to the research. This is an example of questions / comments that were discussed during one of my fortnightly meetings with my supervision team regarding one theme that was later moved into other sub themes.

<table>
<tr><td></td><td> 
<table>
<tr><th>Themes</th><th>Sub Themes</th><th>Codes</th></tr>
<tr><td>Pathway Advantages

Why did they do the HS course??

Wanting a taste

Are they ready for uni

Testing the water of career

- Building an identity as a uni student

Is this necessary though for this study? What is the value?</td><td>Finances
ATAR</td><td>- Taste of university
- Ability to be preference as future student due to HS course previously completed.
- Ability to learn uni skills (academic writing) – preparation for future studies
- Affordability (first course free) / Cost incentive
- Better prepared
- Convenience
- Credit into uni / decrease workload when at uni
- Flexibility – study after hours, convenience of communication (forums), with online assessment (quiz due dates)
- Opportunistic – “foot in the door”
- Online convenience
- Pathway into uni</td></tr>
</table></td></tr>
<tr><td>Step Five (defining and naming themes)</td><td>One theme that was changed after ongoing discussions with the supervisory team was Empowered Independence. This is an example of the theme names that was brainstormed and discussed.</td></tr>
</table>

		~~Empowered / Independence~~ ~~Unique Insight:~~ ~~Empowerment~~ **Empowered Independence Feeling like a real student – how it was for them**	Feeling like a real student / socialising as a real student / becoming a real unit student	- Taking responsibility for future education - Ability to challenge self - Ability to improve school experience / knowledge - Autonomous study - Connection / self of belonging - Empowered independence - Helped to fill knowledge gap - Inclusion / self of belonging - Made connections at F2F
Step Six (producing the report)	The final step allowed verbatim voices to represent the themes. This is an example.			

			(MOH).
~~Empowered / Independence~~ ~~Unique Insight:~~ ~~Empowerment~~ **Empowered Independence Feeling like a real student – how it was for them**	Feeling like a real student / socialising as a real student / becoming a real unit student	- Taking responsibility for future education - Ability to challenge self - Ability to improve school experience / knowledge - Autonomous study - Connection / self of belonging - Empowered independence - Helped to fill knowledge gap - Inclusion / self of belonging - Made connections at F2F - Online isolation - Self determination / self	***Felt like a student*** - *"I also like the fact that I didn't feel I was ever singled out as a HeadStart student and that I felt part of the team. I felt just like any other Uni student to be honest. I may have been younger in age but I was still considered a student enrolled in the course and never got any special treatment or anything which I think is good to prepare you to being a real full time uni student" (EB).* - *"I didn't say that I was a HeadStart student because I didn't see that as important for my peers to know. I thought that they should see me as a student, not a kid doing this course" (EB).* - *"It was nice to be involved in the tutorial and to be able to add my opinion and understanding (EB)".* - *"We had to say who we were, and our background and some people had already completed a degree and this was their second or third one or had other jobs and this was an advancement for them and then there was me who was in grade 11 with no part time job even" (TG).* - *"I didn't want that HeadStart label" (TG).*

APPENDIX H

Ethics Approval

Jessica Elliott

From: human.ethics@usq.edu.au
Sent: Tuesday, 28 September 2021 11:38 AM
To: [redacted]
Cc: Sonya.Osborne@usq.edu.au
Subject: [RIMS] USQ HRE Amendment - H21REA154 (v1) - Expedited review outcome - Approved

Dear Jessica

The revisions outlined in your HRE Amendment have been deemed by the USQ Human Research Ethics Expedited Review process to meet the requirements of the National Statement on Ethical Conduct in Human Research (2007). Your project is now granted full ethical approval as follows.

USQ HREC ID: H21REA154 (v1)
Project title: High school students experiences in early entry nursing programs.
Approval date: 28/09/2021
Expiry date: 04/08/2024
Project status: Approved with conditions.

The standard conditions of this approval are:

(a) conduct the project strictly in accordance with the proposal submitted and ethics approval, including any amendments made to the proposal required by the USQ HREC, or affiliated University ethical review processes;

(b) advise the USQ HREC (via human.ethics@usq.edu.au) immediately of any complaint or other issue in relation to the conduct of this project which may warrant review of the ethical approval of the project;

(c) make submission for ethical review and approval of any amendments or revision to the approved project prior to implementing any changes;

(d) complete and submit a milestone (progress) report as requested, and at least for every year of approval; and

(e) complete and submit a milestone (final) report when the project does not commence within the first 12 months of approval, is abandoned at any stage, or is completed (whichever is sooner).

Additional conditions of this approval are:

(a) Nil.

Failure to comply with the conditions of approval or the requirements of the National Statement on Ethical Conduct in Human Research (2007) may result in withdrawal of ethical approval for this project.

If you have any questions or concerns, please contact an Ethics Officer.

Kind regards

Human Research Ethics

University of Southern Queensland
Toowoomba – Queensland – 4350 – Australia
Email: human.ethics@usq.edu.au