When is a school leaver not a school leaver? - The effect of school leavers entering university via a traditionally 'mature age' entry pathway

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Abstract

This paper examines longitudinal data of students commencing the Bachelor of Commerce program at The University of Adelaide to explore the impact that lowering the minimum age requirements for university admission via the STAT in South Australia has had on this particular STAT cohort. This paper proposes that this change in admissions policy has resulted in a dramatic increase of 18-20 year old students entering university via the STAT and that the majority of these students are recent school leavers who traditionally would have had limited access to university based on not meeting minimum ATAR requirements for admission. This paper further proposes that based on their low rates of academic performance compared to their peers, alternate support mechanisms need to be investigated to provide a successful transition to university for these students.

Introduction

In recent years, over 50 percent of undergraduate offers have been made on a foundation other than the Australian Tertiary Admissions Ranking (ATAR) (Commonwealth Department of Education and Training, 2017c; Pilcher & Torri, 2018). A positive correlation between ATAR and student success has been identified (Anderton, Evans & Chivers, 2016). The decrease in university admissions based on ATAR puts more onus on universities and academic research to focus on the emerging and increasing university admissions avenues. Despite the considerable body of published literature on the impact of the ATAR and alternative entry pathways (Blyth, 2014; Coates & Friedman, 2010; Faruqi, 2016), little has been reported on those aged 18-20 years of age entering university via the Special Tertiary Admissions Test (STAT). Our objective is to firstly use internal longitudinal data to analyse the performance and retention of STAT and ATAR entrant students and secondly, to understand what impact this has had on retention and pass rates.

In this paper we present a particular situation in the South Australian university sector, which is the use of the STAT by students less than 21 years of age to gain admission to a university program. We primarily look at data from the Bachelor of Commerce program in the Faculty of the Professions at The University of Adelaide to examine what this effect is having on the STAT entry students in this program as well as the overall student cohort.

A recent analysis of the academic performance of students commencing a Bachelor of Commerce at The University of Adelaide revealed that students entering the program via the Special Tertiary Admissions Test (STAT) had overall academic success, retention and completion rates far lower than their peers who entered the program through other entry pathways.

The initial findings of this analysis also showed a growing disparity in the academic performance of two specific groups: those entering via the STAT aged 21 and above, and those

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entering via the STAT aged 18 - 20 years of age. There was also an increasing decline in the median age of students entering the program on the basis of a STAT result. These findings led to a more thorough analysis of student performance between 2011 and 2017 in line with changes to admissions policy during that period. Overall it was found that the STAT is an increasingly popular alternative entry pathway for recent school leavers who have an Australian Tertiary Admissions Rank (ATAR) too low for direct entry, and that this has been to the detriment of the performance of the STAT cohort as a whole. This paper explains the background to the lowering of the minimum age requirements for STAT admission, analyses the impact this change has had on the Bachelor of Commerce STAT cohort, questions the effectiveness of the STAT pathway for recent school leavers and proposes the need for further investigation of the motivation, characteristics and performance of students aged 18 – 20 entering via the STAT in order to provide them with a more successful transition to university.

Background

Traditionally domestic students entering university straight from high school have applied based on their ATAR or equivalent. Under a demand driven system, the higher a students' ATAR the more likely they are to be accepted into the program of their choice. In South Australia prior to 2011 school leavers whose ATAR was too low for direct entry into the program of their choice and were not yet 21 had limited options for direct entry to university.

In 2010 (in line with other South Australian universities) changes were made to The University of Adelaide admission policy to allow (as of 2011) students who would be 18 years of age when they commence university to use STAT results as a basis for admission. Previously STAT applicants had to be 21 years of age in the year that they commenced in order to gain admission through the STAT. This approach, adopted by all South Australian universities, is quite unique in the Australian higher education sector as other states have not adopted the same minimum age requirements for the STAT. The decision to lower the minimum age for the STAT, coming shortly after the 2008 Review of Australian Higher Education (Bradley, Noonan, Nugent, & Scales, 2008) could be interpreted as a strategy towards not only widening participation in higher education, but also as acknowledging the impact of the post 'global financial crisis' labour market and implications for young people.

The change in minimum age requirements resulted in current year 12 students (who would be 18 years of age when commencing university) being able to sit the STAT and be assessed for entry on the basis of both their Australian Tertiary Education Rank (ATAR) and their STAT result. Whilst appearing more equitable, the university automatically identifies these students (upon admission) as STAT entrants, a cohort of students often referred to as 'mature age' and not necessarily recognising the fact many had entered straight out of high school. The significance of this is that subsequent tailored communication and offers of transition and academic support are often made on the assumption that the STAT cohort as a whole is not entering directly from high school, is aged in their early to mid-twenties and may have a very diverse academic background.

To date, the impact of lowering the age requirements for the STAT has not been thoroughly analysed. Accepted metrics that are used - academic performance, retention and completion rates - focus on the STAT cohort as a whole, often referred to as 'mature age', rather than analysing the impact of changing the minimum age requirements, and the emergence of any new sub cohorts.

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Analysis

A longitudinal study approach was adopted to allow for deeper insight into the cohort before the STAT entry minimum age change and after. The internal data from the Business Intelligence unit had an eligibility criteria of including students who had gained admission via the STAT compared against those who had gained entry via the ATAR. We then analysed key indicators of retention and academic performance. The study is limited to students enrolled in the Bachelor of Commerce program offered by the Faculty of the Professions at The University of Adelaide.

In the three year period (2011 – 2013) after the change in policy, students aged 21 and above made up 59% of the admitted STAT cohort, and students aged 18- 20 made up 41%. In the most recent three year period (2015-2017) these proportions have reversed, with students aged 21 and above only making up 39% of the admitted STAT cohort, and students aged 18-20 making up 61%. This is due to a 78% increase in 18-20 year olds entering via the STAT in the last 6 years.

In contrast to the increase of 18-20 year olds entering via the STAT, students aged 25 and above accounted for only 14% of this cohort in 2017 (Table 1), and across the last 3 years have made up an average of 10% of the cohort annually.

It is apparent from Table 2 that in the last three years there has been a sharp increase in students aged 18-19 entering the program via the STAT, however students aged 20 have steadily decreased. Whilst this paper looks at students aged 18 – 20 years of age as a whole group, approximately 80% of this group are now 18 or 19 years of age. The South Australian Education act of 1972 requires compulsory education in an approved learning program (often secondary schooling) until the age of 17 so it would be likely that the majority of 17-18 year olds identified in this paper are recent school leavers.

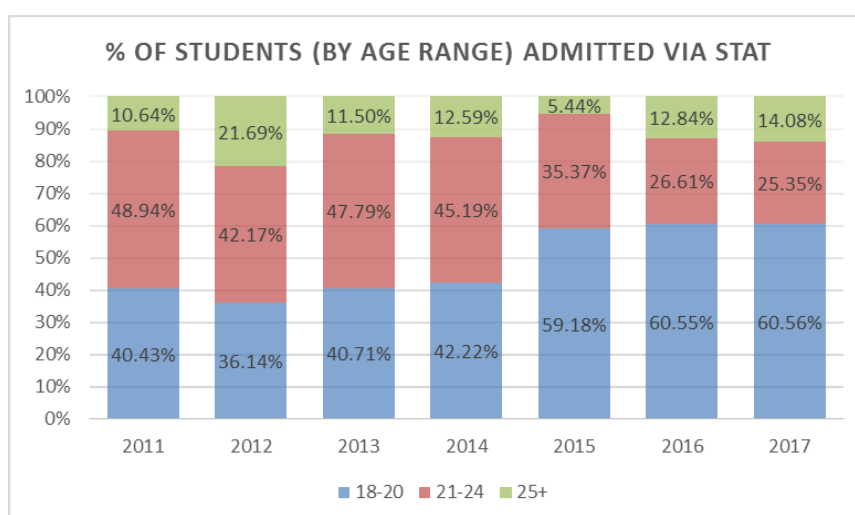**Table 1. Percentage of students admitted to the STAT by age range**

% OF STUDENTS (BY AGE RANGE) ADMITTED VIA STAT

Year	18-20	21-24	25+
2011	40.43%	48.94%	10.64%
2012	36.14%	42.17%	21.69%
2013	40.71%	47.79%	11.50%
2014	42.22%	45.19%	12.59%
2015	59.18%	35.37%	5.44%
2016	60.55%	26.61%	12.84%
2017	60.56%	25.35%	14.08%

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Table 2. Percentage of students aged 18 – 20 entering the STAT between 2011 and 2017 by specific age
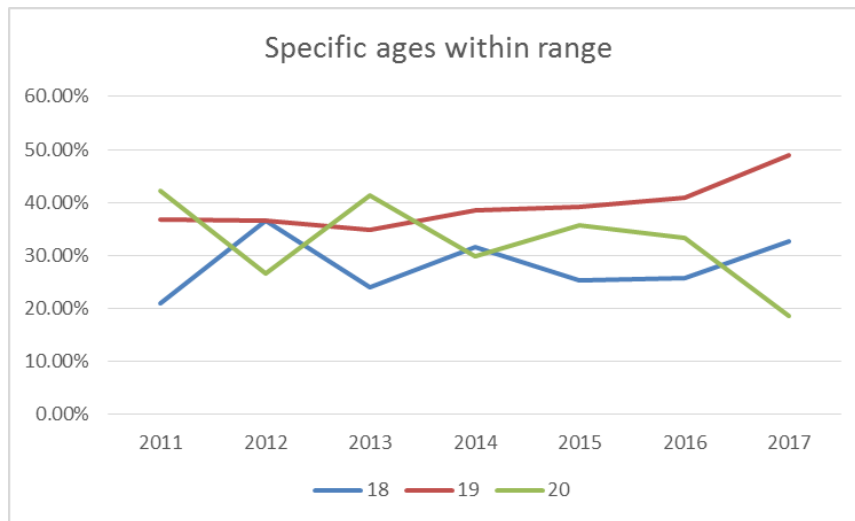
The impact on academic performance, retention and completion

To further understand the impact of these changes, three key metrics were used for the analysis. These included academic performance (defined by Grade Point Average and Load Pass Rates), retention rates (from first to second year) and completion rates.

First year retention rates of those entering the STAT aged 18 – 20 were not only comparable to the Bachelor of Commerce as an entire cohort, but were much higher (82%) than those entering the STAT aged 21 and above (74%). Students aged 25 and above who entered via the STAT had an even lower retention rate of just 66%. These variances support research (Fragoso, et al., 2013) that shows the impact of financial, personal and family pressures on students increases with age and may impact retention.

Whilst second year retention rates over the corresponding period have not yet been measured it is believed that there may be higher attrition in the 18-20 year age group due largely to poor academic performance in their first year of study. A brief look at completion rates compared against first year retention rates also supports this theory, as well as recent research on middle year student attrition due to poor academic progress (Jevons & Lindsay, 2018).

To measure academic performance both a student's first semester Grade Point Average (GPA) and the percentage of enrolled load they successfully passed (Load Pass Rate) were analysed. Between 2011 and 2017 commencing students aged 18-20 had an average first semester GPA of 2.95 (a passing GPA is 4.0), this average rises to 3.17 for all students aged 21 and above. However for students aged 25 and above this average rises to 3.55. Similarly the average amount of first semester enrolled load passed for commencing students aged 18-20 across this period was 49% which rises to 55% for students over 21 and 67% for those aged 25 and above.

Overall the first semester academic performance of commencing STAT students has been negatively impacted by students aged 18-20 entering via the STAT.

As the Bachelor of Commerce is a three year program, completion rates for students admitted between 2011 and 2015 were examined. The percentage of students who either completed or were still actively studying for both age ranges were almost identical. Twenty-five percent of 18 – 20 year olds have completed their Bachelor of Commerce degree or are currently still enrolled. For students over 21 this figure is 24%. Whilst there is no evidence that completion rates are negatively affected by 18-20 year old students, it was surprising that completion rates were almost identical when the assumption is that the challenges faced in committing to university is more difficult for older students. As Bowl (2001) contends "The 18 year-old student can build social and academic support networks around university life. For the non-traditional student financial responsibility, childcare, family and community expectations are central features of life, around which study must be fitted" (p.18).

What does this mean?

The longitudinal data analysis indicates that minimum STAT entry requirements are not an accurate predictor of future academic success for recent school leavers. However, from the increasing numbers of students now using the STAT as their entry to university study we can conclude that there is an appetite amongst Year 12 students for pathways to university other than the use of an ATAR. The question then becomes how can these students be better supported to transition effectively to higher education and meet desired learning outcomes.

School leavers are using the STAT as an alternative to ATAR

The recommendations from the Review of Australian Higher Education (Bradley et al., 2008) led to Australian universities committing to widening participation to enable greater opportunity for potential students to attend university. One result of this commitment was universities increasing their range of bridging programs and alternate entry pathways. It would appear from the increased number of students in the Bachelor of Commerce that recent school leavers are now using the STAT as one such pathway.

In their study of the STAT, Coates and Friedman's (2010) analysis of data showed that the "STAT provides estimates of first-semester performance that are comparable to those linked with Year 12 marks" (p.121). This correlation was particularly strong in the discipline area of Commerce. However, it must be noted that this study only looked at students aged 21 and above. McKenzie and Gow's (2004) research shows that students' past performance in year 12, has been identified as an important indicator of success and achievement in first semester of university. This research supports our argument that for recent school leavers undertaking the STAT, correspondence between ATAR and subsequent academic performance at university is stronger than the correspondence between STAT results and subsequent academic performance at university. To date the ATAR of these students has been largely ignored due to the fact they have entered via the STAT pathway.

Understanding motivation, identity and the blocks to success

In other Australian states the majority of students entering via the STAT are over 21 years of age and have arguably had the benefits of time and maturity to assess their goals and motivations in making the decision to attend university, and may be more willing to seek additional support when needed. The types of support services required by these students are

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widely offered by universities and are largely focused on equipping this cohort with the fundamental skills to assist in their return to study. This type of support, offered to mature age students, does not resonate with the 18-20 year old STAT entrants, due to their recent experience in the school environment that may have already equipped them with these skills. Mallman and Lee's (2017) accounts of the problems faced by "young mature age" students focused on a cohort of adult students between their early 20s and early 30s, however this is an older cohort of students than this paper is focussed on. Therefore any attempt to try and categorise these 18-20 year olds as "young mature age" students is problematic.

Mallman and Lee's research also describes these young mature age students as being "in-between" i.e. struggling to identify and fit in with either the school-leaver or mature age cohorts. For the 18-20 year old STAT entrants, this feeling of being "in-between" may not be applicable, as they are unlikely to feel the same competing demands of work/study/life as other mature age students.

Given the dramatic rate of growth in this 18-20 year old STAT entrant cohort within the South Australian sector, it will become increasingly important to develop support strategies that address their lower academic performance and completion rates. The positive impact of peers and engagement with the university community is acknowledged (Tinto, 1997; Zhao & Kuh, 2004), however developing this in non-traditional students is difficult (Kantanis, 2002; Wyatt, 2011).

It would be easy to suggest that the 18-20 year old STAT cohort is bringing poor study habits from high school that in turn may have led to a low ATAR to the university environment. However, as there is no current appetite for policy change that would see the age requirements for the STAT rise again to 21 years and above (Noonan & Pilcher, 2018), the conversation needs to centre on what strategies will assist these students with their transition to university and to improve their academic performance. The importance of motivation has been widely acknowledged as important to student success (Augustyniak et al., 2016; Bailey & Phillips, 2016; Harackiewicz et al., 2002; Himelstein, 1992; Wurf & Croft-Piggin, 2014; Zimmerman, Bandura & Martinez-Pons, 1992). Broadly, these students will likely have had the benefit of high school career counsellors and associated learning support yet are still under-performing compared to students admitted on the basis of their ATAR or STAT entrants aged 21 and above. To begin to address the issue, it is important to understand the nuances of the learning experiences for different sections of students who are broadly labelled as 'non-school leavers' (Devlin, 2017; Mallman & Lee, 2017, p. 523). Recognising that the 18-20 year old STAT cohort is becoming significant in the university classroom is a good first step. The next steps will be developing sophisticated means to identify and support this cohort. Increasing self-efficacy has been shown as a good indicator of academic performance, and this presents an opportunity for further investigation (McKenzie & Schweitzer, 2001).

What are the alternatives?

Several universities are now using bridging or foundation courses aligned with first year curriculum or dual award programs with VET providers, to offer more suitable pathways for students to maximise their chances of success. Some of these programs also have inbuilt exit points which offer students an alternative to being seen as having 'dropped out'. A recent report (Pitman et al., 2015) analysing the effectiveness of enabling programs found that those who

enter university study via an enabling program "generally had better first-year retention rates than those articulating via most other sub-bachelor pathways" (p.4). However many access and equity pathways generally focus on foundation programs that develop fundamental academic skills and are designed for students who have had a gap from academic study, such as mature age students, recent migrants, or those who have limited access to education.

As these programs were often never designed for the school leaver market, in their traditional format and structure they are unlikely to be an appealing option for recent school leavers. It is also probable that given the foundation teachings in these programs, they may not be effective in improving the academic performance of these students, which may be more dependent on motivation.

While there has long been an emphasis on monitoring the retention of students from equity groups and non-traditional pathways, we argue that the STAT school-leaver cohort is worthy of identification, monitoring and unique academic preparatory support in their own right due to their increasing numbers. There is also a need to offer appropriate transition and support mechanisms that recognise their shared educational background, but also address the needs of the individual learners. Furthermore the suitability of exit points and alternatives to a three year bachelor's degree could be investigated for these students.

Conclusion

This paper has looked at an issue unique to the South Australian university sector, through an analysis of academic performance, retention and completion of STAT entrants in the Bachelor of Commerce program at The University of Adelaide.

This study contributes to our understanding of the effect of lowering the minimum age requirements to enter university via the STAT, and that this has led to an increase in the number of 18-20 year olds in the classroom, specifically those who gain admission via the STAT. A longitudinal analysis has revealed that these students have consistently lower rates of satisfactory academic performance compared to their peers, and have poor completion rates which is partially masked by first year retention rates comparable to the entire cohort. Despite undertaking the STAT and recording a satisfactory result for admission, it is likely that for these students the ATAR is a better indicator of future academic performance. Hence our argument for improved support services and programs for this cohort.

Furthermore there needs to be a significant shift in language and mindset around 'mature age' students to actually articulate and understand who we are referring to with such a term, and ensure that the support on offer reflects the needs of this particular cohort.

Even once identifiable these 18-20 year old STAT students are a relatively new cohort for The University of Adelaide, and one in which our experience and understanding is limited. Much value would derive from a more rigorous, and supportive approach to assessing these candidates readiness for university, and facilitating a successful transition to higher education. The lowering of the minimum age for STAT entrance has increased participation, however to be truly equitable adequate support must be given to maximise the chances of success for these students.

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