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Persisting students' explanations of and emotional responses to academic failure

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ABSTRACT

Academic failure is an important and personal event in the lives of university students, and the ways they make sense of experiences of failure matters for their persistence and future success. Academic failure contributes to attrition, yet the extent of this contribution and precipitating factors of failure are not well understood. To illuminate this world-wide problem, we analysed institutional data at a large, comprehensive Australian university and surveyed 186 undergraduate students who had failed at least one unit of study in 2016, but were still enrolled in 2017. Academic failure increased the likelihood of course attrition by 4.2 times. The students who failed and persisted attributed academic failure to a confluence of dispositional, situational, and institutional factors. There was a compounded effect of academic failure on already-vulnerable students resulting in strong negative emotions. Viewing persistence as an interaction between individuals and their sociocultural milieu opens up different avenues for research and considerations for support.

Introduction

Retention and attrition in higher education have garnered much attention. The drivers of such a focus can be traced to system expansion and associated increases in students discontinuing their studies (DET, 2017), including widening participation policies through which traditionally under-represented students with different forms of cultural capital are entering universities in larger numbers (O'Shea, 2015; Yosso, 2005). Government collated data from the United Kingdom (HESA, 2018) and Australia (DET, 2017) show that students entering from traditionally under-represented backgrounds have, in general, lower completion rates. For discontinuing students, universities, and governments, student attrition is costly. For example, the costs of student attrition in Australian higher education for domestic students were reported to be $1.4billion per year

(Adams, Banks, Davis, & Dickson, 2010). Much of the discussion to reduce attrition, such as tracking students from disadvantaged backgrounds and supporting them through their first year of transition to higher education, frames the problem from the university's perspective, rather than the students.

Taking the students' perspective, Tinto (2017) argues that, to understand the problem of attrition, universities need to consider how they can influence their students to remain motivated and complete their degrees. He states that from a student perspective it is not a problem of 'being retained', but one of 'persisting to degree completion' (p. 2). 'Persistence' captures the focus, drive, and forward progression needed by students to complete a program of study (York, Gibson, & Rankin, 2015). Student motivation to persist in the face of academic struggles is dependent on self-efficacy, a sense of belonging, and the perceived value of the curriculum (Tinto, 2017). Variants of these have been found to be predictors of persistence for traditionally under-represented students as well as those with a stronger vocational focus (Sandler, 2000). There is rich research, primarily with first-year students, that informs these three guiding principles focused on ensuring student success.

In both Tinto's (1975) and Bean and Metzner's (1985) models, for traditional and traditionally under-represented students respectively, academic achievement is a predictor of persistence. Li and Carroll (2017) showed that being at risk of drop-out is associated with average marks below the institutional mean. However, academic attainment is largely absent from current discussions about attrition beyond considerations about the prior academic attainment necessary for admission. Our study addresses this important gap. We sought to explore the prevalence of academic failure and its contribution to persistence and drop-out, and to understand the factors precipitating failure and the emotional responses of students who fail and persist with their studies.

Academic failure, persistence and drop out

There is substantial international literature exploring student success (Zepke, Leach, & Butler, 2011). Research has commonly explored the factors that lead to persistence or withdrawal, of which academic achievement/failure is one contributor (Li & Carroll 2017). Common reasons cited for withdrawal from higher education are personal, including physical or mental health issues and financial pressures (HESP, 2017; NAO, 2007; TEQSA, 2017). When prioritised by students, the single most important reason for thinking of dropping-out was external pressures of 'too much going on' in life (Zepke, Leach, & Prebble, 2005). Worryingly, the most recent results of the Student Experience Survey (SRC, 2018) show that 'health or stress' was the dominant reason for considering leaving university.

A historical overview of various models of retention, persistence, and success factors among higher education students found that many factors impact, including psychological, institutional, and social factors (Yorke, 2004). Similarly, Carroll, Ng, and Birch (2009) proposed a taxonomy of factors contributing to progression decisions relating to dispositional, situational, and institutional factors. Through a synthesis of the literature, Bowles and Brindle (2017) extended the Carroll et al. (2009) model, further refining the contribution of these factors to student retention and identifying belongingness as an important facilitating factor. The authors categorise dispositional factors as an individual student's characteristics such as self-confidence, attitudes, and beliefs; situational factors refer to 'life circumstances' including health, employment, and family responsibilities; and

institutional factors are related to the organisation in which a student enrols and may include procedures, policies, and structures (Bowles & Brindle, 2017). Clearly, the factors that lead to withdrawal are multifactorial and complex. Less is known about how dispositional, situational, and institutional factors contribute to academic failure and persistence.

Instead, there is a history of research that correlates failure with entry scores or other characteristics of students. One strand of the existing literature seeks to classify students who fail. For example, using regression analysis, Wimshurst and Allard (2008) identified that within a Faculty of Arts, 'students assigned higher proportions of fail grades tended to be male, Indigenous, younger, had lower entry scores, had deferred fees, were not full-time day students, lived at home, and had histories of incomplete studies' (p. 687). They attributed failure to personal (e.g., university entrance score, gender) and institutional (e.g., number of students in the cohort, school where the course is offered) characteristics. Other precipitating factors identified for failure at an individual level include: a lack of preparedness, poor study habits, low self-esteem, learning difficulties, and lack of time on task (Holland, 2016; Lizzio & Wilson, 2010; Potter & Bye, 2014). Several studies cite situational factors including employment pressure, mental or physical ill-health, and work practices (Dobele et al., 2012; Holland, 2016; Jevons & Lindsay, 2018; Popovic, 2010).

Students who fail may be portrayed as at 'fault' and in 'deficit' (Devlin, 2013), and as not belonging in universities (Leathwood & O'Connell, 2003). Students who fail may also be 'Othered' by their peers, teachers and institutions (O'Shea, Lysaght, Roberts, & Harwood, 2016), where failure is attributed to some aspect of the student's nature (Orr, 2007). Fassett and Warren (2004) identified powerfully negative 'strategic rhetorics' around academic failure, including that it is a student's individual traits or acts that 'earn them failure'; or that they have failed to engage in an idealised manner with education processes. Such negative individualistic rhetoric serves to further marginalise students who may be struggling and may have a negative influence on their motivation and self-efficacy, and therefore on their persisting (Tinto, 2017).

In summary, factors that contribute to attrition have been extensively studied, yet those that contribute to failure particularly from the students' perspectives are less well known, despite failure being a common experience among undergraduates (Peelo & Wareham, 2002) and contributing to attrition (Li & Carroll, 2017; Tinto, 1993). Studies of academic failure are starting to build a picture of the characteristics of students who fail and the factors that contribute to failure. However, existing research in this space has focused on first-year students (Lizzio & Wilson, 2010; Potter & Bye, 2014); been limited to one school (Holland, 2016; Jevons & Lindsay, 2018); or centred on those deemed to be at-risk student or those having to explain their performance to an academic progress committee (Dobele et al., 2012; Jevons & Lindsay, 2018). None have explored students who have failed academic units and actually persisted in their studies.

Rationale and research questions

Our study was conducted in two parts. First, we sought to understand what institutional data tells us about the prevalence of failure and the risk it will result in drop-out. Second, we sought to understand what happens to those students who fail and do not drop-out,

that is, persist. A student's response to the challenges, stressors, and risk factors over the course of a university degree will determine the value and success of their experience and future learning experiences (Holdsworth, Turner, & Scott-Young, 2018). Therefore, this study is important because how students make sense of failure influences their future approaches to learning and contributes to persistence or drop-out. In particular, we ask whether the 'fail and persist' group have an experience of failure that seems different to what we 'know' about failure from the existing literature. Our study is novel in that it triangulates institutional data to get a sense of the breadth of the problem and then specifically explores what happens with students who fail and persist.

Our specific research questions were:

1. *What proportion of students fail and how does academic failure influence their likelihood to persist or drop out?*
2. *What are persisting students' perceptions of precipitating factors for academic failure?*
3. *What are persisting students' emotional responses to academic failure?*

Methods

A mixed methods research approach (Bryman, 2006) was used with two sets of data: aggregated and anonymised institutional data and a predominantly qualitative online survey. Ethical and institutional approvals were obtained.

Participants and courses included in the research

The study occurred in a large Australian university with diverse student cohorts where 24% of students are external (studying fully online) and 37% mature age (>24 years of age). As the literature indicated that clarity of students' vocational goals can impact on their persistence (Lizzio & Wilson, 2010), participants were recruited from professionally oriented undergraduate courses with a range of minimum entrance scores (Education, Civil Engineering, Nursing, and Commerce).

Institutional data

The anonymised institutional data contained demographic information about students enrolled in the four chosen courses across all years of study as of the 31 March 2017 census date ($n = 9285$); numbers of units they each attempted, failed, and completed in 2016; and whether they continued to be enrolled, completed their degree or were 'lost' by census date. We created a 'dropped out' category to include students who were recorded as inactive (no active enrolments), intermitted (student has advised of a period of intermission from their course of study), or lost to the course (a measure referred to as 'raw attrition' or 'normal attrition' (HESP, 2017)). We chose this definition of attrition because we were interested in persistence within a course. The 'retained' category included students who were still enrolled or had completed their course. Descriptive analyses were conducted including frequencies. Statistical analysis used relative risk to determine the increased likelihood of students who failed at least one academic unit dropping out of their program relative to those who had not failed any units.

Online survey

For the online survey, we recruited students who had failed and persisted with their studies. Course administration staff emailed invitations to an online survey to 2260 students identified as having failed at least one academic unit in Trimester 1 and/or Trimester 2 2016 and persisted (as at census date 2017). 186 students (response rate = 8.2%) completed the survey. The low response rate is typical of similar studies. Students from each of the four courses were represented.

The research team developed the survey questions and were informed by the literature on factors impacting higher education students' retention and/or attrition. The survey was piloted with seven students resulting in minor revisions to format and wording. The majority of questions were open-ended to obtain students' explanations in their own words. Existing factors that informed survey design also provided a starting point for our coding framework for data analysis using a mixture of deductive and inductive coding and interpretation, following the Framework Analysis method (Ritchie & Spencer, 1994). We used NVivo's textual analysis functions to identify frequencies of words and combinations in response to the question on students' emotional responses to failing a unit.

Results

RQ1: What proportion of students fail and how does academic failure influence their likelihood to persist or drop out?

The sample consisted of 9285 students, 60% of whom were female (n = 5567) and 20% studying part time (n = 1854). International students comprised 25.7% of the sample (n = 2388), whilst 18.5% were regional or remote students (n = 1720). External enrolment was 11% (n = 1017), lower than the institutional average, which is a reflection of the vocational nature of the courses, with nursing and education not readily lending themselves to full online study.

Descriptive results indicate that academic failure is relatively common, experienced by between 23% and 52% of students at some stage of their degree, depending on their course of study. On average, 39.5% (n = 3663) of students in our sample failed at least one unit of study in 2016, with 30% of those dropping out of their course after failing (n = 1100). Further, most of the students who failed had failed more than one unit – 2107 of 3663 students in the combined cohort (i.e., 58% of those who failed one unit subsequently failed more). Drop-out rates after failing ranged from 27.6% to 36.8%. Unsurprisingly, students who failed dropped out at higher rates than those who did not and the proportion who dropped out increased as students failed more units (from 30.0% to 36.4%).

We calculated relative risk of raw attrition based on our entire cohort (n = 9285). Those who failed at least one unit had a 4.19 times higher risk of dropping out of their course or university than those who did not fail any units. There were 1100 (12%) students who failed and dropped out versus 403 (4%) who passed all their units and dropped out. This indicates that 70% (n = 2563) of students who failed did persist with their studies (Table 1).

Table 1. Relative risk of students who failed dropping out versus those who did not fail dropping out.

	Dropped out	Retained
Failed one or more units	1100 (12%)	2563 (28%)
Passed all units	403 (4%)	5219 (56%)

Relative Risk = 4.19, 95% Confidence Interval (3.77, 4.66), $p < .0001$, $z = 26.42$.

RQ2: What are persisting students' perceptions of precipitating factors for academic failure?

Having identified the percentage of students who failed and persisted (i.e., were retained), next we invited them to take part in the survey. The sample consisted of 186 students, with 175 choosing to complete the demographics part of the survey. 69.7% of respondents were female ($n = 124$) and 23% studying part time ($n = 40$). International students comprised 25% of the sample ($n = 44$), while external enrolment was 12.4% ($n = 22$). This is broadly representative of the courses involved in this study except for female students who are marginally over-represented.

Students nominated work (58%, $n = 102$), health (58%, $n = 101$), and financial strain (53%, $n = 92$) as the factors that most negatively impacted on their academic achievement (they could choose more than one factor). The majority of respondents (77%) attributed their failure to multiple factors.

Qualitative data extend these findings, highlighting the complexity attributed to failure in students' stories resulting from dispositional, situational, and institutional factors. Failure was often multifactorial with the various factors compounding each other. We present these dimensions individually and then highlight the confluences and the compounded effect of failure on students. Participants are identified by gender, domestic/international status, course, response number, and age group.

Dispositional factors (in order of frequency): maladaptive study habits, cognitive inability/language difficulties, lifestyle activities or hobbies, and social isolation

The most common problem indicated for **maladaptive study habits** was poor time management, resulting in students not keeping up with weekly learning material, running out of time to prepare for exams, handing assignments in late, prioritising one unit over another, and/or feeling overwhelmed. The second most common problem was lack of motivation/engagement/interest in a unit. Often, these two combined. In terms of **cognitive inability and language difficulties**, some indicated that they could not understand the unit material sufficiently or were 'not good at' that subject. Others specified problems with writing assignments or exams, understanding assignments, or referencing. A few indicated problems with the English language.

Students attributed academic failure to their **lifestyle** (e.g., socialising, sport) taking away from their study time. Some recognised an element of escapism in these activities. Fewer students mentioned **social isolation** (lack of belonging). Those who did were living away from home, mostly either internationally or in a geographically distant place, and this led to them feeling 'alone', 'homesick', culturally different, or that they had no-one they could turn to for social support.

Situational factors: mental or physical health, work and financial strain

Physical or mental health issues featured heavily in students' explanations of academic failure. These were frequently significant: chronic conditions including anxiety, depression, cancer, and chronic fatigue. Other student-described conditions included ADHD, dyslexia, video game addiction, insomnia, anaemia, and anorexia nervosa. The majority indicated they felt they had no choice but to **work** long hours because either they needed to support themselves or their family, or it was just the nature of their job or business. However, many suggested they *could* control the number of hours they worked, but had made a choice to spend time working at the expense of keeping up with their study.

Meeting **financial responsibilities** impacted on the time they had available to study. This produced stress and/or tiredness in many cases. Others commented more generally on the difficulties of juggling commitments on a low income. The most prevalent specific costs were fees, especially when having to complete a failed unit twice, followed by text books. Meeting **family responsibilities** caused stress or time away from study. For others, the time required to parent (especially as sole parents) and be with family, alongside work and study responsibilities, created a challenge.

Institutional factors: curriculum design, teaching staff and inflexible rules/policy.

The majority of institution-related comments identified aspects of **curriculum design** commonly related to the lack of perceived alignment between teaching activities and assessment design. Some students commented that unit learning activities were designed poorly, involving too much memorisation or theory without sufficient application, or lacking depth, or being irrelevant/unrealistic, inflexible or unengaging. Many highlighted the inauthentic nature of assessment, including exams and essays, which were not seen as relevant to their *future selves*. Exams by far were the biggest source of assessment design critique, as well as a common source of anxiety.

Students described lack of support from **teaching staff**, difficulty understanding some staff members and a dis-engaging teaching approach. A few commented that the unit chair was unhelpful or unsympathetic in dealing with their particular issues. Comments about **inflexible rules** included failing due to late submission of assignments, being denied special consideration, and that there was no obvious way to appeal an apparently unfair decision.

Interpretations of experiences of failure

Confluences of factors that contribute to academic failure – complex lives and contested identities

The majority of confluences (i.e., where students linked two or more factors in their explanations of their failure) involved maladaptive study habits, work, financial pressures, and physical/mental health problems. These were consistent forces in many students' lives, where they struggled to fit everything in. For others, there were crisis events such as significant and sudden illness. Students talked about the multiple stressors being a contributor to their mental illness:

> I find Exams mentally and physically challenging, which often leaves me to have short attention
> spans, migraines and panic attacks. I only started developing anxiety around my second year of

> *university, when part-time work, financial struggle, heavier study load … became too much.* (FDBCEng#9; Age 20–24)

Students' comments highlight the complexity of the lives many lead, and the pressures this places on their study. The multiple precipitating factors were entangled within students' lives. An important aspect of this complexity was the need to juggle multiple identities that were in tension:

> *Being a single mum of two there are plenty of distractions. Having depression and anxiety at times I found it hard to concentrate or be in the mind set to study. With no family close by and friends that work, I had no physical help so had financial strain of day care and before or after school care plus there's fuel and parking … so the financial stress added to my depression.* (FDBNurs#123; Age 30–39)

Interest and motivation interplayed with lack of valuing of the curriculum and poor sense of belonging, as hypothesised by Tinto (2017), leading to maladaptive study habits including directing time away from study:

> *[I] didn't know if I was in the right course, got lazy and bored with uni, felt like I was isolated in class, didn't go to class, didn't study much until it was too late, gave in assignments late, lost interest, I was also paying monthly rent so focussed more on work because I didn't want to move home.* (FDBEd#102; Age 20–24)

The compounded effect of failure

Students spoke about how the effects of academic failure compounded the stressors they already felt acutely and how they were 'battling' in isolation. Having to pay the full amount of fees again when re-attempting a failed unit was especially frustrating for those who perceived that they had failed by a small amount, or because they had withdrawn after the cut-off date after failing their first assignment:

> The more units I fail the more I have to pay, health because of my chronic illness and work because I have to work to support my studies … Sometimes I am so overwhelmed about what I have to do and what to do if I fail that I just cry in the middle of the night until I fall asleep. (FIBComm#81; Age 20–24)

Having to repeat units at the same time as undertaking further units also interfered with study time for some, leading to further academic failure:

> I had failed a harder subject the year before and I completed this elective while re-doing the previous subject … I found myself spending more time on the already failed subject than on my elective, hence failing the subject as I did not give myself time to do its work. (FDNurs#141; Age 20–24)

Students reported feeling a lack of sympathy and support from the 'university':

> I feel that no matter how hard you try and explain your situation to the university, they will always pretty much tell you to suck it up and continue moving forward … they were saying mental health is no excuse why you should be failing. (MDBNurs#171; Age 20–24)

RQ3: What are persisting students' emotional responses to academic failure?

The persisting students' prevailing response to their academic failure was negative. A word frequency analysis showed that in response to the question 'How did you feel?',

'disappointed' was the most frequently used emotional word. Emotional words such as '(very, extremely) disappointed', 'stressed', 'depressed', 'devastated', and 'embarrassed' were common (see Table 2). Some students expressed shock or surprise at the outcome. Although the word 'good' features in the table, this was preceded by the words 'not' or 'didn't feel'.

Figure 1 maps the most common word linkages surrounding the word 'disappointed' in the responses to this question, with the most common linkages at the centre of the map. The size of the word indicates greater frequency of use by the students. Figure 1 shows that much of the disappointment was turned inwards to the self. Related to this were expressions of loss of confidence and self-efficacy. For example:

> [I] felt uncertain, that I wasn't meant to be here, that maybe I had a calling somewhere else. that I wasn't smart enough, that I was alone, that I wasn't qualified enough to be a teacher. (FDBEd#171; Age 20–24)

For many of our students, there was a sense that the disappointment was time bound, as highlighted in the quote below:

> I was absolutely mortified. It honestly took me over a month to get over it. First year first trimester failing a core prerequisite unit seemed like the end of the world. (FDBNurs#32; Age 19 and under)

Discussion

Our institutional data highlights that academic failure is common and advances the work of Li and Carroll (2017) by showing that failing one or more units can increase a student's likelihood of dropping out of their course fourfold. These figures are calculated based on 'raw attrition' rates for our students and are not generalisable due to the courses chosen for our analysis, but they do indicate a significant contribution of academic failure to drop-out. Our results also highlight that students who fail one unit are more likely to fail again. Unpicking the factors that constitute differences between courses is outside of the scope of the current paper. Our interest here is in those who persist having failed an academic unit.

Previous work highlights that a lack of belonging and negative effects of workload stress are the strongest predictors of student attrition risk (Naylor, Baik, & Arkoudis, 2018). Our

Table 2. Word frequency analysis for 'disappointed'.

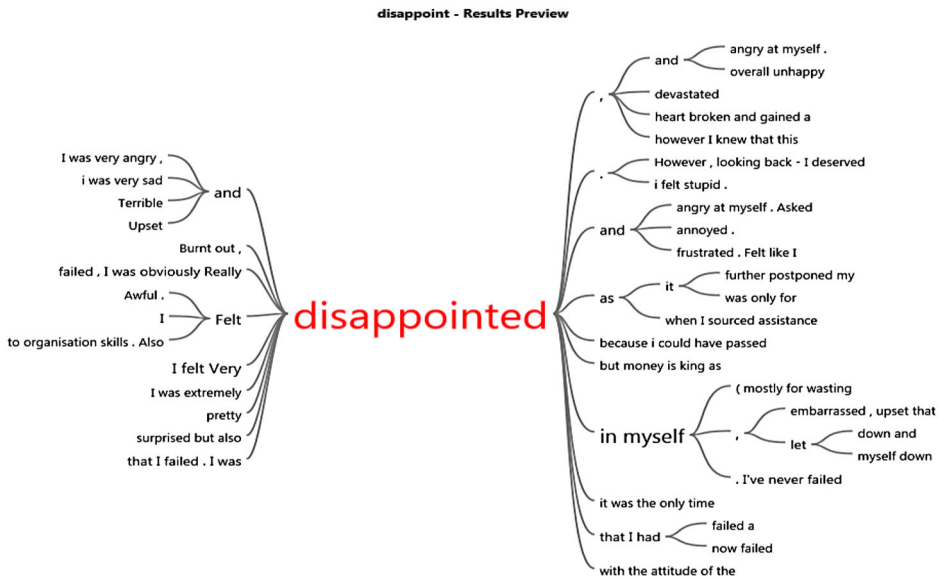| Word	Count	Similar words
disappointed	35	
bad	17	
upset	16	
frustrated	15	frustrating, frustration
hard	12	
really	12	
annoyed	11	
sad	11	
stressed	9	
angry	8	
depression	7	depressed
devastated	7	devastated
surprise	7	shock, shocking
good	6	

Figure 1. Word map showing linkages of most common words surrounding the word 'disappointed'.

study qualitatively supports the notion that workload stress contributes to academic failure. However, a lack of social belonging, although mentioned by some participants, did not feature heavily in our students' explanations of academic failure. Instead, students were critical of and wanted to feel more connected to and supported by their academic staff and the university. This finding indicates that a new orientation to belonging is required given the changing nature of our student body and the rise in part-time and online students (Thomas, 2012). Certainly there was higher representation in our sample of mature-age and part-time students who already had established lives outside of university upon which they drew for a sense of belonging; and/or it may be due to the sense of community offered through vocational courses (Lizzio & Wilson, 2010). Recent research found that part-time students, mature age students over 25 years, and full-time students in paid work of 16 or more hours per week were less likely to feel that they belong to their university community (Baik, Naylor, Arkoudis, & Dabrowski, 2019). Across all student groups, there was a rise in students reporting that they kept to themselves at university (Baik et al., 2019). This perhaps highlights that a more nuanced understanding of belonging or relatedness to the teachers or degree is required.

Difficulty in managing time and prioritising study was the most commonly cited dispositional factor across all responses. This corroborates findings that time management is difficult for first-year students (Brooker, Brooker, & Lawrence, 2017). However, in our study, students across all years struggled with prioritising their time or dedicating enough time to study, with the reasons for this varying from underestimating the amount of time needed to difficulties meeting conflicting responsibilities, whether or not students felt these were within their control. Juggling multiple responsibilities takes students away from their studies, increasing the risk of disengagement and therefore academic failure. Curricular concerns such as a perceived lack of alignment, authenticity, and teacher support were also factors reported for disengagement and academic failure.

Many of our students who failed and persisted described leading complex lives, as others have also noted for those who drop out (Naylor et al., 2018). Both male and female students described juggling multiple roles and responsibilities, referred to elsewhere in the literature as 'contested identities' (O'Shea, 2011), and reported prioritising identities of being a parent, caregiver, and breadwinner by necessity over student identities when narrating experiences of academic failure. This resonates with O'Shea (2015), who focused on first-in-family female caregivers who identified multiple challenges of managing competing roles, requiring a fine balance of caregiver and student identities. Like the women in O'Shea's study, many of our students' stories were 'replete with descriptions of hidden work, both emotional and physical' (O'Shea, 2015, p. 21). Our data adds to this by suggesting that both female and male students who failed and persisted struggled to find balance between their competing identities.

The impact of academic failure on students is broader than issues of retention or withdrawal, where attrition is considered to be problematic for students simply in terms of wasted time and personal debt (TEQSA, 2017). Our study shows the emotional burden of academic failure also on students who persist. The negative valence of emotional response is unsurprising, as students characterise success at university in terms of passing units, completion, and achievement (Naylor, 2017), however, the intensity of emotions described by some was surprising, giving rise to and/or compounding existing mental health concerns. Such experiences influence student well-being and adds further stress to a student body who are widely reported to be experiencing greater mental health problems (Ibrahim, Kelly, Adams, & Glazebrook, 2013; Macaskill, 2013; Orygen, 2017) but are less likely to seek professional help (Gorczynski, Sims-schouten, Hill, & Wilson, 2017). This raises interesting questions about whether those students who fail and persist are more likely to seek help than the students who drop out. Our findings regarding emotional burden prompts greater attention to the emotional health and well-being of students by focusing on student needs in their development journey rather than institutions' retention problems (McQueen, 2009).

Students in our study had not failed through 'individual traits or acts that produce earned failure' or because they do not 'give a darn about what they're doing in life' (Fassett & Warren 2004, p. 28). These stereotypes were clearly inaccurate on two fronts: first, that multiple factors contributed to failure and, second, that the students cared deeply about this. Worse is the potential harm that comes from such stereotypes in marginalising students who already feel vulnerable and deflated. Importantly, students' responses were to be disappointed or angry 'in myself' or feeling 'stupid', which demonstrates a loss of confidence and self-efficacy. Yet, self-efficacy is considered an important marker of persistence and success (Sandler, 2000; Tinto, 2017). Worryingly, feelings of shame and embarrassment are likely to interfere with help-seeking behaviours and suggest a more proactive approach to support following failure. That our students persisted in the face of failure highlights their ability to reframe and overcome this setback; understanding their strategies would be of value.

Our findings lead us to question whether Tinto's (2017) three guiding motivating strategies (self-efficacy, sense of belonging, value of the curriculum) are enough to explain persistence in the face of complicated lives and the compounded effect of failure on traditionally under-represented students. We do not suggest that these strategies are unimportant, instead that we need to consider student motivation as situated within

students' lives in relation to the university ecology, and relying on an individual's motivation to overcome such challenges may be taking too limiting a view of persistence. Our findings strongly highlight that individual, situational, and institutional factors interplay in experiences of failure and persistence; that is, there is interdependence of individual *and* system factors. Adopting this view of academic failure shifts the blame away from individuals who are framed as part of a deficit model. In terms of persistence, it suggests that the different components of support offered within a curriculum and at central university level need to be integrated in ways that do not throw the onus back on vulnerable students to work out how to navigate these on their own.

Our study raises further questions about the students who failed and dropped out and how their experiences differ to those who failed and persisted. More immediate questions regarding persistence include understanding better where students seek help and the strategies they develop to recover from academic failure at both individual and institutional levels. Fifteen years ago, Yorke and Longden (2004) identified a need for more nuanced theorisation of persistence from a multiplicity of theoretical perspectives, taking into account the interdependence of individualistic and sociocultural perspectives; this remains an outstanding challenge.

Study limitations

This study is limited to four courses within one institution that has a high proportion of traditionally under-represented and online students. A large percentage of our student cohort were from one course that had a high failure rate and a large proportion of international students; this may have skewed analyses of the institutional data. The survey's response rate was about 8%, which is lower than we had hoped. However, this is a vulnerable, possibly disaffected/disengaged group, and thus a difficult population to research – which may explain the limited literature in this domain. Further, because we defined persistence as continuing enrolment by census date of the year following a unit failure (2017), it is possible that some of our participants dropped out after this date. This was an unavoidable limitation of the research protocol.

Conclusion

This study identified the increased risk of drop out due to academic failure. However, a significant proportion of students do persist and complete their studies despite multiple failed units and a negative emotional burden. Our students' stories go beyond identifying that work, health, and financial pressures contribute to attrition, instead highlighting the confluence of dispositional, situational, and institutional factors and the emotional burden this places on students, including contributing negatively to mental health (and vice-versa in terms of mental health issues contributing to failure). Viewing persistence as an interaction between individuals and their sociocultural milieu opens up different avenues for research and considerations for support. Students who fail often do persist and complete their studies and much could be learned from their experiences and the strategies they adopt for supporting other students to do the same. Helping students to recover well from academic failure, and turning failure into a learning opportunity, seems a fundamental responsibility of higher education institutions.

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References

Adams, T., Banks, M., Davis, D., & Dickson, J. (2010). *The Hobsons retention project: Context and factor analysis report*. Paper presented at the Australian international education conference, Sydney, Australia.

Baik, C., Naylor, R., Arkoudis, S., & Dabrowski, A. (2019). Examining the experiences of first-year students with low tertiary admission scores in Australian universities. *Studies in Higher Education*, *44*(3), 526–538. doi:10.1080/03075079.2017.1383376

Bean, J. P., & Metzner, B. S. (1985). A conceptual model of non-traditional student attrition. *Review of Educational Research*, *55*, 485–540.

Bowles, T. V., & Brindle, K. A. (2017). Identifying facilitating factors and barriers to improving student retention rates in tertiary teaching courses: A systematic review. *Higher Education Research & Development*, *36*(5), 903–919. doi:10.1080/07294360.2016.1264927

Brooker, A., Brooker, S., & Lawrence, J. (2017). First year students' perceptions of their difficulties. *Student Success*, *8*(1), 49–62.

Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, *6*(1), 97–113. doi:10.1177/1468794106058877

Carroll, D., Ng, E., & Birch, D. (2009). Retention and progression of postgraduate business students: An Australian perspective. *Open Learning: The Journal of Open, Distance and e-Learning*, *24*(3), 197–209. doi:10.1080/02680510903201599

DET. (2017). *Completion rates of higher education students – cohort analysis*. Canberra: Department of Education and Training (DET). Retrieved from https://docs.education.gov.au/documents/completion-rates-higher-education-students-cohort-analysis-2005-2014

Devlin, M. (2013). Bridging socio-cultural incongruity: Conceptualising the success of students from low socio-economic status backgrounds in Australian higher education. *Studies in Higher Education*, *38*(6), 939–949. doi:10.1080/03075079.2011.613991

Dobele, A. R., Kopanidis, F., Gangemi, M., Thomas, S., Janssen, R., & Blasche, R. E. (2012). Towards a typology of at-risk students: A case study in Singapore. *Journal of Higher Education Policy and Management*, *34*(1), 3–13. doi:10.1080/1360080X.2011.621194

Fassett, D. L., & Warren, J. T. (2004). 'You Get Pushed Back': The strategic rhetoric of educational success and failure in higher education. *Communication Education*, 53(1), 21–39.

Gorczynski, P., Sims-schouten, W., Hill, D., & Wilson, J. C. (2017). Examining mental health literacy, help seeking behaviours, and mental health outcomes in UK university students. *The Journal of Mental Health Training, Education and Practice*, 12(2), 111–120. doi:10.1108/JMHTEP-05-2016-0027

HESA. (2018). *Non-continuation: UK Performance Indicators 2016/17*. UK Retrieved from https://www.hesa.ac.uk/news/08-03-2018/non-continuation-tables

HESP. (2017). *Discussion paper: Improving retention, completion and success in higher education*. Canberra: Higher Education Standards Panel (HESP), DET.

Holdsworth, S., Turner, M., & Scott-Young, C. M. (2018). Not drowning, waving. Resilience and university: A student perspective. *Studies in Higher Education*, 43(11), 1837–1853. doi:10.1080/03075079.2017.1284193

Holland, C. (2016). Critical review: Medical students' motivation after failure. *Advances in Health Sciences Education*, 21(3), 695–711. doi:10.1007/s10459-015-9643-8

Ibrahim, A. K., Kelly, S. J., Adams, C. E., & Glazebrook, C. (2013). A systematic review of studies of depression prevalence in university students. *Journal of Psychiatric Research*, 47(3), 391–400. doi:10.1016/j.jpsychires.2012.11.015

Jevons, C., & Lindsay, S. (2018). The middle years slump: Addressing student-reported barriers to academic progress. *Higher Education Research & Development*, 1–15. doi:10.1080/07294360.2018.1462305

Leathwood, C., & O'Connell, P. (2003). 'It's a struggle': The construction of the 'new student' in higher education. *Journal of Education Policy*, 18(6), 597–615. doi:10.1080/0268093032000145863

Li, I. W., & Carroll, D. R. (2017). *Factors influencing University student satisfaction, dropout and academic performance: An Australian higher education equity perspective*. Perth: National Centre for Student Equity in Higher Education (NCSEHE), Curtin University.

Lizzio, A., & Wilson, K. (2010). *Strengthening commencing students' sense of purpose: Integrating theory and practice*. Paper presented at the paper presented at the 13th Pacific Rim first year in higher education conference, Adelaide, Australia.

Macaskill, A. (2013). The mental health of university students in the United Kingdom. *British Journal of Guidance & Counselling*, 41(4), 426–441. doi:10.1080/03069885.2012.743110

McQueen, H. (2009). Integration and regulation matters in educational transition: A theoretical critique of retention and attrition models. *British Journal of Educational Studies*, 57(1), 70–88. doi:10.1111/j.1467-8527.2008.00423.x

NAO. (2007). *Staying the course: The retention of students in higher education*. London: National Audit Office.

Naylor, R. (2017). First year student conceptions of success: What really matters? *Student Success*, 8(2), 9–19. doi:10.5204/ssj.v8i2.377

Naylor, R., Baik, C., & Arkoudis, S. (2018). Identifying attrition risk based on the first year experience. *Higher Education Research & Development*, 37(2), 328–342. doi:10.1080/07294360.2017.1370438

O'Shea, S. (2011). Nomads in diaspora space: Exploring women's identity work in the university. *Studies in the Education of Adults*, 43(1), 61–77. doi:10.1080/02660830.2011.11661604

O'Shea, S. (2015). "I generally say I am a mum first … But I'm studying at uni": The narratives of first-in-family, female caregivers transitioning into an Australian university. *Journal of Diversity in Higher Education*, 8(4), 243–257. doi:10.1037/a0038996

O'Shea, S., Lysaght, P., Roberts, J., & Harwood, V. (2016). Shifting the blame in higher education – Social inclusion and deficit discourses. *Higher Education Research & Development*, 35(2), 322–336. doi:10.1080/07294360.2015.1087388

Orr, S. (2007). Assessment moderation: Constructing the marks and constructing the students. *Assessment & Evaluation in Higher Education*, 32(6), 645–656. doi:10.1080/02602930601117068

Orygen. (2017). *Under the radar: The mental health of Australian university students*. Australia: University of Melbourne & Orygen Youth Health Research Centre.

Peelo, M., & Wareham, T. (2002). *Failing students in higher education*. UK: Society for Research in to Higher Education & Open University Press.

Popovic, C. (2010). Myth busting: An examination of teachers' beliefs about first-year medical students. How well do teachers know their students? *Innovations in Education and Teaching International*, 47(2), 141–154. doi:10.1080/14703291003718885

Potter, A., & Bye, L.-A. (2014). "It might have worked for you but … " Evaluating the efficacy of a first year support strategy in multiple units and disciplines. *The International Journal of the First Year in Higher Education*, 5(2), 57–68. doi:10.5204/intjfyhe.v5i2.232

Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman, & R. G. Burgess (Eds.), *Analysing qualitative data* (pp. 173–194). London: Routledge.

Sandler, M. (2000). Career decision-making self-efficacy, perceived stress, and an integrated model of student persistence: A structural model of student persistence. *Research in Higher Education*, 41(5), 537–580.

SRC. (2018). *2017 student experience survey: National report*. Canberra: Social Research Centre (SRC), DET.

TEQSA. (2017). *Characteristics of Australian higher education providers and their relation to first-year student attrition*. Melbourne: Tertiary Education Quality and Standards Agency (TEQSA). Retrieved from http://teqsa.gov.au/news-publications/news/teqsa-study-highlights-common-characteristics-linked-attrition

Thomas, L. (2012). Building student engagement and belonging in higher educaTion at a time of change: final report from the What Works? Student retention and success programme. In. UK: Paul Hamlyn Foundation, HEFCE, HEA, Action on Access

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89–125. doi:10.2307/1170024

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed). Chicago: The University of Chicago Press.

Tinto, V. (2017). Reflections on student persistence. *Student Success*, 8(2), 1–8. doi:10.5204/ssj.v8i2.376

Wimshurst, K., & Allard, T. (2008). Personal and institutional characteristics of student failure. *Assessment & Evaluation in Higher Education*, 33(6), 687–698. doi:10.1080/02602930701772911

York, T. T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. *Practical Assessment, Research & Evaluation*, 20, 5.

Yorke, M. (2004). Retention, persistence and success in on-campus higher education, and their enhancement in open and distance learning. *Open Learning*, 19(1), 19–32.

Yorke, M., & Longden, B. (2004). Theory: A multiplicity of perspectives. In M. Yorke, & B. Longden (Eds.), *Retention and student success in higher education* (pp. 75–88). Maidenhead: Society for Research into Higher Education & Open University Press.

Yosso, T. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity & Education*, 8(1), 69–91. doi:10.1080/1361332052000341006

Zepke, N., Leach, L., & Butler, P. (2011). Non-institutional influences and student perceptions of success. *Studies in Higher Education*, 36(2), 227–242. doi:10.1080/03075070903545074

Zepke, N., Leach, L., & Prebble, T. (2005). Now you've got them, can you expect to keep them? Factors that influence student departure and persistence. *New Zealand Journal of Educational Studies*, 40(2), 181–201.