

Overcoming disadvantage, achieving success: What helps

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The Bradley Review of Australian Higher Education (2008) and subsequent government policies have led to increased participation in higher education of underrepresented or equity groups, "those disadvantaged by the circumstance of their birth" (p. xi). However, despite institutional interventions, disparity in retention and completion rates continues for these groups (Lim, 2015; Edwards & McMillan, 2015). Although objective measures allow institutions to report on inclusion targets, a focus on the student experience of disadvantaged groups is critical for the development of appropriate institutional support. This study used a mixed methods approach to survey successful students' experiences of challenge or disadvantage while studying, their identification with equity groups and, importantly, their experience of success. The sample comprised 308 students who had sought help to develop their academic skills, a crucial area for success for all students but particularly disadvantaged students (McKay & Devlin, 2014). Findings confirmed that the majority had overcome some level of disadvantage, with the main types identified as, balancing commitments, health issues and financial stress. Although these align with factors identified by consecutive University/Student Experience Surveys (2013; 2014; 2015) as the most common reasons for withdrawal, our student sample overcame these challenges to achieve success. Discipline teaching staff and central support services, particularly academic language and learning, are the most common helpful factors and central support is increasingly important at greater levels of disadvantage. Our findings align with proposals for institutional provision for joint initiatives by teaching staff and central support services to address student disadvantage and enable success.

Key Words: equity, inclusion, success, retention, academic skills, academic language and learning, disadvantage, helpful factors.

1. Introduction and background

Addressing the low participation of certain sectors of society in higher education has been a feature of government policy in Australia and other countries for some time (Organisation for Economic Co-operation and Development (OECD), 2012). A nation's success in a globalised competitive world is dependent on supporting the aspirations of all to attain high levels of education and hence remunerative employment. "In the labour market and in life, education is worth the effort" (OECD, 2015, p. 27). In Australia, initiatives to improve participation began with the Higher Education Equity Programme, *A Fair Chance for All* (Department of Employment Education and Training (DEET), 1990). This identified six groups termed equity or disadvantaged groups, namely: people from low-socio economic status (LSES) backgrounds, from rural or isolated areas, people with a disability, those from a non-English speaking background, women, especially in non-traditional areas of study and Indigenous people.

Subsequent reviews of this programme, established the improvement in participation of certain equity groups such as those from non-English speaking background as well as the negative impact of belonging to multiple equity groups, such as LSES and regional and remote locations (James, Baldwin, Coates, Krause, & McInnis, 2004; Willems, 2010; Australian Institute of Health and Welfare (AIHW), 2014; Edwards & McMillan, 2015). The Bradley review (2008) has been especially influential in identifying the on-going underrepresentation of Indigenous people, people with LSES and those from regional and remote areas, groups "disadvantaged by the circumstances of their birth" (Bradley, Noonan, Nugent, & Scales, 2008, p. xi). The subsequent rise of policy and strategy, the setting of institutional targets for inclusion and funding under the former Higher Education Participation and Partnerships Programme (HEPPP), led to a surge in both research and programs focussed on higher education aspiration, recruitment, attrition and retention. (Devlin, Kift, Nelson, Smith, & McKay, 2012; National Centre for Student Equity in Higher Education (NCSEHE), 2013). While there has been an increase in enrolments, recent studies have shown that students who are members of underrepresented groups, such as low SES, Indigenous people, mature aged students or those from regional or remote areas, continue to fall behind in rates of completion (Lim, 2015; Edwards & McMillan, 2015). So attrition and retention continue to be an issue for these students and the institutions where they are studying.

Identifying individuals who are underrepresented or the nature of their disadvantage has been important for higher education institutions not only to meet inclusion targets and track attrition and retention but also to put in place strategies to support successful completion. One of the main measures for identifying individuals, particularly those from LSES backgrounds has been the student's home postcode, initially based on the Socio-economic Indexes for Areas (SEIFA) produced by the Australian Bureau of Statistics (Department of Education, Employment and Workplace Relations (DEEWR), 2009). Such an objective measure is readily available at scale in enrolment records to monitor inclusion targets and identify locations for outreach to prospective students and schools. However, area based measures have been critiqued on the basis of their inadequacy to represent relative disadvantage (James, 2008), and the potential to undermine the primary goal of inclusion policies when such measures are used for outreach and institutional targets (Lim & Gemici, 2011; Dockery, Seymour, & Koshy, 2015).

Alongside these large scale, quantitative measures there is an extensive literature which uses mixed methods to investigate inclusion, retention and attrition (e.g. Bowles, Fisher, McPhail, Rosenstreich, & Dobson, 2014; King, Luzeckyj, McCann, & Graham, 2015). The addition of qualitative data allows individual students to self-report disadvantage based on their own personal experiences of the factors which make it difficult for them to study at university, and which would be excluded by purely quantitative means (Yorke & Longden, 2004). Additionally, qualitative data allows investigation of not only whether students experience some kind of disadvantage which makes studying difficult, but also provides an opportunity to gauge the level or intensity of difficulty, and how this relates to the nature of their disadvantage. Further, such self-reported data enables a 'success-focussed' approach (Devlin, 2009; Devlin & O'Shea, 2011; Devlin & O'Shea, 2012), through seeking, not only the nature and type of individual disadvantage, but the factors of success – i.e. those things which successful students cite as what helped them to continue in the face of disadvantage.

Students from underrepresented backgrounds have been shown to have greater needs for academic and non-academic support including services provided by academic language and learning centres in order to successfully engage at university (Bradley et al., 2008). Academic language and learning staff are therefore 'at the front line' (Priest, 2009, p. 79) for many students who are members of underrepresented groups in higher education. As Priest (2009) argues, this mediating role between the university and these students is also an opportunity to learn about, and from, students who have traditionally been least included in higher education. Further, enabling such students to 'give voice' to their experience of higher education is in itself a socially inclusive practice (Gaynor, 2011).

The aim of this study is to contribute to research in this area through an investigation of students' personal experiences of challenge or disadvantage during their studies and factors which

have contributed to their success. The cohort under investigation comprises successful students who have sought academic help by registering with an academic language and learning centre. In focusing on these students, we can learn from and about their experiences to gain insight into what is helping at both the institutional level and that of an academic language and learning centre.

2. Literature review

There are a number of terms used in the literature for students belonging to equity or disadvantaged groups. Underrepresentation is typically used as an indication of disadvantage and minority students are often termed non-traditional, those who are mature age and/ or first in family to enrol in higher education, those from LSES and/or diverse ethnic backgrounds, often participating in study part-time and entering university through a variety of pathways (Bowl, 2001; Thomas, 2002). Another common term is students 'at risk' usually in terms of withdrawal and/or failure (Tower, Walker, Wilson, Watson, & Tronoff, 2015). Although all students entering the new environment of the university will be 'at risk', it is clear that students from minority groups may be at higher risk as they tend to be less prepared both educationally, socially, culturally and economically (Bradley et al., 2008). Terms such as 'disadvantaged', 'nontraditional' and 'at risk', when used to label underrepresented groups, can be problematic if students are stereotyped as 'deficient' and in need of 'remediation'. Rather, it is important to value the diverse experiences they bring while at the same time acknowledging the difficulties they face and providing appropriate institutional and government support (Marshall & Case, 2010; Smit, 2012; Burke, 2012; Hitch et al., 2012; Devlin, 2013; O'Shea, Lysaght, Roberts, & Harwood, 2016). For the purposes of this study, the concept of disadvantage not only considers students who identify with particular equity groups or descriptions of disadvantage but also encompasses individual students' lived experiences of disadvantage or challenge during their studies whether or not they identify with such groups or descriptions. In this way, we hope to reveal the complex nature of student disadvantage and what helps students to overcome this to achieve success.

The extensive literature on retention and attrition points to challenging psychological, sociocultural and economic factors as key influences on students' decisions to withdraw from their studies and identifies disadvantaged students as most 'at risk' (Thomas, 2002; Yorke & Longden, 2004; Jones, 2008; Tinto, 2012; Krause & Armitage, 2014). At the same time, interactions between institutions and students are important contributing factors in their decision to withdraw or persist in their studies (Tinto, 2006-7). Yorke and Longden (2004, pp. 84-85) provide a broad categorisation of the influences that impact on student withdrawal as those internal to the student and psychological in nature and those that are external, namely, the environment of the institution, the broader sociocultural/economic environment and 'adventitious' events, those external, accidental influences beyond a student's control. These categories are also useful in discussing factors that support students to succeed and similar categories are found in studies of retention and attrition (Thomas, 2002; Zepke, Leach, & Butler, 2011; Devlin & O'Shea, 2011; Bowles et al., 2014; Mestan, 2016).

Internal psychological factors such as motivation and self-efficacy (Bandura, 1977), as well as academic and organisational abilities, are qualities students bring with them to the institution. Positive psychological characteristics are largely based on previous life and educational experience, such as prior academic success, and these can support students to overcome both academic and other difficulties (McKenzie & Schweitzer, 2001; Palmer, Bexley, & James, 2011). Although students from underrepresented groups may well have experienced educational disadvantage and failure (Scevak et al., 2015), such students often bring psychological strengths developed through their life experiences and these can support successful academic performance (Pitman, Koshy, & Phillimore, 2015; King et al. 2015; O'Shea, 2016a; Barney, 2016). Research into the comparative success of students from disadvantaged backgrounds is inconclusive, some studies showing that such students perform equally as well as their peers (Krause, Hartley, James, & McInnes, 2005; James, 2008; Gale, 2012; Devlin et al., 2012; Pitman et al., 2015), while others point towards lower achievements and lower completion rates (Yorke & Longden,

2008; Edwards & McMillan, 2015; Scevak et al., 2015). What is clear, however, is that students from equity and disadvantaged backgrounds need both academic and non-academic institutional support to persevere in their studies (Bradley et al., 2008; Putman & Gill, 2011; Tinto, 2012).

From an institutional perspective, identifying factors under their control which enable students to persist and succeed is important, and particularly important for disadvantaged students. Institutional practices to support student success have been strongly influenced by Tinto's theory of academic and social integration (Tinto, 2006-7; Tinto, 2012), more recently termed student involvement or engagement (Tinto, 2012; Krause & Armitage, 2014). Academic integration means that students are engaged in their learning, receiving positive reinforcement and achieving success while social integration leads to strong interpersonal relations through both formal and informal study and social interactions (Tinto, 2012). Integration leads, in turn, to a sense of belonging (Thomas, 2012; Krause & Armitage, 2014;) which ultimately supports academic success. For institutions, the question is what kind of strategies can they put in place to support both kinds of integration in the current higher education environment of widening participation, massification and globalisation (Quinn, 2013, cited in Lim, 2013; Krause & Armitage, 2014).

There is general consensus in the literature on three core strategies that support integration and hence retention. Firstly, academic and social integration or student engagement needs to take place in curricula and in the classroom since many students, not only those from disadvantaged backgrounds, have limited time on campus mainly due to the need for paid work. Secondly, the focus for engagement is primarily the first year experience as attrition is most frequent during transition. Lastly, academic and, in some instances, even non-academic support is more effective when embedded in curricula where it is of direct relevance to students' immediate needs (Yorke & Longden, 2008; Tinto, 2012; Kift, 2015). There are now a large variety of case studies reported in the literature on ways in which institutions have implemented these strategies with a focus on developing inclusive and student centred curricula (e.g. Crosling, Heagney, & Thomas, 2009; Grace & Gravestock, 2009; Devlin et al., 2012; NCHSE, 2013). Most target the first year experience and transition from different pathways and are aligned with institutional contexts and student backgrounds. However, there is growing recognition that to be successful, institutional efforts need to be systematic and sustainable and involve a whole-of-institution approach across levels and years of study (Willcoxson, Cotter, & Joy, 2011; Kift, 2015).

Despite the success of many of these strategies, university is still an unfamiliar and challenging environment for many new students who often experience a mismatch between their expectations and their academic experience resulting in poor performance and attrition (Christie, Munro, & Fisher, 2004; Harvey & Luckman, 2014). However, students from particular sociocultural and economic backgrounds may not only experience academic challenge but also find the university culture incompatible with their home culture. This can lead to alienation and exclusion from either or both environments which can impact academic performance and result in withdrawal (Habel & Whitman, 2016). In contrast, students from higher socio-economic backgrounds have the cultural resources or cultural capital (Devlin, 2009; Gale, 2012; Devlin, 2013) to fit into the dominant university culture and more easily understand the 'hidden curriculum' or implicit educational expectations (Devlin, 2010) and academic literacies (Lea & Street, 1998; Smit, 2012) necessary for success.

Finally, there are challenges for students in the sociocultural/economic environment, largely outside the control of the institution. Many students are balancing their study with work and life commitments (Wierenga, Landstedt, & Wyn, 2013). Financial pressures can have a greater impact on LSES students and mature age students (James, Krause, & Jennings, 2010; Leveson, McNeil, & Joiner, 2013; King et al., 2015, Baik, Naylor, & Arkoudis, 2015). Work and family commitments for these students limit the time on campus making it more difficult to establish social or study groups (Yorke &Thomas, 2003; Putman, & Gill, 2011). Informal support systems of peers, family and friends can enable students to succeed (Zepke et al., 2011; King et al., 2015). Peers can provide both academic and social support and family and friends can encourage and provide practical support such as finance and relief from caring responsibilities (Pitman, 2013). However, in some instances, students' home background may not be understanding or encouraging (Putman & Gill, 2011; O'Shea, 2016a, 2016b; Habel & Whitman, 2016). Institu-

tions are limited in their ability to address many of these broader external issues although they may organise peer mentoring systems and provide financial support and accommodation, specifically targeting disadvantaged groups. Clearly, it is important for institutions to be aware of these external factors as well as adventitious events such as health difficulties and how they impact on student retention and attrition (Yorke & Longden, 2004; Zepke, 2013).

The need for academic and non-academic support for students from underrepresented backgrounds is not disputed "access without support is not opportunity" (Tinto, 2008). However, there is conflicting research on whether students most at risk seek the specialised academic and non-academic help provided by institutions. Students may be unaware of the services offered and may not seek help in time to alleviate a crisis (Collins & Sims, 2006; King et al., 2015). Formal help seeking may be seen as a sign of failure, immaturity or stigma (Hitch et al., 2005; Clegg, Bradley, & Smith, 2006; Karimshah et al., 2013; Goldingay et al., 2014; Scevak et al., 2015; Mestan, 2016). Informal help-seeking from family and friends, especially for psychological problems, is often preferred (Benson, Hewitt, Devos, Crosling, & Heagney, 2009; Walsh, Larsen, & Parry, 2009) while academic help may be sought from peers or discipline based academic advisors or tutors rather than central language and learning centres (Walsh et. al., 2009; Morosanu, Handley, & O'Donovan, 2010; Devlin & O'Shea, 2011).

However, the students in this study did in fact seek academic help from a central language and learning centre, namely, the Learning Centre (LC) at the University of Sydney. Some of these students may well have perceived a need to develop their academic skills while others may have perceived help seeking in this area as a normal part of their university learning. Whatever their motivation, this study sought to investigate the experiences of disadvantage and success of this sub-set of the university population, successful students who seek academic help.

The above overview of the literature on factors that influence student withdrawal or persistence provides a useful framework for the presentation and discussion of the outcomes of this study.

The specific aims of the study were:

- identify the intensity of challenge/disadvantage students experienced while studying;
- identify the most common helpful factors reported by successful students who experience disadvantage;
- identify trends for specific equity groups in type and level of disadvantage and in helpful factors.

3. Methodology

Although a mixed methods research design was used, the main thrust of the research is qualitative in line with the research aims to enable students to give voice to their experiences of disadvantage and success. The methods comprised an online exploratory survey using Survey Monkey with follow up focus groups and interviews to explore outcomes in more detail (due to space limitations, the data from the latter are not discussed in this paper). The online survey (see Appendix A) was designed to be anonymous and brief to maximise qualitative responses and no demographic or study level data were collected. Although the term disadvantage was used in questions, this was not defined and alternative expressions, namely 'challenge' and 'difficulty' were used to elicit information on what had hindered students in their studies and the severity of this experience. In contrast, a subsequent question on success factors provided typical examples of 'helpful things'. A final question invited students to identify with descriptions or categories typically related to those of disadvantaged, underrepresented or equity groups but these categories were not defined as disadvantaged and students had the option to add other descriptions. Since the term LSES could not be used, a more general term 'struggling financially' was used in an attempt to capture students in this category. The questions were reviewed by the researchers and categories for the last question were chosen based on the research literature and institutional categories.

The target population for the survey consisted of current, or recently completed, students at the University of Sydney (undergraduate and postgraduate), who had achieved some measure of

success defined according to LC records as having completed at least one year of study, a measure used in the literature (Yorke & Longden, 2004; Devlin & O'Shea, 2011). Using LC email contact details, a convenience sample of 1,873 previous and current students who had completed at least one year of study in August 2011 were invited to participate in the survey. Ethics approval was granted by the University of Sydney Human Research Ethics committee, and participants were offered a chance to win an iPad as an incentive to participate. This provided a 17% response rate, with 321 responses received. Although this is a low response rate for the whole sample, it is counterbalanced by the number of responses as well as the purpose of the survey (Nulty, 2008). Respondents were asked the status of their studies and only those surveys from students who were continuing or had completed their studies were included in the study (n = 308).

Quantitative data were analysed using descriptive statistical analysis and qualitative data using inductive, thematic coding (Strauss & Corbin, 1990). Themes were generated in Survey Monkey, firstly, for the types of difficulty/disadvantage/challenge and secondly, the types of helpful factor. Descriptive statistics were then generated for the number and frequency of these themes (i.e. types of difficulty and helpful factor) and for the number and frequency of survey responses which were already categorical; that is, the level of disadvantage which students experienced and their identification with equity groups. Relationships between these descriptive statistics were explored to identify the most prominent trends and connections between students' experiences of disadvantage, both level and type, their identification with equity groups and the factors which helped them succeed. Coding and themes were validated by a second researcher.

4. Survey findings

4.1. Level of challenge/disadvantage and membership of equity groups

Of the 308 responses, 69% reported some level of disadvantage while studying, with the highest proportion (38%) at the level of slight or occasional (see Table 1). This may be a noteworthy proportion, given that all students had been successful in their studies.

Table 1. Number of survey responses which report each level of challenge/ disadvantage.

Level of challenge/disadvantage	Instances (%)
No challenge/disadvantage	95 (31%)
Slight or occasional challenge/disadvantage	118 (38%)
Regular or significant challenge/disadvantage	73 (24%)
Constant or extreme challenge/disadvantage	22 (7.1%)

Three quarters (231) of respondents identified with equity groups or disadvantaged descriptions (Table 2). Some identified with more than one description resulting in a total of 388 responses. Those who identified as returning to study are the most frequent category in the data, followed by those struggling financially (possibly LSES) and first in family students.

Respondents were also provided with an optional 'other' category. Many responses reinforced the given descriptions, but also included others, such as "carer", "PhD candidate", "living with parents", "having a daughter doing the HSC", "family and social responsibilities", "cross cultural differences", "isolated in field of study", "studying at a distance", "full-time worker", "resistance to field of study in family/culture", "change of career", "family breakdown", "moving house". However, there were insufficient examples for a new category. It should be noted that almost a quarter of the sample did not identify with any equity group description.

Table 2. Self-reported identity with equity/disadvantaged groups/descriptions.

Group/description	Number	Percentage of whole group
Returning to study after a long period	103	33.4%
Person who is struggling financially	81	26.3%
First in family	80	26.0%
Non-native speaker of English	64	20.8%
Person with a disability	31	10.1%
Person from a remote or isolated area	19	6.2%
Single parent	6	1.9%
Indigenous person	4	1.3%

4.2. Relationship of equity group identity to the level of challenge/disadvantage

At each level of challenge/disadvantage, the profile of equity group identity varied (Table 3).

Table 3. Equity group identity at each level of challenge or disadvantage. (Column totals add to more than 100% as respondents often identified themselves as belonging to more than one equity group.)

	Percentage of re	espondents wi	th each level o	of challenge
Equity group	No challenge/ disadvantage (n = 95)	Slight/ occasional (n = 118)	Regular/ significant (n = 73)	Constant/ extreme (n = 22)
Returning to study after a long period	49	52	36	27
Struggling financially	16	33	49	50
First in family	18	40	41	36
Non-native speaker of English	36	24	25	32
Person with a disability	0	9	26	32
Person from a remote or isolated area	7	5	12	14
Single parent	2	2	3	5
Indigenous person	2	1	2	5

While those who identified as returning to study are well represented in the sample as a whole, and at each level of disadvantage, the frequency is progressively lower at higher levels. Also this group and non-native English speakers represent the largest proportion who report no level of disadvantage. In contrast, some equity groups are represented with progressively higher frequency as the level of disadvantage increases, namely those struggling financially, those with a disability, and those from regional/remote areas. The number of students who identify as indigenous and single parents in this data is small, but suggest over-representation at higher levels of disadvantage. First in family students report comparatively high and constant frequency of disadvantage in each category from slight to extreme. This is also the case for non-native speakers

of English, although frequency levels are lower for this group but increase with each category of disadvantage.

4.3. Experiences of challenge/disadvantage

For respondents who reported some level of disadvantage while studying, qualitative comments which identified the types of difficulty they experienced were coded thematically. Responses frequently mentioned multiple types of difficulty. The initial coding yielded 15 themes. These have been broadly categorised with reference to the literature on factors influencing student withdrawal, namely, those internal to the student, those relating to the institution, and those in the broader sociocultural/economic environment as well as adventitious events (Yorke & Langden, 2004, pp. 84-85). The categories and the themes are listed in Table 4, with examples from the data.

Table 4. Categories of challenge/disadvantage with themes and verbatim examples from the survey responses.

Categories of student challenge/disadvantage	Themes from data	Example from data
Internal to the student		
Academic	Academic skills	how to write a scientific paper if I didn't learn how to write, I would have kept failing
	Difficult/too much study	dealing with sheer amount of study loads
	English language ability	English is my second language
Non-academic	Motivation	keeping motivated while being at home and away from other students and staff
	Balancing commitments	conflict between family responsibili- ties/work and study/research
	Mature/returning student	I am a mature aged student and found it intimidating returning to university
	Social connections	socially, sometimes I felt a little isolated
External to the student		
Institutional environment	Access to resources	limited library resources, i.e. insufficient books
	Lecturer/supervisor/tutor	difficulty in asking any questions to lec- turers and tutors as they are too busy
	University infrastructure/ systems	incorrect, delayed and conflicting in- formation from the student centre
Broader environment	Accommodation	problems arising in accommodation
	Distance/travel	neglected/falling through the cracks because I am not always on campus
	Financial difficulty	sole breadwinner for a young family while studying
Adventitious events	Health/disability	repetitive strain injury in my right arm
	Personal/family prob- lems	family illness and death

The most frequently reported themes are shown in Figure 1. The most common area of difficulty is *balancing commitments*, which although classified as personal or internal to the student, would necessarily be affected by external factors such as the institutional environment, the students' sociocultural/economic environment, and the impact of adventitious events, namely *health/disability*. The latter is the second most frequent difficulty and lies largely outside the control of the student. Another frequent challenge is *financial difficulties*, which once again would impact on *balancing commitments* as students would most likely need to engage in paid work. Another frequent challenge is *academic skills*, both personal to the student, but clearly dependent on interactions with the institution. The most frequent institutional difficulty is teaching staff (*lecturer/supervisor/tutor*).

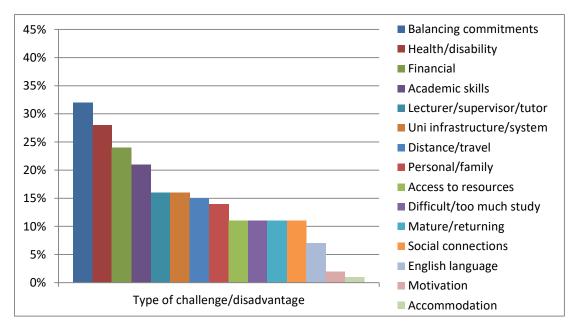


Figure 1. Themes of challenge/disadvantage as percentage of responses which reported some level of challenge / disadvantage.

The frequency of various types of difficulty varies, however, once the survey responses are filtered for the level of disadvantage experienced. Although *balancing commitments* is the most common challenge, the level of challenge decreases with higher levels of disadvantage (36% slight; 31% regular; 14% extreme). Other factors are more significant for those experiencing higher levels of disadvantage, namely *health/disability*, *academic skills* and the role of the *lecturer/supervisor/tutor*. Taken together, these factors would most likely impact on students' ability to balance commitments.

External factors, namely *health/disability* and *financial difficulties* increase with increasing challenge. The pattern for *health/disability* (17% slight; 43% regular; 37% extreme) is similar for students with a disability which is perhaps to be expected, given the numerous primary and secondary links between health and various types of disadvantage (e.g. Adler et al., 1994). *Financial* challenge is a fairly constant difficulty across all levels (26% slight; 21% regular; 23% extreme).

Academic skills, and teaching staff (*lecturer/supervisor/tutor*) become increasingly common at higher levels of disadvantage but *teaching staff* are mentioned more frequently than *academic skills* at the level of extreme disadvantage (17% slight; 25% regular; 27% extreme versus 13% slight; 14% regular; 36% extreme).

Also for those experiencing higher levels of disadvantage, the challenge of being a *return-ing/mature* student (18%) and lacking in *social connections* (18%) are mentioned more often compared with regular (6% and 8% respectively) and slight (13% and 11% respectively) levels of challenge.

4.4. Relationship of equity groups to types of challenge/disadvantage

Markedly different patterns for the most common types of difficulty are apparent for each equity group (Table 5).

Table 5. Frequency of reporting for 5 most commonly mentioned areas of difficulty for each equity group.

		Percer	tage of resp	ondents	
Equity group (n)	Balancing commitments	Health/ disability	Financial	Academic skills	Lecturer/ supervisor/ tutor
Returning to study after a long period (76)	39	23	18	26	8
Struggling financially (72)	34	43	41	17	13
First in family to attend university (70)	26	30	25	17	15
Non-native speaker of English (44)	28	9	12	40	19
Person with a disability (31)	10	87	10	23	10
Person from a remote or isolated area (15)	27	53	20	20	13
Single parent (5)	20	20	0	60	20
Indigenous person (3)	0	50	0	50	50

In some cases, these patterns are predictable, such as *financial difficulties* and *balancing commitments* for those struggling financially, and *health/disability* for those with a disability. However, *health/disability* is noticeably more frequent for approximately half of all remote/isolated area students and Indigenous students and is also frequent for those struggling financially (43%) and first in family students (30%). *Balancing commitments* is also a predictable difficulty for those returning to study (39%) and struggling financially (34%).

Academic skills is one of the most frequently reported types of disadvantage for all equity groups and especially for single parents, Indigenous students and non-native English speakers. Similarly, the role of the *lecturer/supervisor/tutor* is most frequently mentioned by these groups.

4.5. Experiences of success

All respondents, regardless of what level (if any) of challenge/disadvantage, were asked for the most helpful things during their time at university; things which either helped them to overcome some challenge, have a positive experience at university, or achieve success in their studies. Inductive coding of the qualitative responses initially yielded 33 themes and if themes occurred less than ten times in the data, these were re-examined and incorporated, where appropriate, in a final 18 themes. These have been broadly categorised in the same way as those for disadvantage (Table 6).

 Table 6. Themes coded for helpful factors with examples from the data.

Categories of things which	Themes from	Examples from data
helped	data	-
Internal to the student		
Non-academic	Beliefs/strategies	personal belief that education is important, and money will come eventually
	Motivation	doing for myself and not because I have to
	Life balance	ensuring I spend time with partner or friends and have a balance in life has been essential
External to the student Institutional environment		
Academic		
Academic faculty	Lecturer/supervisor/ tutor	my honours supervisors were incredible. they got me through a tough time; a lot of our assignments are formative
	Faculty support/resources	good resources in the conservatorium of music and Faculty of Architecture Audio Acoustics!!
	Course design/re-	recording of lectures, this has been espe-
	sources	cially helpful come exam time
Academic central	Central support services	LC feedback on essay writing was im- mensely helpful;
		the one-on-one [LC support] was very helpful;
	T 11	O-week courses
	Library Flexible/ technological access	university library and library website recording equipment which allows me to hear things I would not otherwise have
Academic resources Academic informal	Access to resources Other students	access to journals – high speed internet other students and postdocs have been giving me advice;
		helping others with the things I have struggled with – sharing my knowledge
Non-academic		
Administration	Administrative staff/ process	the admin staff in the History & Arts of- fice: Special Consideration Bursary and grant system
	Financial assistance	full scholarship
Infrastructure	Uni infrastructure	the availability of study spaces and computers
Social	Social event	Biology frisbee and soccer
Broader environment		
	External professional support	cognitive Behavioural Therapy; medical treatment
	Family/friends/ col-	my sister has always been excellent at
	leagues	guiding me through the university system
	Sport/exercise / leisure activity	reading for leisure has been helpful as an escape from uni work;
		playing sport/doing regular exercise has been great

The most commonly reported helpful factors, mentioned at least ten times in the data, are shown in Table 7. Responses were coded for multiple themes where appropriate and the frequencies shown are a percentage of the total responses, including students who experienced no disadvantage.

Table 7. Helpful factors with number of instances and frequencies in all surveys (n = 308).

Categories of things which helped	Themes from the data	Instances	Percentage
External to the student	Lecturer/supervisor/tutor	170	58.6
Institutional environment	Central support services	104	35.9
	Library	97	33.5
	Flexible/technological access	90	31.0
	Other students	82	28.3
	Faculty support/resources	56	19.3
	Access to resources	50	17.2
	Course design/resources	49	16.9
	University infrastructure	27	9.3
	Faculty support/resources	56	19.3
	Financial assistance	19	6.6
	Social event/organisation at uni	18	6.2
	Admin staff/process	16	5.5
Broader environment	Family/friends/colleagues	71	24.5
	Sport/exercise	26	9.0
	External professional	10	3.5
Internal to the student	Beliefs/strategies	24	8.3
	Life balance	22	7.6
	Motivation	11	3.8

It is interesting to note that themes internal to the student occur less frequently than those in the institutional and broader environment. Also, students' perceptions of their own academic skills ("my own organisational skills") and experience of success ("approached to do summer classes, a feeling of achievement after all these years") are infrequent in the data occurring three times or less. Themes related to employment ("employer support – ability to negotiate with my employer to fit my study"), accommodation ("living close to uni Redfern") and transport ("the (generally good) train network, otherwise I couldn't come to uni at all") are each mentioned, on average, only five times in the data.

Figure 2 shows the frequency of the most helpful factors which occur with 10% frequency or more (for at least one group) as a percentage of all student responses, regardless of the level of disadvantage (if any).

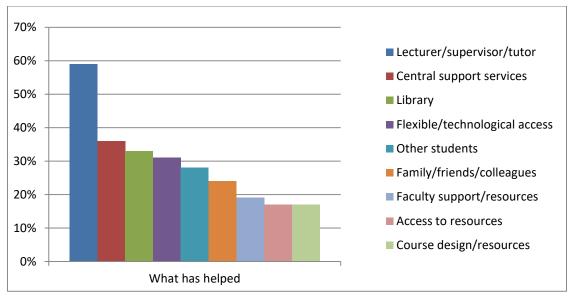


Figure 2. Frequency of common (>10%) helpful factors for all survey respondents (n = 308).

The two most frequently reported helpful factors were *teaching staff* (lecturer/supervisor/ tutor) and *central support services* (most commonly the LC in this data, but also disability services, counselling, careers and financial assistance). However, the frequency of each of these varies with the level of disadvantage (Figure 3).

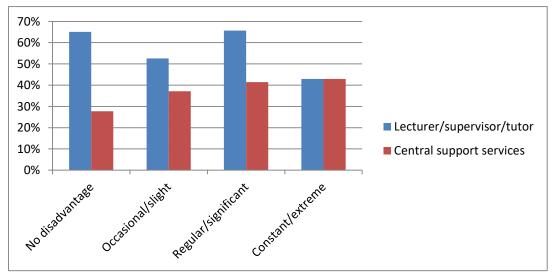


Figure 3. Frequency of the top two helpful factors at each level of student challenge/disadvantage (if any).

While *teaching staff* are frequently mentioned as helpful by students at all levels, the frequency with which *central support services* are reported increases with the level of disadvantage. As Figure 3 shows, for those students experiencing extreme disadvantage, central support services are reported as helpful in 43% of responses – the highest frequency for this group, and equal with teaching staff.

The other two most commonly reported helpful factors are *the library* and *flexible/technological access*. While the library is more frequently reported for those with either no disadvantage (42%) or with slight disadvantage (35%), flexible access is relatively more important at higher levels of disadvantage, (31% regular; 29% extreme).

Although *other students* and *family and friends* are a constant helpful factor for those experiencing no disadvantage, and slight and regular disadvantage (on average 28% of responses), their influence decreases for those experiencing extreme disadvantage, in particular the role of *family and friends* (10%).

It is also worth noting that a number of helpful factors are only mentioned with noticeable frequency by students experiencing extreme disadvantage. Two of these are internal to students, namely *beliefs and strategies (24%) and motivation (14%)*. At this level, recourse to *external professionals (19%)* is also helpful.

4.6. Relationship of equity groups to factors which help

Students who identified with specific equity groups reported helpful factors with varying frequencies, although *teaching staff* and *central support services* are consistently among the most common factors, along with the *library* (Table 8).

Table 8. Frequency of 6 most commonly mentioned helpful factors for each equity group.

		Po	ercentage o	f responder	nts	
Equity group (n)	Teaching staff	Central support	Library	Flexible access	Other students	Family/ friends
Returning to study after a long period (76)	57	46	46	28	27	23
Struggling financially (72)	50	47	23	19	21	36
First in family to attend university (70)	49	39	35	30	29	25
Non-native speaker of English (44)	49	47	42	26	28	21
Person with a disability (31)	63	67	20	23	13	23
Person from a remote or isolated area (15)	60	40	47	20	33	33
Single parent (5)	60	100	60	20	40	40
Indigenous person (3)	33	33	33	0	33	33

Teaching staff are reported as helpful most frequently by students with a disability, single parents, remote/isolated area students and returning students. Some of these groups (those with a disability, single parents) rate central support more highly. Teaching staff and central support are rated almost equally by students struggling financially, non-native speakers of English and Indigenous students. First in family students also rate Teaching staff above others but not as strongly as other equity groups.

The *library* is rated before *central support* as the second most helpful factor for remote/isolated students and equal to *central support* by returning students and Indigenous students. The *library* is the third most helpful factor for first in family students and non-native speakers of English and equal to *teaching staff* for single parents.

For students with a disability, the third most helpful factor is *flexible/technological access* and this is equal to the support of *family and friends*. Although important for all students, the influence of *family and friends* is greater than *other students* for those struggling financially, while both *family and friends* and *other students* are equally important for single parents, remote/isolated students and Indigenous students. *Other students* are more important than *family*

and friends for non-native speakers of English, those returning to study and first in family students.

5. Discussion and conclusion

The results of this study provide some insight into the level and type of disadvantage experienced by successful university students during their studies, how this intersects with their identity with equity group descriptions, and the factors which have helped them achieve success.

The majority reported some level of challenge or disadvantage, and the most common types of difficulty can be considered as both internal and external to the student, namely balancing commitments, health/disability, financial difficulties and academic skills. These challenges closely match the reasons for early withdrawal given in the Student/University Experience Surveys (2013, 2014, 2015), namely, health/stress, workload difficulties, study/life balance, financial difficulties and the need to be in paid work. The 2015 survey found these difficulties impact more on older students, Indigenous students, students with a disability and first in family students as well as students who achieve poorer grades. Such findings have also been commonly reported in the literature on retention and attrition (e.g. Wierenga et al., 2013; Edwards & McMillan, 2015). However, what is significant about our findings is that the students in our sample, many from the groups mentioned, overcame these difficulties to achieve success. Our study also strongly underlines the ubiquitous role of external factors, namely financial and health related difficulties (Baik, Naylor, & Arkoudis, 2015) which severely impact students' lives and academic work. What is also noteworthy is that the most severe level of disadvantage is overcome by those who are struggling financially, most likely students from LSES backgrounds. While institutions have limited ability to help with financial difficulties and even less so with health difficulties at a formal level, our data show the importance of empathetic teaching and central support staff in providing ways for students to overcome these difficulties. Conversely, institutions have a key role to play in addressing the area of academic skills and this can in turn help students to balance their study/life commitments and improve their grades.

Academic skills were reported as a significant area of difficulty and increasing with higher levels of disadvantage. At the same time, the provision of central academic skills support and other central services was rated as the second most helpful factor and increasing with higher levels of disadvantage. It is not surprising that students who sought academic help, our sample, reported academic skills as a significant area of difficulty while at the same time valuing the help they received in this area from a central academic language and learning centre. What is important in our findings is that academic language and learning support, as well as other central services support, is critical for enabling success as the severity of disadvantage increases. The institutional provision of academic skills support is widespread and varied across the sector and has been strongly recommended by government and in the literature. As McKay and Devlin (2014) point out, scaffolding academic literacies and 'demystifying the different language' of university is a powerful enabler of success, in particular for students from disadvantaged backgrounds. Indeed, the two most helpful factors include precisely those people who are best placed to support students' needs in this area: discipline teaching staff (lecturers, supervisors and tutors) and central support services (primarily, academic language and learning).

Despite this, another key finding is that teaching staff are frequently reported as both sources of difficulty and help, whereas central support is only mentioned as helpful. This is perhaps to be expected, as teaching staff form the basic fabric of students' interactions with the university, and in particular the assessment/feedback regime, and are hence the most likely source of all experiences, whether positive, negative or neutral. While teaching staff are helpful at all levels of disadvantage, central services increase in importance as the level of disadvantage increases and are equal to the support provided by teaching staff at the level of extreme disadvantage. This important enabling role of teaching staff and central services has been recognised in previous studies (e.g. Yorke & Longden, 2004) and has resulted in the promotion of institutional partnerships, for example, in embedding academic and life skills in curricula (Kift, 2015).

The essential role of other institutional central services, namely the library as well as technological facilities for flexible access can be seen in the frequent mention of these as helpful factors, particularly for those who are likely to have limited time on campus, such as single parents or to have difficulty accessing the campus, such as students with disabilities. Our findings strongly align with the literature in terms of the key role played by institutional central support services in student retention (e.g. Bradley et al., 2008; Tinto, 2012; King et al., 2015).

The institutional environment can also facilitate social integration through supporting the development of peer/colleague relationships. Our data not only highlight the important role of other students in enabling success but also the difficulty in establishing social and study networks, particularly for those experiencing higher levels of disadvantage and for students returning to study. Social integration is increasingly a challenge for all students and for institutions (Baik, Naylor, & Arkoudis, 2015). In line with other studies, a supportive external environment provided by family and friends is particularly important for single parents, Indigenous students and those from remote/regional areas and also for those struggling financially but the family situation can also be a source of difficulty (Barney, 2016).

An intriguing insight is that students rarely mention their own internal strengths as factors that have helped them succeed although undoubtedly this is the case (Smit, 2012; O'Shea, 2016b). Only those experiencing extreme disadvantage mention their own internal resources, such as motivation, more frequently. This is clearly an area for further investigation and intervention to promote self-esteem and confidence.

It is clear that our findings cannot be generalised as participants were drawn from a unique group of students, those successful students who had accessed academic language and learning resources. Despite this limitation, this study has provided insights into these students' experiences of disadvantage while studying and what has helped them to succeed. In addition, our study, in contrast to much of the literature on help-seeking, has shown that students who identify with equity group descriptions, the majority of our sample, do seek academic help from a central academic language and learning unit and increasingly value this help at higher levels of disadvantage.

Future studies could survey a broader sample of students who seek help from other central and faculty based services to provide more in depth data especially in terms of the effectiveness of these services to help students overcome significant institutional and external difficulties. Also more detailed qualitative investigation with specific groups, such as those experiencing higher levels of difficulty within particular equity descriptions, may provide richer insight into the factors which help in the face of severe disadvantage.

The outcomes of this study highlight the importance of key institutional enabling factors for student success, namely, teaching staff and central services, particularly academic language and learning. These support students towards overcoming their main difficulty of balancing study and life commitments in an environment severely impacted by powerful negative external and adventitious influences. Our findings are consistent with proposals that bring together the key institutional factors that enable student success, namely, discipline teaching staff and central services, to work together to more accurately align programs and resources with what helps.

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Appendix. Survey provided to participants online using Survey Monkey ®

What works for you	ı at university			
What is the status	of vour studies?			
I am continuing my st	-			
I have completed my				
I will not be completing				
I have not decided wi	nether to continue.			
2. Have you faced an university?	y challenge or disadva	antage which has mad	de it more difficult for y	ou to study at
		occasional or slight	regular or significant	constant or extreme
	no cha ll enge or disadvantage	challenge or disadvantage	challenge or disadvantage	challenge or disadvantage
I have faced:				
4. What have been th	e 3 most helpful things	s during your time at ເ	university, and why?	l
				acitiva evnerience
	ner helped you to face		idvantage, to have a p	ositive experience
of university life, or to Helpful things might in	ner helped you to face succeed in your studi nclude, e.g. practical re lecturers or other stud	es. esources you've used	, like a website or son	ne technology, the
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References

- Adler, N.E., Boyce, T, Chesney, M.A., Cohen, S., Folkman, S., Kahn, R.L., & Syme, S. L. (1994). Socioeconomic status and health. The challenge of the gradient. *American Psychologist*, 49(1), 15–24.
- Australian Institute of Health and Welfare (AIHW). (2014). *Towards a performance measure-ment framework for equity in higher education*. Canberra: AIHW.
- Baik, C., Naylor, R., & Arkoudis, S. (2015) *The first year experience in Australian universities:* Findings from two decades, 1994-2014. The University of Melbourne: Centre for the Study of Higher Education.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychology Review*, 84(2), 191–215.
- Barney, K. (2016). Listening to and learning from the experiences of Aboriginal and Torres Strait Islander students to facilitate success. *Student Success*, 7(1), 1–11.
- Benson, R., Hewitt, L., Devos, A., G., & Heagney, M. (2009). Experiences of students from diverse backgrounds: the role of academic support. In *The Student Experience*, *Proceedings of the 32nd HERDSA Annual Conference*, Darwin, 6-9 July 2009 (pp. 545–550).
- Bowl, M. (2001). Experiencing the barriers: non-traditional students entering higher education. *Research Papers in Education*, 16, 141–160. doi:10.1080/02671520110037410
- Bowles, A., Fisher, R., McPhail, R., Rosenstreich, D., & Dobson, A. (2014). Staying the distance: students' perceptions of enablers of transition to higher education, *Higher Education Research & Development*, 33, 212–225. doi:10.1080/07294360.2013.832157
- Bradley, D., Noonan, P. Nugent, H., & Scales, B. (2008). *Review of Australian Higher Education: Final Report*. Canberra: Department of Education, Employment & Workplace Relations (DEEWR).
- Christie, H., Munro, M., & Fisher (2004). Leaving university early: exploring the differences between continuing and non-continuing students. *Studies in Higher Education*, 29, 617–636. doi:10.1080/0307507042000261580
- Clegg, S., Bradley, S., & Smith K. (2006). 'I've had to swallow my pride': help seeking and self- esteem. *Higher Education Research & Development*, 25, 101–113. doi:10.1080/07294360600610354
- Collins, W., & Sims, B.C. (2006). Help seeking in higher education academic support services. In S. Karabenick and R. Newman (Eds.), *Help seeking in academic settings* (pp. 203–223). London: Lawrence Erlbaum Associates.
- Crosling, G., Heagney, M., & Thomas, L. (2009). Improving student retention in higher education Improving teaching and learning. *Australian Universities Review*, 51(2), 9–18.
- Department of Education, Employment and Workplace Relations (DEEWR). (2009). *Measuring the Socio-Economic Status of Higher Education Students, Discussion Paper, December.*
- Department of Education and Training (DET). (2016). 2015 Student experience survey national report.
- Department of Employment Education and Training (DEET). (1990). A fair chance for all.
- Devlin, M. (2009). Indigenous higher education student equity: Focusing on what works. *Australian Journal of Indigenous Education*, *38*, 1–8. doi:10.1375/S1326011100000533
- Devlin, M. (2010). Non-traditional student achievement: Theory, policy and practice in Australian higher education. *Keynote Address. First Year in Higher Education (FYHE) international conference, June 27–30, in Adelaide.* Retrieved from http://www.fyhe.com.au/past_papers/papers10/content/pdf/Marcia_Devlin_keynote_4.pdf
- 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*, 939–949. doi:10.1080/03075079.2011.613991

- Devlin, M., Kift, S., Nelson, K., Smith, L., & McKay, J. (2012). Effective teaching and support of students from low socioeconomic status backgrounds: Resources for Australian higher education. Sydney: Office for Learning and Teaching, Department of Industry, Innovation, Science, Research and Tertiary Education.
- Devlin, M., & O'Shea, H. (2011). Directions for Australian higher education institutional policy and practice in supporting students from low socioeconomic backgrounds. *Journal of Higher Education Policy and Management*, 33, 529-535. doi:10.1080/1360080X.2011.605227
- Devlin, M., & O'Shea, H. (2012) Effective university teaching: Views of Australian university students from low socio-economic status backgrounds. *Teaching in Higher Education*, 17(4), 385-397.
- Dockery, A.M., Seymour, R., & Koshy, P. (2016). Promoting low socio-economic participation in higher education: a comparison of area-based and individual measures. *Studies in Higher Education*, 41, 1692-1714. doi:10.1080/03075079.2015.1020777
- Edwards, D., & McMillan, J. (2015). *Completing university in a growing sector: Is equity an issue?* Report submitted to the National Centre for Student Equity in Higher Education, Australia. Australian Council for Educational Research (ACER), Melbourne.
- Gale, T. (2012). Towards a Southern Theory of Student Equity in Australian Higher Education: Enlarging the Rationale for Expansion. *International Journal of Sociology of Education*, 1, 238-262. doi:10.4471/rise.2012.14
- Gaynor, F. (2011). Giving voice to valuing difference. Keynote address at Association for Academic Language and Learning Symposium: Critical Discussions about Social Inclusion. University of Wollongong.
- Goldingay, S., Farrugia, D., Hosken, N., Lamaro, G., Nihill, C., & Macfarlane, S. (2014). "The university didn't actually tell us this is what you have to do": Social inclusion through embedding of academic skills in first year professional courses. *The International Journal of the First Year in Higher Education*, *5*, 43-53. doi:10.5204/intjfyhe.v5i1.194
- Grace, S., & Gravestock, P. (2009). *Inclusion and diversity: Meeting the needs of all students*. London: Routledge.
- Graduate Careers Australia (GCA) and the Social Research Centre (SRC). (2014). 2013 University experience survey national report.
- Graduate Careers Australia (GCA) and the Social Research Centre (SRC). (2015). 2014 University experience survey national report.
- Habel, C., & Whitman, K. (2016). Opening spaces of academic culture: doors of perception; heaven and hell. *Higher Education Research & Development*, *35*, 71-83. doi:10.1080/07294360.2015.1133570
- Harvey, A., & Luckman, M. (2014). Beyond demographics: Predicting student attrition within the Bachelor of Arts degree. *The International Journal of the First Year in Higher Education*, 5, 19-29. doi:10.5204/intjfyhe.v5i1.187
- Hitch, D., Goldingay, S., Hosken, N., Lamaro, G., Mcfarlane, S., Nihill, C., Ryan J., & Farrugia, D. (2012). Academic skills and beyond: A resource based approach to support student success in higher education. *Journal of Academic Language and Learning*, *3*(2), A29-A41. Retrieved from http://www.journal.aall.org.au/index.php/jall/article/view/197/146
- James, R. (2008). Participation and equity: A review of the participation in higher education of people from low socioeconomic backgrounds and Indigenous people. Centre for the Study of Higher Education, The University of Melbourne: Universities Australia.
- James, R., Baldwin, B., Coates, H., Krause, K.L., & McInnis, C. (2004). *Analysis of equity groups in higher education 1991-2002*. Centre for the Study of Higher Education The University of Melbourne: Commonwealth of Australia.

- James, R., Krause, K.L., & Jennings, C. (2010). *The first year experience in Australian universities. Findings from 1994 to 2009*. The University of Melbourne: Centre for the Study of Higher Education.
- Jones, R. (2008). Student retention and success: A synthesis of research. *EvidenceNet Synthesis*, 1-43. Higher Education Academy. Retrieved from https://www.heacademy.ac.uk/resources/detail/inclusion/wprs/WPRS_retention_synthesis
- Karimshah, A., Wyder, M., Henman, P., Tay, D., Capelin, E., & Short, P. (2013). Overcoming adversity among low SES students: A study of strategies for retention. *Australian Universities Review*, *55*(2), 5-13.
- Kift, S. (2015). A Decade of transition pedagogy: A quantum leap in conceptualizing the first year experience. *HERDSA Review of Higher Education*, 2, 5-26.
- Kift, S., Nelson, K., & Clarke, J. (2010). Transition Pedagogy: A third generation approach to FYE A case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, *1*(1), 1-20.
- King, S., Luzeckyj, A., McCann, B., & Graham, C. (2015) Exploring the experience of being first in family at university: A 2014 Student Equity in Higher Education Research Grants Project. Perth: Curtin University: National Centre for Student Equity in Higher Education.
- Krause, K.L., & Armitage, L. (2014). *Australian student engagement, belonging, retention and success: A synthesis of the literature.* York: the Higher Education Academy.
- Krause, K.L., Hartley, R., James, R., & McInnis, C. (2005). *The first year experience in Australian universities: findings from a decade of national studies.* The University of Melbourne: Centre for the Study of Higher Education.
- Lea, M., & Street, B. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education*, 23(2), 157–172.
- Leveson, L., McNeil, N., & Joiner, T. (2013). Persist or withdraw: the importance of external factors in students' departure intentions. *Higher Education Research & Development*, 32, 932-945. doi:10.1080/07294360.2013.806442
- Lim, P. (2015). Do individual background characteristics influence tertiary completion rates? A 2014 Student Equity in Higher Education Research Grants Project. Perth: Curtin University: National Centre for Student Equity in Higher Education.
- Lim, P., & Gemici, S. (2011). *Measuring the socioeconomic status of Australian youth*. National Centre for Vocational Education Research.
- Marshall, D., & Case J. (2010). Rethinking 'disadvantage' in higher education: a paradigmatic case study using narrative analysis. *Studies in Higher Education*, *35*, 491-504. doi:10.1080/03075070903518386
- McKay, J., & Devlin, M. (2014) 'Uni has a different language ... to the real world': demystifying academic culture and discourse for students from low socioeconomic backgrounds. Higher Education Research & Development, 33(5), 949-961.
- McKenzie, K., & Schweitzer, R. (2001). Who Succeeds at University? Factors predicting academic performance in first year Australian university students. *Higher Education Research & Development*, 20, 21-33. doi:10.1080/07924360120043621
- Mestan, K. (2016). Why students drop out of the Bachelor of Arts. *Higher Education Research & Development*, 35(5), 869-880. doi:10.1080/07294360.2016.1139548
- Morosanu, L., Handley, K., & O'Donovan, B. (2010). Seeking support: researching first- year students' experiences of coping with academic life. *Higher Education Research & Development*, 29, 665-678. doi:10.1080/07294360.2010.487200
- National Centre for Student Equity in Higher Education (NCSEHE). (2013). *Access and participation in higher education: Outreach, Access, Support. Curtin University*. Retrieved from http://www.ncsehe.edu.au/wp-content/uploads/2013/11/NCSEHE-Access-and-Participation-in-Higher-Education-2013.pdf

- Nulty D.D. (2008) The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education*, *33*, 301-314. doi:10.1080/02602930701293231
- Organisation for Economic Co-operation and Development (OECD) (2012). *Equity and quality in education. Supporting disadvantaged students and schools.* Paris: OECD Publishing. doi:10.1787/9789264130852-en.
- Organisation for Economic Co-operation and Development (OECD) (2015). Multilingual summaries: Education at a glance 2015. Paris: OECD Publishing. doi:10.1787/eag-2015-en
- O'Shea, S. (2016a). Avoiding the manufacture of 'sameness': First-in-family students, cultural capital and the higher education environment. *Higher Education*, 72, 59-78. doi:10.1007/s10734-015-9938-y
- O'Shea, S. (2016b). Navigating the knowledge sets of older learners: Exploring the concept of experiential capital amongst first-in-family mature age students. Paper presented to the *Open University Biennial Widening Participation Conference 2016: Transforming Lives through Life-wide Learning?* 27-28 April 2016 (pp. 112-116). Milton Keynes, United Kingdom.
- 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, 322-336. doi:10.1080/07294360.2015.1087388
- Palmer, N., Bexley, E., & James, R. (2011). *Selection and participation in higher education: University selection in support of student success and diversity of participation.* Centre for the Study of Higher Education, The University of Melbourne: Group of Eight. Retrieved from http://www.go8.edu.au/university-staff/go8-policy-_and_-analysis
- Pitman, T. (2013) 'Miraculous exceptions': what can autobiography tell us about why some disadvantaged students succeed in higher education? *Higher Education Research & Development*, 32, 30-42. doi:10.1080/07294360.2012.750278
- Pitman, T., Koshy, P., & Phillimore, J. (2015). Does accelerating access to higher education lower its quality? The Australian experience. *Higher Education Research & Development*, 34, 609-623. doi:10.1080/07294360.2014.973385
- Priest, A. M. (2009). 'I have understanding as well as you': Supporting the language and learning needs of students from low socio-economic status backgrounds. *Journal of Academic Language and Learning*, 3(2), A1-A12. Retrieved from http://www.journal.aall.org.au/index.php/jall/article/view/95/69
- Putnam, T., & Gill, J. (2011). The Bradley challenge: A sea change for Australian universities. *Issues in Educational Research*, 21(2) 176-191.
- Scevak, J., Southgate, E., Rubin, M., Macqueen, S., Douglas, H., & Williams, P. (2015). Equity Groups and Predictors of Academic Success in Higher Education. A 2014 Student Equity in Higher Education Research Grants Project. Perth, Curtin University: Report submitted to the National Centre for Student Equity in Higher Education.
- Smit, R. (2012). Towards a clearer understanding of student disadvantage in higher education: problematising deficit thinking. *Higher Education Research & Development*, *31*, 369-380. doi:10.1080/07294360.2011.634383
- Strauss, A.C., & Corbin, J.M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Thomas, L. (2002). Student retention in higher education: the role of institutional habitus. *Journal of Education Policy*, 17, 423-442. doi:10.1080/02680930210140257
- Thomas, L. (2012). Building student engagement and belonging in higher education at a time of change: Final report from the What works? Student retention & success programme. London: Paul Hamlyn Foundation.
- Tinto, V. (2006-2007). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), 1-19.

- Tinto, V. (2008). *Access without support is not opportunity*. Paper presented at the 36th Annual Institute of Chief Academic Officers, The Council of Independent Colleges, November 1, 2008, Seattle, Washington.
- Tinto, V. (2012). *Completing college Rethinking institutional action*. Chicago: University of Chicago Press.
- Tower, M., Walker, R., Wilson, K., Watson, B., & Tronoff, G. (2015). Engaging, supporting and retaining academic at-risk students in a Bachelor or Nursing: Setting risk markers, interventions and outcomes. *The International Journal of the First year in Higher Education*, 6, 121-134. doi:10.5204/intjfyhe.v6i1.251
- Walsh, C., Larsen, C., & Parry, D. (2009). Academic tutors at the frontline of student support in a cohort of students succeeding in higher education, *Educational Studies*, 35, 405-424. doi:10.1080/03055690902876438
- Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco: John Wiley.
- Wierenga, A., Landstedt, E., & Wyn, J. (2013). *Revisiting disadvantage in higher education*. The University of Melbourne: Youth Research Centre, Melbourne Graduate School of Education.
- Willems, J. (2010). The Equity Raw-Score Matrix a multi-dimensional indicator of potential disadvantage in higher education. *Higher Education Research & Development*, 29, 603-621. doi:10.1080/07294361003592058
- Yorke, M., & Longden, B. (2004). *Retention and student success in higher education*. Maidenhead: Open University Press.
- Yorke, M., & Thomas, L. (2003). Improving the Retention of Students from Lower Socio-economic Groups. *Journal of Higher Education Policy and Management*, 25, 63-74. doi:10.1080/13600800305737
- Zepke, N. (2013). Student engagement: A complex business supporting the first year experience in tertiary education. *The International Journal of the First year in Higher Education*, 4, 1-14. doi:10.5204/intjfyhe.v4i1.183
- Zepke, N., Leach, L., & Butler, P. (2011). Non-institutional influences and student perceptions of success. *Studies in Higher Education*, 36, 227-242. doi:10.1080/03075070903545074