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Making friends in high places: exploring the role of institutional status in the social integration of working-class higher education students in Australia

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Abstract

There is a large body of research demonstrating that working-class students are less socially integrated than their middle-class peers at higher education institutions. The present research investigated the role that institution type may play in the relationship between social class and social integration. In particular, we investigated theories related to institutional prestige and status and their potential exacerbating effects on the social integration of working-class students. The study used data from a nationally representative sample of young Australian adults ($N = 2333$) of the same age. The moderating role of institution type on the relationship between social class and social integration was tested comparing elite (Go8) against non-elite, and university against vocational college (TAFE) institutions. Results indicated that working-class students were generally less socially integrated than students from higher classes. However, this effect was not moderated by institution type. We conclude that social class differences in social integration in higher education are remarkably pervasive, and appear to be a widespread problem across all institutions. We discuss the need for higher education institutions to do more to create an inclusive environment for students from working-class backgrounds.

Keywords Social class · Social integration · Socioeconomic status · University students · Working-class student

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Introduction

Higher education is one of the quickest pathways to upward social mobility and as such there has been a global push to increase access to higher education from traditionally excluded groups. Historically, higher education, particularly university education, has been reserved for the upper echelons of society, and in more recent times it has become a staple of the middle class. In response to modern pushes for equity and inclusion in higher education, the number of working-class students enrolled at university has been on the rise over the last decade. However, research has consistently demonstrated that enrolling in university is only the first part of what can often be an arduous journey for these students. In particular, research across multiple disciplines has found that various aspects of the university experience and culture make it more difficult for these students to progress and complete their studies (e.g., Martinez et al. 2009; Nunez and Cuccaro-Alamin 1998; Soria and Stebleton 2012). Compared to their middle- and upper-class peers, working-class students do not feel as prepared for university (e.g. Bui 2002; Shields 2002), they are less likely to pass courses and cultivate academic skills (Robbins et al. 2004), and they have higher attrition and lower graduation rates (Robbins et al. 2004). As discussed by Reay et al. (2010), if these differences in experiences and outcomes are not understood and properly addressed, then widening participation may serve to maintain and even in some cases increase social and economic inequality, rather than improve it.

In the present paper, we consider one particular area in which differences have been found between working-class students and their peers: their social integration. Research has established that working-class students are less likely to be socially integrated at higher education institutions (HEIs; for a meta-analysis, see Rubin 2012). Social integration refers to the quantity and quality of social interactions and relationships students have with other students and faculty at HEIs. Previous research has found that working-class students report fewer and less meaningful interactions with students and staff and generally have a more difficult time engaging socially at HEIs (Jack 2016; Walpole 2003). Research has also found that working-class students are less likely to adopt a student identity (Iyer et al. 2009), which is known to be an important factor in HEI adaptation and success (Chickering and Reisser 1993; Jensen and Jetten 2015; Lounsbury et al. 2005; Pascarella and Terenzini 2005; Pasque and Murphy 2005; Scanlon et al. 2007; Torres et al. 2009). Notably, these effects have been found across different measures of class and socioeconomic status and different conceptions of social integration (Rubin 2012). Rubin (2012) also found that the social class-social integration relation did not vary as a function of gender or year of study.

Social integration is a fundamental component of higher education, because it is linked to important HEI outcomes, such as academic performance, retention, and mental health and wellbeing (e.g., Robbins et al. 2004; Rubin et al. 2019; Thomas and Hanson 2014). As explained by McCabe (2016), issues with social integration tend to lead to academic issues and vice versa. Social integration in higher education can lead to changes in students' attitudes, articulateness, dress sense, sociability, and team spiritedness, and these changes can increase

students' prospects on the job market (Moore et al. 1998; Stuber 2009, 2011). If colleges and universities aim to develop the "whole student", then social integration is an essential part of higher education.

There is also evidence that social integration has benefits for working-class students over and above the benefits that it provides to students from higher class backgrounds. Research has demonstrated that working-class students receive less social, emotional and practical support from outside sources (e.g., family and friends) during their studies (Billson and Terry 1982; Elkins et al. 2000) and therefore benefit more from sources of support from inside the HEI (Malecki and Demaray 2006). Social integration also provides working-class students with important types of informational support or "college knowledge" (Bryan and Simmons 2009; Collier and Morgan 2008; Lehmann 2009; Lynch and O'Riordan 1998; York-Anderson and Bowman 1991). This support includes information about how to navigate different aspects of the HEI experience, which students usually obtain from parents and other family members who have been to university. Because working-class students are more likely to be the first in their family to attend university, they often miss out on this inside knowledge (Bryan and Simmons 2009). Working-class students who are able to "fully" socially integrate into HEIs have been found to be more academically successful, as well as experience higher education as a more transformative experience (Lehmann 2013). Consequently, social integration appears to be particularly beneficial for working-class students, and it is believed to work to reduce some of the disadvantages that these students experience in higher education. Altogether, this past work indicates that improving the social integration of working-class students should be a key priority for higher education institutions.

Understanding social class differences in social integration

In order to understand how to increase the social integration of working-class students, there first needs to be an understanding of the reasons why these differences exist and the factors that impact upon them. Rubin and Wright (2015) found that working-class students were less integrated at university in part because they tended to be older than middle-class students. A follow up study found that social class and older age predicted less time and money for social activities, which predicted less social integration (Rubin and Wright 2017). In a case study, Lareau (2015) reported that a student from a working-class background was better able to adapt to university because they had a friend from a similar background, which suggests peer-relationships are an important factor in aiding social integration efforts. Other studies have investigated institutional rather than individual factors that might influence the relationship between social class and social integration.

In particular, previous research has considered the role that institutional status has on the relationship between social class and social integration. Institutional status refers to the characteristics and history of the higher education institution, with older, larger, and more traditional universities generally being considered to be higher in prestige. Importantly, although there have been marked increases in the number of students from non-traditional and low-SES backgrounds across the higher

education sector, there is an undeniable trend of these students going to certain types of institutions. In the US for instance, increases in working-class higher education students have largely occurred in community colleges, while the Ivy League enrolment rates remain relatively stagnant (Chesters 2015; Gurney-Read 2015; Jaschik 2012; Parker 2016). Similarly, in Australia, rural and outer-urban universities have seen rapid expansions in the number of working-class enrolments, with the inner-city sandstone universities (so-called *Group of Eight* universities) failing to match these increases (Chesters 2015; Gurney-Read 2015; Jaschik 2012; Parker 2016).

Previous research has highlighted how these disparities in enrolments are reflections of complex processes of class reproduction (Lareau and Lamont 1988; Lareau 2015). These class reproduction processes can be understood in terms of cultural capital. Compared to their higher class peers, students from lower social class backgrounds have less exposure to highly valued cultural codes that help individuals succeed in the education system. In terms of enrolment differences across institutions, working-class students are less likely to aspire to attend more prestigious universities because of these differences in cultural capital (Bradley et al. 2008; Jetten et al. 2017; Walpole 2003). Additionally, they may lack the social or economic resources needed to gain access to these kinds of institutions in the first place (Feinstein and Vignoles 2008). As noted by Rubin et al. (2019), this uneven distribution of working-class students in higher education institutions serves to preserve rather than improve social inequality. These class reproduction processes also manifest in the university experience of working-class university students (Lareau and Lamont 1988; Lareau 2015), with prior literature indicating that working-class students have more success in public universities and community colleges (Cofer and Somers 2000; Lohfink and Paulsen 2005; Wells 2008) compared to more elite prestigious universities.

Institution status and social integration

Research on HEI status and prestige and the experiences of students from working-class backgrounds in "elite" higher education institutions has generally found that working-class students face greater barriers to social integration and belonging when attending more elite institutions (Cofer and Somers 2000; Lohfink and Paulsen 2005; Wells 2008). Previous research on structural diversity in higher education has found that more diverse campuses foster more connected support networks and a greater sense of belonging in working-class students (Chang 1999; Hurtado et al. 1998; Lareau 2015; Leyton et al. 2015). In particular, Leyton et al. (2015) found that working-class students adapted better at non-elite compared to elite HEIs. The researchers attributed this finding to the greater diversity in class present at the non-elite HEIs. That is, working-class students may be less socially integrated, or less likely to "fit in" at higher status institutions because students from backgrounds similar to them are generally underrepresented. Thus, there is some evidence that the institutional context, in particular the number of working-class students, plays a role in shaping the social experiences of students. In particular, previous research

suggests that working-class students will be less socially integrated at high status institutions compared to institutions that are lower in status.

Institutional status and social identity

One aspect that has received limited attention in this sphere is the role that social identity and group processes may play in the balance between institutional status and social integration. Social identity in particular, has previously been linked to social integration in higher education (Iyer et al. 2009). Notably, students who assume the student identity and the identity of their institution tend to have better social integration (Iyer et al. 2009). However, working-class students are in general less likely to adopt a student identity at university (Iyer et al. 2009; Jetten et al. 2017). The status of the institutions may have a key role to play in this context. Research on social identity has found that belonging to a higher status group fosters stronger social identity and more in-group favouritism (Sachdev and Bourhis 1987). Due to their lower status, working-class students may be more motivated to identify with higher status institutions than middle-class students (Ellemers et al. 1992). In contrast, working-class students' motive to identify with the institution would be more equal with middle-class students in lower status institutions, where there is not so much to gain from the identification. In other words, social identity theories would predict that working-class students gain more than middle-class students from basking in the reflected glory of prestigious institutions, and so they should identify more strongly with these institutions and feel a greater sense of belonging, thereby reducing the social class difference in social integration at such institutions. However, it should be noted that Aebischer and Oberlé (2004) found that university students at less prestigious institutions had a greater sense of identity than students at a more prestigious university. This result seemed to be contingent upon the status of the lower prestige institution being on an upward trajectory. Consequently, theories of identity and status may also predict that working-class students at higher status institutions with relatively stable statuses are more socially integrated through their stronger motives for identification.

In summary, there are mixed indications about whether the type of institution plays a role in social class differences in social integration and on what this role might be. A "fit" explanation predicts that the social class difference should be larger at high status institutions, because working-class students feel more out of place in these prestigious institutions. In contrast, a "motive" explanation predicts that social class differences should be smaller at high status institutions, because working-class students have a stronger motive to identify with such prestigious institutions. One major consideration to make when discerning these effects is the specific context in which they are being examined. In this particular research project, we focus on these relationships in Australian higher education students. The effects of prestige on social integration in Australian higher education are yet to be explored.

Higher education institutions in Australia

We considered two distinctions that can be made when looking at the type of HEI that students attend in Australia. Specifically, we tested whether the relationship between social class and social integration is stronger for students at elite Group of Eight (Go8) universities relative to other less prestigious HEIs and whether this relationship is stronger at university compared to vocational college.

Go8 universities are similar to the Ivy League institutions in the US or Russel Group universities in the UK. They represent an official coalition of eight of Australia's oldest, largest and most research-intensive universities, including the Australian National University, Monash University, and the Universities of Adelaide, Melbourne, New South Wales, Queensland, Sydney, and Western Australia. These universities collectively receive the majority of competitive research funding and top the national and international rankings. As in their international counterparts, working-class students are in a smaller minority in Go8 universities than in other Australian HEIs (Bradley et al. 2008). Thus, Go8 universities are fairly similar in terms of composition and status compared to other groups of elite institutions in other countries, particularly the US. According to the "fit" explanation, we would expect that working-class students would be less integrated at Go8 vs non Go8 institutions. Alternatively, based on the "motive" explanation, we might expect higher levels of belonging and social identification with these institutions, particularly for working-class students.

To aid in further understanding these relationships, we broadened the scope of institutions to also consider vocational higher education, namely Technical and Further Education (TAFE) colleges. Australia's TAFE colleges provide vocational tertiary education courses aimed towards equipping students with the knowledge needed to be qualified in certain vocational positions (e.g., electrical, hospitality, childcare). Because of its focus on vocation, TAFE has a much broader student population and is considered to be a less elite and high-status institution (James 2000). In the Australian context, TAFE has a distinct identity separate to that of university, although it can be used as a pathway to university (Wheelahan 2009). We included TAFE in the present study because it is often defined as being at the opposite end, or the lesser status alternative to university and thus is a useful counterpoint. Thus, we expected that if institutional status is the driver or social integration, then working-class students who attend TAFE would be more socially integrated than those who attend universities, because they form a larger portion of the student population at these institutions (James et al. 2008). In contrast, if status related identities are at play, then working-class students who attend TAFE should be less socially integrated than working-class students at university because they have relatively little social status to gain from identifying with the institution.

In this paper, we explore the question of how the institutions that students attend shape and determine their social experience within the Australian context. We investigated these relationships in a nationally representative sample of Australian students and tested to determine whethert the relationship between social class and social integration is more or less pronounced at elite higher education institutions. This study had the added benefit of providing an opportunity to demonstrate the

relationship between social class and social integration using a robust control for the effects of age, because all participants were within the same 12-month age range. Previous research has shown that social class differences in social integration are attributable to working-class students being older on average (Rubin and Wright 2015, 2017). Hence, in the present study, we tested whether social class differences in students' HEI social integration persisted in the absence of social class differences in age.

Method

Participants

This study analysed data from the 2006 cohort (Y06) of the Longitudinal Surveys of Australian Youths (LSAY). The LSAY is a longitudinal research project that tracks nationally representative cohorts of 15-year old Australians for 10 years. LSAY researchers randomly select Year 9 classes within randomly selected school classes across Australia. Sampling was specifically designed to sample representative numbers from each state. Further information about the LSAY, including the research surveys, is available at: http://www.lsay.edu.au.

Y06 cohort participants were 15 years of age during the first wave of data collection in 2006, and they were interviewed every following year until 2015. A total of 14,170 participants completed the LSAY survey in Wave 1. In the present study, we focussed on participants who were in their first year of tertiary education in Wave 4 (2009). This wave was chosen because it was the first wave in which most students had left high school, and thus the year most students commenced tertiary education. As expected, Wave 4 contained the highest number of students in the first year of tertiary education across all waves of the study ($n = 2629$).

Of the participants in their first year of tertiary education in Wave 4, 1322 (56.66%) were female, and 1011 were male. This ratio is similar to the representation of males and females in Australian Universities, where 55.7% of students are female (Parr 2015). In addition, 2043 were born in Australia, 267 were born in a country other than Australia, and the remaining 23 participants did not provide data on this item. Fifty-seven (2.4%) participants were recorded as being Aboriginal or Torres Strait Islander (ATSI). This number slightly over-represents ATSI students, who form 1.4% of the Australian undergraduate population (Parr 2015). Participants were sampled from all states and territories in Australia with the largest number in Wave 4 coming from New South Wales ($n = 534$) and the smallest number coming from the Northern Territory ($n = 46$), which is representative of the population density of those states and territories. Note that age was a constant variable in this sample because all participants were the same age (i.e., 18 years old in Wave 4).

Measures

Social class

In line with recommendations in the literature, we took a multi-faceted continuous approach to measuring social class that encompassed a broad range of factors relating to individual's social and economic position and background (Diemer et al. 2012; Kraus and Stephens 2012; Saegert et al. 2007). Social class measures were only included in the LSAY Wave 1 survey. The measures included parental education and occupation and several indicators of household wealth and resources. Parental education was classified using the International Standard Classification of Education (ISCED; United Nations Educational, Scientific and Cultural Organization 1997). Participants were asked to indicate both their mother's and father's highest levels of education using seven categories. Mother's and father's occupations were recorded and coded according to the International Socio-Economic Index of Occupational Prestige (ISEI; Ganzeboom et al. 1992). ISEI scores are based on analyses of international data on educational level and income of different professions and rank individual occupation categories based on these factors.

The measure of social class also included 20 questions that asked about the presence of various status-linked household items including technology, art and cultural paraphernalia, furniture, and the density and privacy of living arrangements in the house. The responses to these 20 items were summed to form an overall score of household possessions. These items had adequate internal reliability with a Cronbach's α of 0.69. One additional question asked about the number of books in the home. Because this item had a more nuanced scale than the other items in this category (i.e. a scale from 0 to 100), it was kept separate from the other household possession items.

Social integration

Participants were asked to indicate the extent to which they agreed with the following five statements on a 5-point scale ranging from *strongly agree* (1) to *strongly disagree* (5): "you really like being a tertiary student," "you think student life really suits you," "you really like the atmosphere on campus," "student life has lived up to your expectations," and "you've made friends at your current educational institution." It should be noted that these questions are ad hoc and not from a previously researched and validated measure of social integration. Nonetheless, these items are similar in content to items used in other social integration surveys (e.g., Krause and Coates 2008; Rubin 2012), which also include items relating to tertiary student life, identity, and campus climate as part of their conceptualisation of social integration.

Institution type

Tertiary education institutions were differentiated in two ways. The first approach was to categorise participants based on whether they attended Go8 or non-Go8 institutions. Go8 university students made up 29% of the sample ($n = 767$) and

non-Go8 HEIs students made up the remaining 71% ($n = 1854$). We also differentiated between TAFE and university students. TAFE students comprised 19% of the sample ($n = 502$) and university students comprised 81% of the sample ($n = 2127$).

Results

Exploratory factor analysis

In line with the approach described by Evans (2019) and Rubin et al. (2019), we investigated the factor structure of the social class items to determine whether these items loaded onto a single factor. In a principal axis factor analysis, only one factor had an eigenvalue higher than 1.0, and both Cattell's scree plot and a Monte Carlo simulation (Horn 1965; Wilson and Cooper 2008) indicated a one factor solution. This single factor accounted for 39.19% of the variance and had an eigenvalue of 2.35. Most of the items in the social class scale had positive loadings above the standard cut-off of 0.40 (ranging from 0.67 to 0.42). However, the household possessions item had a factor loading of 0.30. The internal reliability ($\alpha = 0.69$) was not affected when this item was removed, and so it was retained. We averaged the item scores for the measures of social class to form a single continuous social class score for each participant.[1]

We also investigated the factor structure of the social integration items. For the five social integration items, only one factor had an eigenvalue higher than 1.0, and Cattell's scree plot and a parallel analysis indicated one factor. This single factor accounted for 53.06% of the variance and had an eigenvalue of 2.63. All five items had positive loadings on this factor ranging from 0.73 to 0.51, and these items had adequate internal reliability ($\alpha = 0.77$). Consequently, we averaged the scores on the social integration items to form a single continuous social integration score for each participant.

Independent samples *T*-test

We conducted two independent samples *t*-tests to confirm our assumptions that students who attend Go8 institutions had a higher social class on average than students who attend other institutions, and students who attend TAFE had a lower social class on average than those who attend university. As expected, Go8 students had significantly higher social class scores ($M = 0.51$, SD $= 0.58$) than non Go8 students ($M = 0.15$, SD $= 0.58$), $t(2619) = -14.64$, $p < 0.001$. Also consistent with our expectations, TAFE students had significantly lower social class scores ($M = -0.05$,

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[1] This variable is treated continuously rather than categorically throughout this research. However, at times, we refer to "working-class" individuals in discussing the results from the research. We use these terms to refer generally to people on the lower end of this social class spectrum rather than people specifically classified within the working-class. Similarly, "middle-class" and "upper-class" refer generally to those towards the middle or top of the social class spectrum.

Table 1 Results from type of institution moderation analyses

Dependent: W4 social integration	b	SE	df	t	p	95% CI	
W1 social class (X)	0.08	0.02	2617	3.42	0.001	0.03	0.13
W4 Go8 v non-Go8 (M)	0.07	0.03	2617	2.24	0.025	0.01	0.14
X × M	0.01	0.04	2617	0.32	0.746	− 0.07	0.10
W1 social class (X)	0.08	0.02	2,652	3.87	0.001	0.04	0.13
W4 TAFE v uni (M)	− 0.15	0.03	2,625	− 5.05	0.000	− 0.21	− 0.09
X × M	− 0.03	0.05	2,625	− 0.71	0.475	− 0.14	0.06

SD = 0.58) than university students ($M = 0.32$, SD = 0.59), $t(2627) = 12.69$, $p < 0.001$. Thus our assumptions about social class differences across these types of institutions were upheld.

Regression analysis

Using a multiple linear regression analysis, we predicted W4 social integration ($M = 4.10$, SD = 0.59) using W1 social class ($M = 0.25$, SD = 0.61). Consistent with predictions, there was a positive regression coefficient of W1 social class ($\beta = 0.10$, $p < 0.001$), indicating higher class students were more socially integrated at their HEIs. This coefficient did not change when controlling for gender, ATSI status, and country of birth.

Moderation analyses

We used Hayes' (2013) PROCESS Model 1 to test the moderating effects of university prestige (Go8/non-Go8) and institution type (university/TAFE). The results from these tests are presented in Table 1.

Contrary to predictions, there was no significant interaction effect between W1 social class and either institution type when W4 social integration was the outcome ($ps \geq 0.324$). These results indicate that the relationship between social class and social integration did not differ significantly as a function of the type of institution students attended. This pattern of results did not change when the analyses were conducted with or without outliers (± 3 SDs from the sample mean) or covariates (gender, country of origin and ATSI status). To check for the sensitivity of the social integration aggregate, we tested each of the items measuring social integration individually. The direction and non-significance of results did not change when using each of these items alone.

Discussion

Consistent with prior research (Rubin 2012), Study 1 found that students from lower social class backgrounds are less integrated at their HEIs. However, unexpectedly we did not find any differences in this relationship when including institution type. The finding that the relationship between social class and social integration does not vary by institutional context suggests that working-class students are less integrated than middle-class students both at it elite and non-elite institutional, and the size of this social class difference does not vary as a function of institutional status. These results seem to contradict previous research that indicates that the prestige and status of higher education institutions interacts with students' social class to determine their social integration.

The present study is also the first to demonstrate the existence of social class differences in social integration across HEIs in a national Australian sample. Using nationally representative data, we demonstrated a significant positive relationship between social class and social integration: Working-class students reported being less socially integrated at HEIs than middle-class students. This pattern of results fits with the results of previous research, including meta-analyses (Robbins et al. 2004; Rubin 2012). As in Rubin's (2012) meta-analysis, the social class difference observed in the present research was relatively pervasive, because it persisted even when controlling for age, gender, ATSI status and country of origin. Of particular note in the present study was the robust control for age presented by the methodology used. Previous research has found that working-class students are more likely to be mature age students and that this social class difference in age explains some of the social class differences in social integration (Rubin and Wright 2015, 2017). The present research suggests that age is not the only factor driving this difference.

Institutional context and the social class–social integration relation

In terms of moderation results, the present study did not find any differences in the relationship between social class and social integration based on the type of institution that students attended. The size of the relationship between social class and social integration remained relatively constant regardless of whether this relationship was considered in Go8 universities, non-Go8 universities, or TAFE colleges. Hence, based on the current results, the relative status of the institution does not seem to impact on class differences in the level of social integration of students.

In the Introduction section, we presented multiple approaches to understanding the role that institution type might play in the relationship between social class and social integration. If we had found that higher status institutions had larger social class differences in social integration, then we theorised this would be due to the elite status of these universities and the makeup of their student population. In contrast, we theorised that if there were larger social class differences in social integration in lower status institutions, this may be because these institutions represent a high status identity that motivates working class students to identify more strongly.

We expected that whatever moderation effect was uncovered in comparing Go8 to non Go8 institutions would be exemplified in comparisons of TAFE to university. The null results from this research do not provide evidence for or against either of these theories.

There are some key differences between the present research and previous research on institution type/size that may explain the present results. One particularly notable difference is that the present research is conducted with an Australian population in the context of higher education in Australia. The bulk of previous research in this area has focussed on North American students and education contexts. This is the first research to consider the social integration of higher education students across all higher education institutions in Australia. Previous research comparing higher status (Go8) to lower status institutions has found social class differences in enrolments and post-university outcomes (Marginson 2009). Thus, as discussed previously, it is generally accepted that the structure and composition of higher education institutions status and size does not substantially differ from other OECD countries. However, it should be noted that by virtue of Australia's history, Australian universities tend to be much younger than universities in other countries. For example Australia's oldest university, the University of Sydney, was founded in 1850. In comparison, the oldest university in the US, Harvard University, was founded in 1636. Thus, although the rankings and prestige of universities in Australia seem to match those of other countries, there may be fewer differences in status and prestige amongst universities in Australia due to their relative youth.

In terms of identity, there may also not be as much stability of status and prestige amongst universities in Australia compared to other countries. As Aebischer and Oberlé (2004) found, university students at less prestigious institutions have a greater sense of identity than students at more prestigious universities. However, this effect was only present when these levels of prestige were perceived as variable and moving in an upwardly mobile direction. Although the Group of Eight institutions are a formally recognised group of elite institutions in Australia, there may not be an associated public perception that this status is fixed. As discussed, all universities in Australia are young in the wider context of higher education meaning many universities are almost as old and established as the youngest group of eight institutions (e.g. the University of New England was founded only 5 years after Monash University). Many non-Go8 universities also received similar rankings and are awarded similar levels of research funding compared to go8 institutions (Marginson 2009). The Go8 title may not carry as much weight in Australia as the Ivy League, Oxbridge and other prestige groups in other countries, and the status of universities may be seen as being more transient than fixed. In terms of status and identity processes, this may weaken or even reverse the effect of status on identity. Consequently, it is possible that the status of higher education institutions in Australia are not as prominent, stable and influential as they are in other countries, particularly those in countries with older and more entrenched hierarchies among institutions. These differences may explain the lack of moderation results found in the present research.

Comparing TAFE to University

An additional surprising finding, or lack thereof, from the present study is that social class differences in social integration are present to the same degree at vocational colleges as they are at universities. We included TAFE in the present study as a litmus test of institutional status differences, because TAFE has the least status of all higher education options in Australia (James 2000; Wheelahan 2009). Research by Wheelahan (2009) found that, despite the "over-representation" of low SES (socioeconomic status) students in TAFE, there exist inequalities in the courses and pathways undertaken by TAFE students. They found that low SES students were more likely to be taking the lower level courses and were not taking up the TAFE-based pathways to university at the same rate as higher SES students. Thus, despite seeming to provide access to higher education for working-class students, TAFE has its own issues with perpetuating and reinforcing existing inequalities. As Wheelahan (2009) argued, in the Australian context it is important to consider TAFE and university as related rather than separate entities. The present research supports this notion by demonstrating that social class disadvantages that exist in universities also exist in TAFE.

Institution size

One potential confound in the present study is institution size. Tinto (1975, p. 116) predicted that "the larger institution, normally more heterogeneous in student composition, may enhance persistence through its ability to provide for a wider variety of student subcultures and, therefore, through its effect upon social integration into the institution". Hence, minority groups may find it easier to integrate at larger institutions where there is greater heterogeneity among the student population. In addition, students at larger institutions tend to be more involved at campus-sponsored social activities (Chapman and Pascarella 1983), most likely because larger institutions are more able to fund such activities. Lohfink and Paulsen (2005) considered both of these possibilities after finding that institutional size positively predicted persistence for first-generation students, but not for continuing-generation students. Notably, however, Chapman and Pascarella (1983) found that, "while involvement in campus social activities increased with institutional size, informal contact with faculty on either social or academic matters tended to decrease" (p. 315). Thus, it is possible that larger institutions have more capacity than smaller institutions to foster certain kinds of social integration among working-class students. In particular, they may incite greater peer-related social integration. However, this benefit of size on peer interaction may come at the expense of interaction with faculty.

In an international context, HEI size is often confounded with status, because the most elite universities also tend to be the largest in terms of both faculty and number of students. However, in Australia, not all of the universities that are Go8 are "large" by Australian standards. In particular, the Australian National University, University of Adelaide and the University of Western Australia are only considered average to small institutions and are smaller than a number of other non Go8 universities. Thus,

it is possible that exploring the impact of institution size rather than prestige may reveal marked differences in the social class social integration relation that were not found with the current focus on status.

Simultaneous conflicting processes?

Finally, it is possible that the null moderation results in the present study stem from the "fit" and "motive" processes that we discussed operating simultaneously, such that any "fit" benefits gained from attending a lower status institution are nullified by the lack of "motive" benefits and any "motive" benefits gained from attending a higher status institution are dampened by a lack of "fit". In this respect, it could be true that elite institutions, due to their culture, history and student population composition, are more difficult to navigate socially for working-class students. Indeed, much research in the past on elite institutions provides evidence to this effect (Cofer and Somers 2000; Lohfink and Paulsen 2005; Wells 2008). However, it could also be true that these processes are affected by the motives of students to identify more or less strongly with an institution depending on its status (Aebischer and Oberlé 2004; Sachdev and Bourhis 1987) and thus higher status institutions generate stronger identity and belonging based social integration. It is very likely that status, culture and identity all intersect together to influence students and their own personal grappling with the need to "fit in" and succeed at these institutions (Aries and Seider 2005; Stephens et al. 2012).

Although the present study represented an expansive exploration of social integration across a large Australian sample, it is possible that the measure of social integration used was not sufficiently sensitive to detect these processes occurring simultaneously. In particular, the present study used five unvalidated items to measure social integration. The five items used to measure social integration fit together in a factor analysis and internal reliability check, indicating they have some convergence. Additionally, the items are similar in content to other widely used and validated scales used in the social integration literature (e.g. Baker and Siryk 1989; Hurtado and Carter 1997; Hurtado et al. 2007; Langhout et al. 2009). However, in terms of the broader definition of social integration, the items only reference the quality of social interactions and relationships students have at HEIs with other students and general satisfaction with the student experience. Missing from this measure are the more objective measures of quantity of social contact commonly used in social integration measurement and a measure of interaction with faculty members (e.g. Beattie and Thiele 2016; Chambliss and Takacs 2014). Thus, the present research is limited to assessing social integration as a subjective construct of belonging and satisfaction. Rubin (2012) found that the relationship between social class and social integration was moderated by the type of measure used. Notably, the strongest measures were multi-dimensional ones that encompassed various kinds of social activities, loneliness and sense of belonging. The present research did not include any measure of specific social contact or activities. Previous research has demonstrated the importance of explicit contact with students and faculty on different outcomes including mental health and academic success (e.g., Beattie and Thiele

2016; Chambliss and Takacs 2014; Rubin et al. 2016; Read et al. 2003). This literature uses objective contact-based forms of social integration and often differentiates between the types of contact students have within the institution. It is possible that employing these more fine-grained objective measures when investigating the role of institution type would reveal some nuances in the role of status in the relationship between social class and social integration. Future research should extend on the present research by including broader measures of social integration, including objective indicators in particular.

Overall, the lack of moderation findings might point to the trade-offs or pros and cons that come with pursuing different kinds of social integration at different institutions. That is, whatever resourcing or identity based-benefits that come from attending a higher status institution may be nullified by the lack of diversity in the student body. Alternatively, the benefits gained from attending a lower status institution with a more welcoming culture and diverse student body may be dampened by the lower status identity adopted there. Our results indicate, at the very least, that class differences in social integration are present across all Australian institutions, and do not fluctuate as a function of institutional prestige. Furthermore, the findings suggest that although less elite institutions in Australia are doing better at encouraging enrolments from working-class students on the whole, they are not faring any better at creating socially integrated environments for these students.

Implications

On the surface the present findings that institution type does not moderate social class differences in social integration, may seem to contradict previous research, which has found that college characteristics influence social integration of working-class students (Aries and Seider 2005; Cofer and Somers 2000; Lohfink and Paulsen 2005; Wells 2008). However, as we have outlined above, we believe that a more nuanced approach to measuring social integration would likely reveal some specific aspects of social integration that may be impacted by institutional status. Additionally, in the Australian context in particular, it may be institution size rather than status that matters for social integration. Thus, further exploration into why social class differences in social integration exist is needed.

The general findings of the pervasive social class differences in social integration across all higher education institutions speaks to the magnitude of the issue. On the whole, students from more economically and socially disadvantaged backgrounds feel less socially engaged or attached to the higher education experience. The finding that social integration differences exist even at TAFE is particularly troubling given that TAFE is considered one of the key access points for working-class people into university (Wheelahan 2009). The question remains, why do these differences persist? Prior research tells us it may be due to the individual circumstances of the students, such as their being older or having less time and money (Rubin and Wright 2015, 2017). However, the present research found that these effects persist even when controlling for age. As explained by Rubin et al. (2019), the onus of addressing social integration differences and improving the outcomes of working-class

students falls squarely on the institutions themselves. Our research highlights that even institutions that are more successful in attracting working-class students are contributing to processes of disadvantage by not providing an environment in which working-class students are able to be socially integrated to the same degree as their peers. As outlined in the outset, this is particularly troubling given the significant role social integration plays in the higher education experience (Robbins et al. 2004; Rubin et al. 2019; Thomas and Hanson 2014), and the findings that social integration is beneficial for working-class students in particular (Rubin 2012).

Social integration is a crucial aspect of the higher education experience that has numerous flow on effects to the success, retention and career trajectories of students. It is therefore imperative for institutions and higher education practitioners to continue working towards understanding and addressing these differences. This interpretation of our findings speaks to the idea posed by Gale and Mills (2013) of making spaces and not places for working-class students in higher education. That is, rather than opening up extra places in the existing system and shepherding students in expecting them to conform, higher education institutions should look to creating spaces for these students and shifting the expectations and cultural mores around who a typical student is and the ways they engage with the HEI experience. More specifically, HEIs should aim to work with rather than act on students from working-class backgrounds and foster diversity and different forms of engagement amongst their student body.

Declarations

Conflict of interest The authors declare that they have no conflicts of interest.

Ethical approval Ethics approval for both studies was obtained from the University of Newcastle's Human Research Ethics Committee.

Informed consent Informed consent was obtained from participants. Informed consent included consenting to the use of data in publications.

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