Accounting for unequal access to higher education: The role of social identity factors

Abstract

Western societies stress the potential for anyone, irrespective of social background, to improve their position within society. However, disadvantaged students face barriers in gaining a good education. Two studies in secondary schools show how perceptions of identity compatibility and anticipated fit influence students' university choices. It was found that relatively disadvantaged students scored lower on identity compatibility, and that low scores on identity compatibility were associated with lower anticipated fit at a local selective (Study 1) or highly selective (Study 2) university. Anticipated fit, in turn, predicted the type of university to which participants wanted to apply; those who anticipated fitting in more at selective universities were more likely to apply to higher status universities. These relations were significant while controlling for academic achievement. Together, these studies suggest that social identity factors play a relevant role in explaining higher education choices among low status group members.

Accounting for unequal access to higher education: The role of social identity factors

Western societies promote the meritocracy principle whereby social positions are based on merit. According to this principle "the association between individuals' social origins and their attainment must increasingly reflect only their level of ability – as other factors that might prevent the full expression of this ability are removed or offset" (Goldthorpe & Jackson, 2008, p. 4). Educational systems provide a context in which individual differences in ability can be estimated and certified, relying on assessment methods rather than differences in social background (Carson, 2007). As a result, a person's level of education has become a key determinant of the social status they are awarded and is a strong predictor of many important life outcomes. Educational attainment is not only economically beneficial for individuals (Day & Newburger, 2002), but has also been linked to happiness (Chen, 2011; Cuñado & Gracia, 2011; Diener, 2000), health (Marmot, Ryff & Bumpass, 1997) and social trust (Huang, Maassen van den Brink, & Groot, 2009) and this 'education effect' has been shown to be stable over time (Easterbrook, Kuppens, & Manstead, 2015).

However, research has long shown that purely meritocratic selection based on individuals' achievements and potential is an illusion: The reality is that socio-economic status (SES) is still related to educational outcomes (OECD, 2010). Indeed, young people from disadvantaged backgrounds remain underrepresented in higher education, particularly within high-status institutions (Boliver, 2011). In the current research we examine the impact of SES on higher education choices in the UK, focusing on the psychological barriers that low SES students face to applying to high status universities. We argue that SES influences university choice partly through its impact on perceptions of the compatibility between current social identity and the identity of being a university student (hereafter 'identity compatibility') and perceptions of anticipated fit at a high- or low-status university and we examine these relationships while controlling for academic performance. Whereas previous

studies have examined the impact of perceived fit on belonging and performance among students already attending (high status) universities, the current study is the first to examine the role of *anticipated* fit in making university choices.

Research examining access to higher education in industrialized nations shows that in England high achieving young people from high SES backgrounds have a 53 percent chance of entering an elite university, compared to 25% for their high achieving low SES peers (Jerrim, Chmielewski, & Parker, 2015). Also, in the US, low SES students are more likely to 'undermatch' – a phenomenon where a student's academic credentials permit them access to a university that is more selective than the postsecondary alternative they actually choose (Smith, Pender & Howell, 2012). Such findings suggest that even if young people have the academic ability to go to university, those from working class backgrounds are less likely to enter high status institutions than their socially advantaged peers. As a result, students from disadvantaged backgrounds are disproportionately concentrated in less prestigious universities, and the opportunities and benefits of undergraduate study are therefore unfairly distributed. Indeed, graduates of more prestigious universities have been shown to be more likely to secure professional and managerial jobs and to earn higher salaries (Bratti, McKnight, Naylor, & Smith, 2004; Chevalier & Conlon, 2003; Hussein, McNally, & Telhaj, 2009). Not only are these educational differences unfair; they also represent a huge waste of human talent and opportunity.

Psychological barriers to applying to high status universities

Longitudinal research on access to higher education in the UK distinguishes between making applications to, and receiving admission offers from, high status universities. The results suggest that, for those from lower social class backgrounds, barriers to *applying* to high status universities play an important role (Boliver, 2013). Although a diploma from a high status university represents a good economic choice it may be at odds with other identity

needs. For working class students, getting a good education is a way to improve one's life conditions and become part of a group that has a higher status in society. As such, attending a high status university confers an upwardly mobile status and distinctiveness from others (especially those from their social background) on comparison dimensions that are valued within society (e.g., ability, motivation; Tajfel & Turner, 1979). However, gaining access to a higher status group is not an easy option and successfully adjusting to a new group can be challenging (Argyle, 1994; Ethier & Deaux, 1994). Building on the social identity model of identity change (SIMIC; Haslam, Holme, Haslam, Iyer, Jetten, & Williams, 2008; Jetten, Haslam, Iyer & Haslam, 2009; Jetten, Iyer & Zhang, 2017), we propose that social identity factors such as feelings of incompatibility and belonging uncertainty (Walton & Cohen, 2007) may deter low SES students from applying to high status universities (see also Easterbrook, Hadden & Nieuwenhuis, 2019).

The ease with which one can construct a positive new identity as a university student is likely to depend on existing identities, such as one's social background. People have multiple, nested social identities based on their group affiliations (Hogg & Abrams, 1988; Tajfel & Turner, 1979). Identity compatibility refers to the organization, structure and inter-relations between these identities (Iyer, Jetten, Tsivrikos, Postmes, & Haslam, 2009). In the context of individual mobility, it refers to the fit or compatibility between the current identity network and the new identity, based on the content of the collective identities.

Working class students are more likely to see a mismatch between the identity conferred by their social backgrounds and the identity they associate with being a student at a high status university. Stephens, Fryberg, Markus, Johnson, and Covarrubias (2012) describe this as 'cultural mismatch'. Their sociocultural theory of class suggests that, much like national cultures, different social classes have different cultures that hold different norms and endorse different ways of being. Stephens and colleagues' work has shown that working-

class students in the US have a more interdependent sense of self and agency than middle-class students. Their thoughts and actions are more likely to be influenced and motivated by communal and familial factors over internal factors. In contrast, middle-class people tend to value independence, self-direction, and self-reliance. They argue that the interdependent norms that characterize the working-class backgrounds of most first-generation college students in the United States do not match the middle-class independent norms that prevail in universities. In a longitudinal study they showed that this mismatch leads to greater discomfort and poorer academic performance among first-generation students, even after controlling for race and SAT scores.

When SES students perceive that their socio-economic background is not very compatible with becoming a university student, they may question the potential fit between themselves and a university setting. That is, the cultural mismatch experienced by students from low SES backgrounds causes them to experience university settings as relatively unfamiliar, uncomfortable, and difficult, leading to a reduced sense of "fit" or belonging (Smart Richman & Leary, 2009; Walton & Cohen, 2007). This might especially be the case for high status universities, where low SES students are historically even more underrepresented and where selectivity and independence norms are more prevalent.

A perceived lack of fit with a particular educational setting can be caused by a number of factors, such as physical location, institutional size, or demographic characteristics (e.g., Weiler, 1994). In the current research we focus on the impact of the status of universities as a source of fit. We expect that the level of fit that low SES students perceive between themselves and attending university is not fixed, but likely to depend on the specific university context. The extent to which they see the university setting in terms of 'us' (working class) vs. 'them' (middle class) is theorized (Bruner, 1957; Turner, 1985) and shown (Oakes, Haslam & Turner, 1994) to depend on levels of comparative and normative

fit. If 'typical' students at a particular university look, speak and act differently from working class students (*comparative* fit) and these perceptual differences are consistent with social stereotypes (*normative* fit), then the tendency to categorize people into groups ('them' vs. 'us') is likely to be strong. We expect that low SES students are more likely to see the situation in terms of 'them' and 'us' in the context of prestigious universities and are therefore less likely to think that they will fit in such institutions.

In interviews with students in secondary and further education, Reay, Davies, David and Ball (2001) found that students from less advantaged backgrounds were more likely to say that they did not expect to fit into prestigious universities and were therefore more likely to settle for 'second best' universities. Research on the experiences of lower SES students already attending a high status university speaks to the importance of compatibility perceptions and university adjustment. Iyer and colleagues (2009) found that university students from lower SES backgrounds were more likely to report that attending university was incompatible with their social background than students from higher SES backgrounds. This sense of incompatibility, in turn, reduced the likelihood that students identified as a university student after starting university.

Literature on anticipated belonging suggests that anticipations of fit in a future educational context play a relevant role in the choices that students make. Research by Murphy and Zirkel (2015) showed that students' social representations of race in academic disciplines were significant predictors of anticipated belonging for both White students and students of colour. Moreover, students' anticipated belonging significantly predicted their interest in those college majors. A study among outgoing students at secondary school showed that those who felt that they might not belong in college before they started college were less likely to persist through the first year of college (Yeager et al., 2016). Research into experienced belonging of female graduates in science, technology, engineering, and math

(STEM) showed that numerical underrepresentation of women decreased their sense of belonging which in turn decreased desire to participate in a STEM activity (Murphy, Steele & Gross, 2007). In another study among female STEM graduates, lower levels of belonging were linked to decreased motivation do to well within their STEM domain (Smith, Lewis, Hawthorne, & Hodges, 2012). Representations of who belongs in a particular setting can also be communicated by identity cues in the environment. In a study where women completed a survey in a computer science room filled with objects that represented a geeky masculine stereotype about computer scientists, women anticipated belonging less and expressed less interest in the field (Cheryan, Plaut, Davies, & Steele, 2009). These findings show that students' anticipated fit with a future educational context influences various educational choices, such as major choice or college persistence. In the current research we examine how anticipated fit influences the status of the university to which students intend to apply. In addition, the perceived openness of high status universities might also be a relevant factor shaping feelings of anticipated fit among students who are making university choices. Previous research on the permeability (i.e., openness) of high status groups indicates that low status group members are more likely to access groups that are open to "people like them" (e.g., Ellemers, Van Knippenberg, & Wilke, 1990). We therefore expect that the perceived openness of high status universities to students from lower SES backgrounds might also play a role in their university choices.

In the current study we measure the impact of identity compatibility and anticipated fit on university choices before students enter higher education. We expect that students who are making their university choices will consider whether they are likely to be accepted as a group member by the new group (i.e., anticipated belonging), whether they want to be associated with the new group (i.e., anticipated social identification), and the extent to which a new environment, such as a given university, will be open to and accepting of 'people like

me' (i.e., anticipated permeability). Together, these constructs form what we will refer to as *anticipated fit*. Such anticipated feelings of fit are not stable, but rather are likely to depend on the status of the university in question.

The proposed model

Research examining access to higher education shows that part of the social class gap in access to high status universities can be explained by factors unrelated to academic achievement (Jerrim et al., 2015). In two studies conducted in secondary schools we examine the role of social identity factors in explaining higher education choices. Although previous qualitative research had pointed to the importance of feelings of fit on higher education choices (e.g., Reay, 2005; Reay et al., 2001), the current studies are to our knowledge the first to examine this issue quantitatively. The main strength of this quantitative approach is that it allows us to control for the influence of academic performance, which is important given the well-known achievement gap between pupils from different SES backgrounds. Our predictions are set out in the model shown in Figure 1. We expect that pupils from a high SES background will perceive their background as more compatible with being a university student than will their low SES counterparts. Identity compatibility, in turn, should be related to anticipated fit at a particular university: The more identity compatibility students perceive, the more likely they are to expect that they will fit at a high status university. On the other hand, students who perceive less compatibility between their background and becoming a university student are more likely to expect that they will fit at a lower status university. Anticipated fit is defined by the perceiver's expected level of belonging with other university students, the perceived permeability of the university and the perceiver's expected level of identification with students of the university. In turn, students who anticipate fitting in more at a high status university are more likely to apply to a high status university, whereas those who anticipate fitting in more at a lower status university are more likely to apply to a lower

status university. We examine these effects while controlling for the fact that, on average, students from high SES backgrounds gain higher grades than their low SES counterparts (i.e., the achievement gap), which makes them more likely to apply to higher status universities.

[INSERT FIGURE 1]

Study 1

In a study with high school students in the UK, we investigated how academic grades, social background and social identity factors influenced their higher education decisions. More specifically, we examined how anticipated fit with two local universities – one much more selective (and therefore higher in status) than the other – was related to the status of the universities that students wanted to apply to, while controlling for the influence of academic achievement.

Method

Participants and procedure

Pupils were recruited from seven state secondary schools in South Wales. The initial sample consisted of 249 pupils, all from the year group consisting of pupils aged 16-17 years. The vast majority of pupils (>85%) were of White-British ethnicity, and the proportion of pupils receiving free school meals (an indicator of deprivation) varied between 6 and 25% per school (national average = 18%). The study was introduced by explaining that the researchers were interested in students' higher education decisions. Pupils completed paper-and-pencil questionnaires individually but in a group setting. The students received instructions before administration and were debriefed immediately afterwards. At the time of completion of the study (June), pupils were 1 year away from their final exams (A-levels) in high school and 6 months prior to the time at which they had to select the five universities to which they would

like to apply.[1] Students who indicated on the questionnaire that they did not want to go to university (N = 27) or did not indicate which universities they were intending to apply to (N = 15) were excluded from further analyses. The final sample consisted of 207 pupils (47.5% male; M_{age} 16.85, *SD* = .35). For more than half of these students (55%) neither parent had been to university.

Measures

Parental education. Pupils were asked to indicate the highest level of education that both their father and mother had achieved on a 7-point scale ranging from 'no qualifications' to 'PhD', based on a standardised measure included in the European Social Survey (2012). The educational attainments of fathers and mothers were significantly correlated ($r = .48$, $p < .001$).

Identity compatibility. We measured the level of perceived compatibility between a student's background and becoming a university student using two items ($r = .79$, $p < .001$), based on Jetten, Iyer, Tsivrikos and Young (2008): 'To what extent do you feel your decision to become a student is consistent with your general family and social background?' and 'To what extent do you feel your decision to become a student is consistent with your immediate family background, for example your parents' occupation?' Responses were made on a 7-point scale (1 = not at all consistent; 7 = very consistent).

Anticipated fit. We measured the student's anticipated level of fit at two large universities in the same geographical region as their schools. These universities differ in academic reputation, as reflected in UK national university rankings. One of the universities belongs to a prestigious group of British research universities (the so-called 'Russell Group')

[1] In Britain, potential students typically apply to a number of universities (up to 5), whose entry criteria can vary, before doing their A-levels (i.e., their final exams in secondary schools). Conditional offers of admission to university are mainly based on students' predicted A-level results (i.e., their performance as predicted by teachers). Admission is then dependent on achieving the A-level grades set by the university in its conditional offer. Because A-level results are only released a few weeks before the start of the academic year, students typically apply to a range of universities. They can only hold two conditional offers at one time.

and has a higher ranking (top 25% in the ranking of British universities; subsequently referred to as a selective university; SU), whereas the other university has a lower ranking (bottom 25%) and offers a wider range of vocational courses (subsequently referred to as a less selective university; LSU). The universities are of similar size and have similar student satisfaction scores (HEFCE, 2013). Anticipated fit consisted of three constructs, which were all measured on a 7-point scale (1 = strongly disagree; 7 = strongly agree). *Social identification* was measured with three items (α_{SU} = .80, α_{LSU} = .85; e.g., 'I expect to feel strong ties with other University X students'), adapted from Jetten, Branscombe, Schmitt and Spears (2001). *Belonging* was measured with four items (α_{SU} = .72, α_{LSU} = .77; e.g., 'I am confident that I would fit in with others at University X'), adapted from the Sense of Belonging Instrument – psychological state (SOBI-P; Hagerty and Patusky, 1995). *Permeability* was measured with one item ('University X is open to students like me').

Academic ability. Pupils were asked to report the grades they received on three core courses (English, Mathematics and Science; α = .83) for their General Certificate of Secondary Education (GCSE) examinations, taken at age 15-16. The grades achieved range from higher to lower (A*, A, B, C, D, E, F, G, U) and for present purposes this scale was reverse-coded (1 = U; 9 = A*).

University status. Pupils were asked to indicate the top three universities they would like to apply to, and their answers were compared to the University League Table (which includes 124 universities and is reported in *The Complete University Guide*). Their answers were reverse-coded (1 = lowest ranking university; 124 = highest ranking university) and then averaged across their three choices (α = .63).

Results

Preliminary analysis

Means, standard deviations and correlations for all model variables are reported in Table 1. To check for clustering (i.e., dependency among pupils within schools), the intraclass correlation (ICC) of all model variables was calculated, which measures the proportion of total variance that is accounted for by the clustering of cases within schools. The ICCs ranged between 0 and .20. Only parental education had significant school variation (ICC = .20). Bickel (2007) and Maas and Hox (2005) recommend taking clustering into account if ICC > .10. Because the number of clusters was smaller than 10 (i.e., 7 schools) we included school (as a dummy variable) in the model as a predictor of parental education to account for the between-school variance (see Cohen, Cohen, West, & Aiken, 2013).

[INSERT TABLE 1]

Structural equation model

We tested our hypotheses that psychological barriers play a significant role in higher education choices, while controlling for grades, by constructing a structural equation model using AMOS (see Figure 2). All variables, except for anticipated fit, were modelled as observed variables. Anticipated fit was modelled as a latent factor using the observed variables social identification, social belonging and permeability as indicators, reflecting the multidimensional nature of the latent factor (Kenny, 2016).

[INSERT FIGURE 2]

The model specified parental education of pupils as an exogenous predictor of grades (measuring the social class achievement gap), which then predicted university status. Parental education was also an exogenous predictor of the perceived compatibility between the participant's social background and being a university student, which then predicted anticipated fit with each of the two universities, which in turn predicted university status. In

addition, grades were a predictor of anticipated fit with each university, and we also added the direct paths from parental education and identity compatibility to university status. We added a covariance between identity compatibility and grades and between the anticipated fit factors.

To determine the fit of the proposed model, we report the Chi-square goodness of fit test. A small non-significant Chi-square value indicates optimal fit, although the Chi-square is affected by the number of cases and the size of the correlations in the model (larger correlations mean poorer fit; Kenny, 2016). Therefore alternative fit measures, namely the Comparative Fit Index (CFI) and the root mean squared error of approximation (RMSEA), are also reported. Values higher than .95 for the CFI indicate that the tested model provides a good fit to the data, as does an RMSEA value lower than .06 (see Hu & Bentler, 1999). The analyses revealed that the model fit the data well, $\chi^2(77) = 99.67$, $p = .042$, CFI = .974, RMSEA = .038.

As expected, parental education positively predicted academic grades, such that pupils with an advantaged background had gained higher grades ($\beta = .37$, $p < .001$). In turn, pupils with higher grades were more likely to apply to a high-ranking university ($\beta = .44$, $p < .001$). The indirect effect of parental education on university status via grades was significant (indirect effect = 2.34, 95% CI [1.34, 3.33]. Parental education also positively predicted compatibility, such that pupils with an advantaged background perceived greater compatibility between their background and being a university student ($\beta = .50$, $p < .001$). In turn, pupils perceiving greater compatibility were more likely to anticipate fitting in at the selective university ($\beta = .30$, $p < .001$). This relationship was significant while controlling for the positive effect of grades on anticipated fit at the selective university ($\beta = .21$, $p = .009$). Anticipated fit with the less selective university was not significantly predicted by identity compatibility ($\beta = .02$, $p = .835$), or by grades ($\beta = -.11$, $p = .172$). In turn, anticipated fit

predicted university status. That is, the higher the anticipated fit at the selective university, the more likely pupils were to intend to apply to a high-ranking university in general (β = .28, $p < .001$), whereas the higher the anticipated fit at the less selective university, the more likely pupils were to intend to apply to a lower ranking university (β = -.28, $p = <.001$). The indirect effect from parental education to university status via identity compatibility and anticipated fit at the selective university was significant (indirect effect = .62, 95% CI [.19, 1.24]. The direct path from parental education to university status remained significant (β = .15, $p = .017$), whereas the direct path from compatibility to university status was not significant (β = -.03, $p = .631$).

Discussion

The results show that social identity factors play a significant role in explaining higher education choices, even when controlling for academic performance. School students who anticipated fitting in at a designated selective university were more likely to apply for higher ranking universities in general, whereas the reverse was the case for school students who anticipated fitting in at a less selective university. Anticipated fit at a selective university, in turn, was related to levels of identity compatibility. Together these results show that psychological barriers inhibit students from lower SES backgrounds from applying to high status universities.

A limitation of this study is that we asked participants about their university application *intentions*. Participants were still 6 months away from the moment at which they had to make a decision about their applications, so their intentions might not have reflected their actual behaviour. In Study 2 we therefore recruited a different sample, closer to the moment of making their university applications. Furthermore, in Study 1 we only asked students about their perceptions of fit with two local universities, whereas in reality students choose between multiple universities in the application process (see footnote 1). To come

closer to reflecting the reality of the process, in Study 2 we asked students to rate their anticipated fit at three universities that differed in their degree of selectivity.

Study 2

In Study 2, we aimed to replicate the findings of Study 1 in a sample of students in their final year of secondary school (aged 17 or 18). Higher education choices should have been especially relevant for these participants. We also took the opportunity to expand the measurement of subjective permeability (which was only measured with a single item in Study 1). Furthermore, we asked students to rate their anticipated fit with three universities: in addition to the less selective and selective university used in Study 1, we included a more prestigious university that is ranked even higher in the ranking of British universities than the selective university included in Study 1.

Method

Participants and procedure

The initial sample consisted of 331 pupils, all drawn from the year group consisting of pupils aged 17-18 years. Pupils were recruited from eight state secondary schools in South Wales. The vast majority of pupils at these schools (> 75%) were of White-British ethnicity, and the proportion of pupils receiving free school meals varied between 6 and 22% per school. As in Study 1, the research involved pupils completing paper-and-pencil questionnaires individually in a classroom setting, with the rest of the procedure also being similar to that used in Study 1. At the time of completion (November) pupils were only 5 months away from their final school exams (A-levels) and 6 weeks away from the deadline by which they needed to indicate the universities to which they would like to apply. Students who indicated on the questionnaire that they did not want to go to university (N = 37) or did not indicate which universities they were going to apply to (N = 16) were excluded from further analyses. Cases with extremely low variance in responses were inspected (n = 5) and

one of the cases was excluded as the participant had responded in the same way to positively and negatively worded items of the same scale (i.e., all 7s on the response scale). The final sample therefore consisted of 277 pupils (39% male; M_{age} = 17.33, *SD* = .56). For more than half (57%) of these students, neither parent had been to university.

Measures

Parental education. This was assessed with the same two items used in Study 1 (r = .55, $p < .001$).

Identity compatibility. This was assessed with the same two items used in Study 1 (r = .77, $p < .001$).

Anticipated fit. We measured the students' anticipated fit at three large universities that differed in academic reputation, as reflected in UK university rankings. In addition to the two universities used in Study 1, we asked for anticipated fit with a still more prestigious Russell Group university (hereafter referred to as the highly selective university, HSU). This university is perceived as having a higher status than the other two universities, in that it is ranked more highly academically (top 15% in the ranking of British universities) and has a higher proportion of students who were privately educated (Paton, 2014). Although the HSU is somewhat further away geographically and slightly smaller in size than the other two universities, it has similar student satisfaction scores (HEFCE, 2013). Anticipated fit with the three universities was measured using three constructs, with all items measured on a 7-point scale (1 = strongly disagree; 7 = strongly agree). *Social identification* was measured with four items (α_{LSU} = .83, α_{SU} = .80, α_{HSU} = .81; e.g., 'I expect to feel strong ties with other University X students'). These items were more simply worded than in Study 1 and were taken from Doosje, Ellemers and Spears (1995). *Belonging* was measured with the same four items as in Study 1 (α_{LSU} = .78., α_{SU} = .80, α_{HSU} = .77; e.g., 'I am confident that I would fit in with others at University X'). *Permeability* was measured with three items, including the item

used in Study 1 (α_{LSU} = .78, α_{SU} = .78, α_{HSU} = .80; e.g., 'Assuming I get the required grades, it is easy for students like me to get into University X').

Academic ability. As in Study 1, pupils were asked to report the grades they received on three core courses (English, Mathematics, and Science) for their GCSE exams taken at age 15-16. Their achieved grades were coded in the same way as in Study 1 (α = .77).

University status. As in Study 1, pupils were asked to indicate the top three universities they intended to apply to and their answers were scored with reference to the University League Table (as reported in *The Complete University Guide*). Their answers were reverse-coded and then averaged across their three choices (α = .71).

Results

Preliminary analysis

Means, standard deviations and correlations for all model variables are reported in Table 2. To check for clustering (i.e., dependency among pupils within schools) the intraclass correlation (ICC) was calculated, which ranged between 0 and .03. Because the between school variation was low (all ICCs below .10) there was no need to take clustering into account in the model (see Bickel, 2007; Maas & Hox, 2005).

[INSERT TABLE 2]

Structural equation model

We constructed a structural equation model consisting of 13 observed variables and three latent factors (see Figure 3). The model specified parental education as an exogenous predictor of grades (measuring the social class achievement gap), which then predicted university status. Parental education was also an exogenous predictor of the perceived compatibility between social background and being a university student, which then predicted anticipated fit with each of the three universities, which in turn predicted university status. In addition, grades were predictors of anticipated fit with each university, and we also added the

direct path from parental education and identity compatibility to university status. Correlations were allowed among the three anticipated fit factors and we added a covariance between identity compatibility and grades. The analyses revealed that the model fit the data well, $\chi^2(42) = 84.17$, $p = .001$, CFI = .965, RMSEA = .060.

[INSERT FIGURE 3]

All parameter estimates were in the expected directions and statistically significant. As expected, parental education positively predicted grades, such that pupils with a more advantaged background gained higher grades ($\beta = .19$, $p = .002$). In turn, pupils with higher grades were more likely to apply for a high-ranking university ($\beta = .25$, $p < .001$). The indirect effect of parental education on university status via grades was significant (indirect effect = .85, 95% CI [.32, 1.69]).

Parental education also positively predicted compatibility, such that pupils with a more advantaged background perceived more compatibility between their background and being a university student ($\beta = .52$, $p < .001$). In turn, pupils perceiving greater compatibility with being a university student anticipated fitting in more at the highly-selective university ($\beta = .13$, $p = .032$) and fitting in less at the less-selective university ($\beta = -.17$, $p = .017$); no relation was found with anticipated fit at the selective university ($\beta = -.03$, $p = .773$). Anticipated fit was also predicted by grades. That is, pupils with higher grades anticipated fitting in more both at the selective and at the highly selective university ($\beta_{SU} = .26$, $p < .001$; $\beta_{HSU} = .22$, $p = .001$), whereas the effect of grades on anticipated fit at the less selective university was not significant ($\beta = -.12$, $p = .079$). In turn, anticipated fit predicted university status. That is, the higher the anticipated fit at both the selective and the highly selective university, the more likely pupils were to apply to a high-ranking university in general ($\beta_{SU} = .22$, $p = .004$; $\beta_{HSU} = .15$, $p = .034$), whereas the higher the anticipated fit at the less selective university, the more likely pupils were to apply to a lower ranking university ($\beta = -.41$, $p <$

.001). The indirect effect from parental education to university status via compatibility and anticipated fit with the less selective university was significant (indirect effect = .62, 95% CI [.14, 1.38]), as was the indirect path via compatibility and anticipated fit at the highly selective university (indirect effect = .19, 95% CI [.02, .47]). The direct paths from parental education and compatibility to university status were not significant ($\beta_{ParEduc}$ = .06, p = .314; β_{Comp} = .02, p = .638).

Discussion

As in Study 1, social identity factors played a significant role in explaining higher education choices, independent of the effect of academic performance. Secondary school students who anticipated fitting in at a selective or highly selective university were more likely to apply for higher ranking universities in general, whereas the reverse was the case for students who anticipated fitting in at a less selective university. The nature of the relationships between identity compatibility and anticipated fit was different to what was found in Study 1. In Study 2, school students who perceived their background to be compatible with being a university student anticipated fitting in less at a less selective university and anticipated fitting in more at a highly-selective university, but no association was found for the selective university (whereas we did find a positive and significant relation between identity compatibility and anticipated fit at the selective university in Study 1). We believe that this is due to the anchoring provided by the presence of both the highly selective and the less selective university. In the context of these other universities, anticipated fit at the selective university was unrelated to identity compatibility. Perceptions of universities and their students are not stable, but are likely to be influenced by the comparative frame of reference (Spears & Manstead, 1989). Together these results suggest that the perceived psychological barriers facing low SES students are significantly related to the higher education choices that they make.

General Discussion

The current research provides inside into why students from lower SES backgrounds, in comparison to their high SES peers, are less likely to apply to higher status universities (Jerrim et al., 2015) and are more likely to choose a university that is less selective than their academic credentials would permit (Smith et al., 2013). We found that SES influences university choice partly through its impact on perceptions of identity compatibility and anticipated fit at high- or low-status universities. Socially advantaged students were more likely to report that their social background was compatible with being a university student and were, in turn, more likely to say they would fit in at a selective (Study 1) or highly selective (Study 2) university. These feelings of fit were based on expected identification with other students at that university, the expectation of being able to form meaningful relations with other students at that university, and the expectation that applicants like them would feel accepted by the university. On the other hand, disadvantaged pupils were less likely to feel that their social background was compatible with becoming a university student and were, in turn, less likely to say they would fit in at a selective (Study 1) or highly selective (Study 2) university, but more likely to say they would fit in at a non-selective university (Study 2). Anticipated fit, in turn, predicted the type of university to which students applied: Students who were more likely to say they would fit at a selective or highly selective university were more likely to apply for higher ranking universities in general, whereas students who were more likely to say they would fit at a non-selective university were more likely to apply for lower ranking universities in general (Studies 1 & 2). These associations with anticipated fit were found while controlling for the fact that socially advantaged pupils gained higher grades and were therefore more likely to apply for higher status universities (Studies 1 & 2).

These findings suggest that for socially advantaged students their identity needs (Vignoles, Manzi, Regalia, Jemmolo, & Scabini, 2008) are aligned when applying for a high status university: Admission to such an institution would enhance their status in society and provide economic benefits once they graduate, be consistent with their social backgrounds, and they would be likely to find fellow students similar to themselves. By comparison, disadvantaged pupils are more likely to face a dilemma: Gaining entry to a high status university would help them to improve their life conditions, but would also mean a break with their social background and their belonging needs would be less likely to be fulfilled at a high status university. To be upwardly mobile it is often necessary for individuals to dissociate themselves from their former groups, severing connections and thereby losing the benefits of their original group membership (Ellemers, van Knippenberg, de Vries, & Wilke, 1988; Van Laar, Derks, Ellemers, & Bleeker, 2010). As a result, low SES students are less likely to apply for higher status universities. Although previous qualitative research had pointed to the importance of feelings of fit on application to high status universities (e.g., Reay, 2005; Reay et al., 2001), the current studies are the first to examine this issue quantitatively. We found that psychological barriers play a significant role in applications to high status universities and the effects remained significant while controlling for the relations between academic performance and anticipated fit and higher education choices.

The findings are in line with previous research that showed that (anticipated) belonging has a significant impact on education choices and activities (e.g., Murphy et al., 2007; Murphy & Zirkel, 2015). However, the current research is to our knowledge the first to measure the impact of anticipated belonging, together with anticipated identification and permeability, on university choices. The findings are also in line with research that showed that disadvantaged students perceive a mismatch between a universities' cultural norms (i.e., focusing on independence motives) and their own normative models of self (i.e., focusing on

interdependence motives) which leads to a feeling of discomfort and lowers performance (Stephens et al., 2012). The current research shows that these mismatch or incompatibility processes already occur before students even start university and that they may deter students from lower SES backgrounds from applying to higher status universities. Furthermore, previous research on adjustment to university life had found that compatibility perceptions are related to SES and predict long-term university identification and well-being in students who are already at university (Iyer et al., 2009; Jetten et al., 2008). The present studies add new insights by showing that identity compatibility also predicts *anticipated* adjustment to being a university student, which is associated with the types of university students choose to apply to in the first place. Going to university is an important life transition for all students, and the present findings show that deciding which university to apply to is a process that does not take place in a social vacuum. To understand how group members choose to take on new group memberships when faced with identity changes, one needs to consider the extent to which the new identity fits with previously established identities (Sani, 2008). Indeed, the current studies focused on perceptions of compatibility or mismatch in students from lower SES backgrounds, but other social groups, such as Black and minority ethnic students, might experience similar barriers when making their university choices. We expect that our findings can be extended to other social groups that are underrepresented at high status universities, especially when the prototypical attributes of the group are perceived to be different to the typical student at higher status universities (Roccas & Brewer, 2002).

Although the current studies focused on students' university choices, we expect the current findings could be extended to other education choices. For example, students from lower SES backgrounds may perceive their background to be less compatible with doing well in school, which may impact on the choices they make in secondary education (for example choosing a vocational or academic study route). In addition, compatibility processes and

anticipated fit might also help to explain why students from lower SES backgrounds are less likely to choose certain undergraduate fields of study (Goyette & Mullen, 2006; Ma, 2009) and certain occupations (Schoon & Parsons, 2002).

Although the current studies provided important insights into the role of identity compatibility and anticipated fit in predictors of university choices, the cross-sectional approach does not allow causal relationships to be explored. In future research, one could examine the causal influence of identity compatibility on feelings of fit and higher education intentions. For example, in experimental studies the university identity could be represented as more or less compatible with a working-class identity and the consequences on anticipated belonging and higher education intentions examined. Future studies could also examine the motives underlying the positive effects of identity compatibility. Based on SIT, we assumed that people are motivated to maintain or enhance feelings of distinctiveness, self-continuity and belonging, and that for low SES group members these motivations are involved when making their higher education choices (whereas motives of distinctiveness might be fulfilled when applying for a high status university, this is much less likely to be true of self-continuity and belonging motivations). Future experimental studies could examine the links between SIT motives and identity compatibility.

Recently, several *wise interventions* have been developed and implemented in educational settings to alter a specific way in which people think or feel about their education to help them flourish (Walton, 2014; Walton & Wilson, 2018). Several interventions have focused on situations in which students' need to belong is threatened, for example when underrepresented students question whether they belong in a particular educational setting, causing them to feel distressed and disengaged (e.g., Stephens, Hamedani & Destin, 2014; Walton & Cohen, 2011). These interventions are aimed at bolstering or protecting a sense of belonging in order to improve functioning in the face of challenges. Although these

interventions have generally targeted students already at school or university, they could be adapted to target those in transition to higher education with a view to helping them make decisions about their education. For example, in the education-difference intervention (Stephens, et al., 2014), senior university students from different backgrounds shared personal stories with incoming students that highlighted how social class backgrounds can affect how students cope with the challenges that they are likely to face at university, as well as how certain strategies for coping with these challenges can be successful. By the end of their first year low SES students who learned about the significance of their backgrounds earned higher grades. A similar intervention could be developed for secondary school students in transition to higher education, where former students from different backgrounds share their personal story about how their background shaped the higher education choices that they made. Such an intervention might help students from low SES backgrounds to think about the barriers they might perceive if they were to apply to high status universities and how they could overcome those barriers. By increasing awareness about the role of social contexts, students are likely to understand themselves and others better, which should equip them with the tools they need to take charge of their education choices (and subsequent) university experience (Fook & Askeland, 2007). In addition, interventions focusing on the impact of positive role models for low SES students on feelings of identity compatibility could be tested. This could be done by testing the effects of materials and resources showing prospective and current students examples of past students from low SES backgrounds who have been successful (Zirkel, 2002). However, mere awareness of role models does not automatically enhance the mobility of other ingroup members (Ellemers & Van Laar, 2010). It will be important that these role models are presented as ‘one of them’, rather than as exceptions to the rule (see Gibson & Cordova, 1999; Hamburger, 1994). These interventions could address the psychological barriers that low SES students are perceiving to apply to high

status universities and might prevent those coming from socially disadvantaged backgrounds to settle for less prestigious universities.

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Table 1.

Means, standard deviations, and intercorrelations of variables in Study 1 (N = 207).

	M	*SD*	1	2	3	4	5	6	7	8	9
1. Parental education	3.49	1.49	-								
2. Identity compatibility	4.53	1.83	.51***	-							
3. Identification LSU	4.30	.99	-.13	-.01	-						
4. Belonging LSU	4.92	1.10	-.12	.03	.56***	-					
5. Permeability LSU	5.22	1.38	-.18**	-.07	.51***	.52***	-				
6. Identification SU	4.70	.91	.12	.15*	.53***	.29***	.20**	-			
7. Belonging SU	5.37	.98	.21**	.24***	.25***	.51***	.22**	.45***	-		
8. Permeability SU	5.47	1.23	.17*	.27***	.15*	.24***	.36***	.42***	.51***	-	
9. Grades	4.37	.99	.37***	.15*	-.11	-.11	-.01	.16*	.14	.21**	-
10. University status	85.18	21.49	.41***	.20**	-.18**	-.19**	-.13	.09	.24***	.22**	.59***

Note. LSU = less selective university, SU = selective university. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2.

Means, standard deviations, and intercorrelations of variables in Study 2 (N = 277).

	M	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Parental education	3.35	1.39	-											
2. Identity compatibility	4.25	1.83	.52***	-										
3. Identification LSU	4.59	1.30	-.14*	-.14*	-									
4. Belonging LSU	5.35	1.29	-.15*	-.14*	.65***	-								
5. Permeability LSU	5.54	1.14	.01	-.01	.30***	.35***	-							
6. Identification SU	5.33	1.08	.02	-.04	.37***	.31***	.28***	-						
7. Belonging SU	5.81	1.05	.02	.01	.21**	.43***	.30***	.58***	-					
8. Permeability SU	5.43	1.07	.03	.06	.09	.22**	.58***	.47***	.40***	-				
9. Identification HSU	4.99	1.14	.08	.15*	.18**	.15*	.20**	.37***	.31***	.29***	-			
10. Belonging HSU	5.38	1.13	.01	.12	.16**	.34***	.29***	.30***	.51***	.33***	.58***	-		
11. Permeability HSU	4.90	1.20	.09	.13*	.17**	.23	.43***	.20**	.30***	.56***	.51***	.46***	-	
12. Grades	7.22	.92	.19**	.02	-.13*	-.16**	.11	.20**	.13*	.19**	.19**	.12	.16**	-
13. University status	82.33	25.0	.20**	.14*	-.33***	-.24***	.09	.13*	.11	.28***	.21***	.12*	.15*	.40***

Note. LSU = less selective university, SU = selective university, HSU = highly selective university. * $p < .05$. ** $p < .01$. *** $p < .001$.

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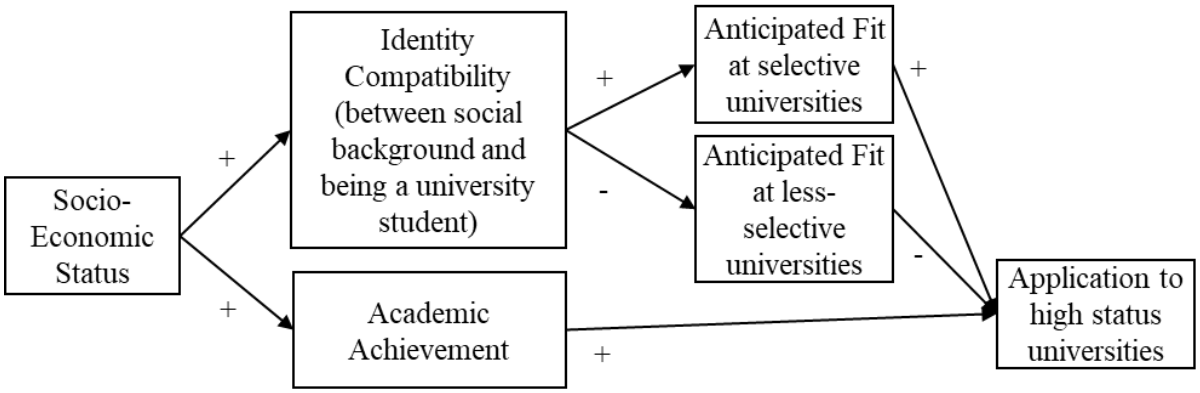

Figure 1.

Theoretical model of the way in which the socioeconomic status (SES) influences application to high status universities as a result of social identity factors and academic achievement

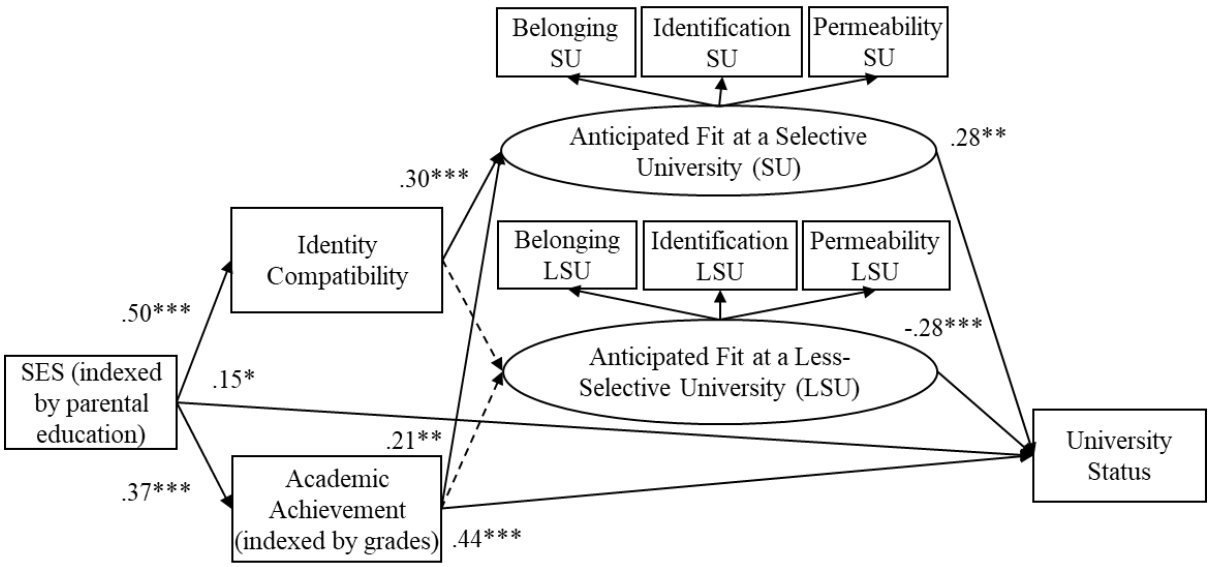

Figure 2.

Structural equation model (Study 1) showing the substantive paths with standardised parameter estimates (N=207). Solid lines are significant and dashed lines are non-significant (to enhance clarity the covariances and the direct path from compatibility to university status (β = -.03, p = .631) are omitted). SU = selective university; LSU = less selective university. * $p < .05$. ** $p < .01$. *** $p < .001$.

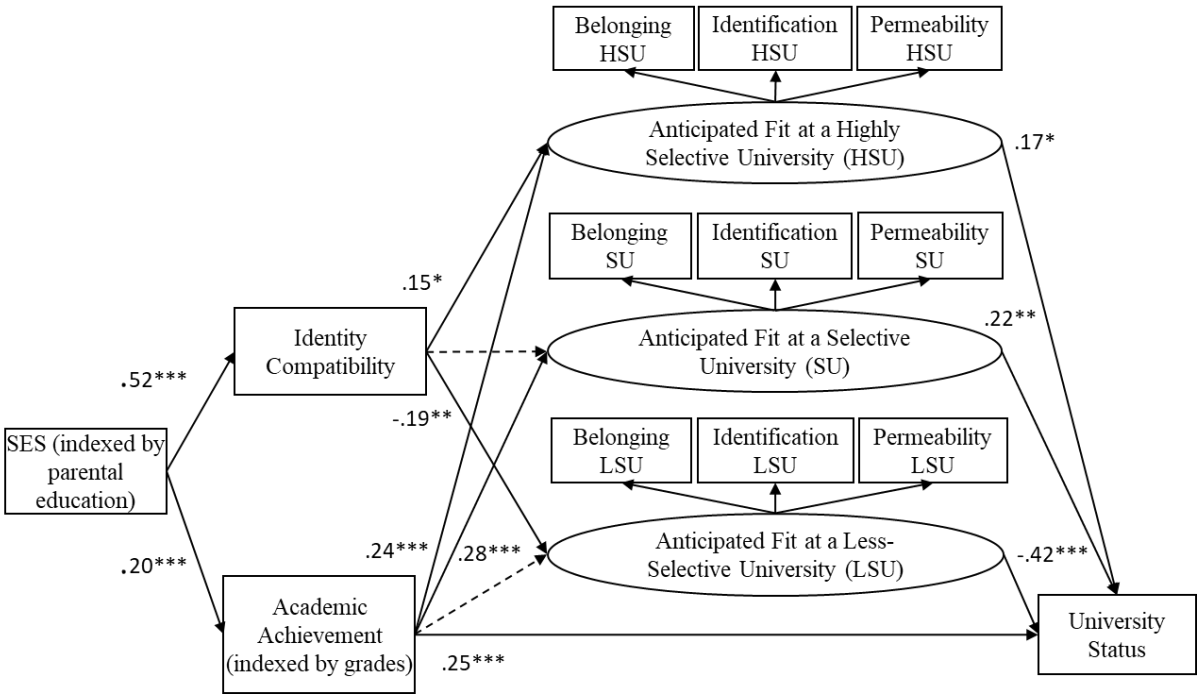

Figure 3.

Structural equation model (Study 2) showing the substantive paths with standardised parameter estimates (N=277). Solid lines are significant, and dashed lines are non-significant (to enhance clarity the covariances and the non-significant direct paths from parental education and compatibility to university status are omitted). HSU = highly selective university; SU = selective university; LSU = less selective university. * $p < .05$. ** $p < .01$. *** $p < .001$.