## How meritocratic is admission to highly selective UK universities?

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#### Introduction

Widening access to UK universities has been high on the policy agenda for more than seventy years. The 1944 Education Act — best known for creating free, universal and compulsory secondary schooling for all — introduced the first maintenance grants to enable students from poorer families to meet the day-to-day costs of going to university (Stevens, 2004). In the 1960s, the government-commissioned Committee on Higher Education led by Lord Robbins established the principle that "...all young persons qualified by ability and attainment to pursue a full-time course in higher education should have the opportunity to do so." (Committee on Higher Education, 1965: 49). The Robbins report led to the creation of thirteen new universities and thirty new polytechnic higher education institutions (Halsey, 2000), the mandatory provision of maintenance grants for students by local authorities, and a rapid increase in the HE participation rate from 5 percent to 14 percent within a decade (UGC, 1973).

Informed by the same meritocratic ideal as the Robbins report, the upgrading of the polytechnics to full university status following the 1988 Education Reform Act and the 1992 Further and Higher Education Act, saw the HE participation rate increase again to 32 percent by the mid-1990s (NCIHE, 1997). This ongoing political commitment to widening participation in higher education has even accompanied a series of regressive policy measures implemented by successive UK governments since the late 1980s. These have included the introduction of student loans and the reduction of student maintenance grants from 1989

onwards, the introduction of tuition fees in 1998, and the subsequent increases in fees in 2006 and 2012 (DES, 1988; DfEE, 1998; DfES, 2003; DBIS, 2011). The latest statistics indicate that the HE participation rate for the UK now stands at over 40 percent (DBIS, 2015) and that all young people from the most and least disadvantaged neighbourhoods are participating in HE at record rates (DBIS, 2014). At the same time, however, the evidence suggests that neither the more progressive era of HE policy in the UK, nor the more recent regressive era have produced much in the way of an equalisation of HE participation rates among those from more and less socio-economically advantaged backgrounds, least of all in relation to older, more prestigious institutions (NCIHE, 1997; Boliver, 2011).

Partly because inequalities in overall HE participation rates have remained so stubborn, debates about widening access to higher education have become more nuanced in recent years. First and foremost, analysts have become increasingly cognisant of the fact that in an era of mass participation in a highly diverse HE sector, it is important to focus not just on access to higher education in general, but on access to highly selective and prestigious universities as well. In particular, researchers and policy-makers are increasingly asking questions about why Oxbridge, the wider Russell Group of "leading UK universities", and Old (pre-1992) universities more generally remain so unrepresentative of wider society, much more so than most new (post-1992) universities (Boliver 2013: 350). Secondly, there has been growing awareness of the need to look not only at the barriers to wider access which occur prior to the point of university application, but to also consider the potential role played

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<sup>&</sup>lt;sup>1</sup> The Russell Group website bills its 24 member institutions as "24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector." The 24 members of the Russell Group are: University of Birmingham, University of Bristol, University of Cambridge, Cardiff University, Durham University, University of Edinburgh, University of Exeter, University of Glasgow, Imperial College London, King's College London, University of Leeds, University of Liverpool, London School of Economics and Political Science, University of Manchester, Newcastle University, University of Nottingham, University of Oxford, Queen Mary University of London, Queen's University Belfast, University of Sheffield, University of Southampton, University College London, University of Warwick, and University of York.

by universities at the point of admissions decision-making. In particular, researchers and policy makers are increasingly asking to what extent university admissions can be considered meritocratic, both in the narrow sense of admissions decisions being determined by academic achievement alone without bias in favour of applicants from more socio-economically advantaged backgrounds (Sutton Trust, 2011; Zimdars, Sullivan and Heath, 2009; Boliver, 2013; Noden, Shiner and Modood, 2014; Boliver, 2015a; Boliver, 2015b), but also in the broader sense of admissions decisions being taken in light of information about the socio-economic context of applicants' achievements in order to fully capture applicants' merit (Schwartz, 2004; Social Mobility and Child Poverty Commission, 2012; Boliver, Gorard and Siddiqui, 2015).

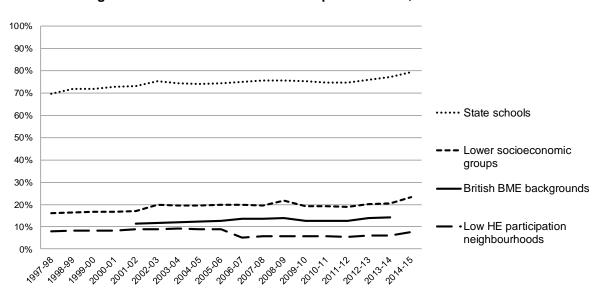
Against this backdrop, this chapter explores empirically the extent to which admission to highly selective, Russell Group universities can be said to be meritocratic, in the narrow sense of determined by applicants' prior attainment alone. The chapter also discusses the case to be made for a greater shift towards meritocratic admissions policies in the broader sense, via the widespread use of contextualised admissions policies which take due account of the often challenging circumstances in which people from socio-economically disadvantaged backgrounds achieve the qualifications required to go to university.

# Recent trends in widening access to Russell Group universities

Before looking at admissions to prestigious, Russell Group universities, it is helpful, first, to take a look at the data on recent trends in the social composition of young full-time first degree entrants to these institutions. As Figure 1 below shows, the percentage of entrants to Russell Group universities from state schools and colleges, remained flat at around 75% in the eleven year period between 2002/3 to 2012/13, and although it has since increased by 3.3

percentage points to 79.1% in 2014/15 it continues to fall far short of the 93% of 15 year old school pupils attending state rather than private schools nationally (DfE, 2015). Similarly, the percentage of Russell Group entrants from lower social class backgrounds remained at around 20 percent for more than a decade and although this figure rose to 23.3% between 2013/14 and 2014/15 it is still significantly below the 37.1% of 17-18 year olds in the UK population large who come from lower social class backgrounds (LFS data for 2013). The percentage of students entering Russell Group universities from low HE participation neighbourhoods in fact fell from 8.8% to 5.3% in 2006/7 – the year that tuition fees were raised to £3000 a year, before being raised again to £9000 a year in 2012 – and has only recently begun to recover, reaching 7.8% in 2014/15 compared to around 20% of the wider national population. The representation of young people from black and minority ethnic (BME) backgrounds among entrants to Russell Group universities has increased slightly by some 2.6 percentage points between 2001/2 and 2014/5, but at 14.1% remains below the figure of 19% for the wider national population of young people (Nomis, 2013). Moreover, the aggregated statistic for BME students obscures the fact that while some ethnic minority groups, such as the Chinese and Indian groups, are statistically over-represented at Russell Group universities compared to their national population proportion, other groups, such as the Black Caribbean, Black African, Pakistani and Bangladeshi groups, are under-represented by as much as one half (Boliver, 2015b).

Figure 1. Percentages of young full-time first degree entrants to Russell Group universities between 1997/98 and 2014/15 (calculated from HESA data).<sup>2</sup>



### Young full-time entrants to Russell Group universities, 1997/98 to 2014/15

## From entry rates to admissions chances

Of course the figures above relate to *entrants* to Russell Group universities, which conflates a number of different processes and outcomes. Ultimately entering a Russell Group university is dependent sequentially on the following: (1) staying on in post-compulsory education and being on course to achieve the qualifications needed to be eligible for entry to a Russell Group university; (2) choosing to apply to a Russell Group university; (3) receiving an offer

<sup>&</sup>lt;sup>2</sup> Data on entrants from state schools and colleges, lower socioeconomic groups, and low HE participation neighbourhoods is taken from HESA's *UK Performance Indicators on Widening Participation*, Table T1a for indicated years, available online at <a href="https://www.hesa.ac.uk/pis/urg.">https://www.hesa.ac.uk/pis/urg.</a> The 2014/15 data point for those from low HE participation neighbourhoods excludes Russell Group universities in Scotland (Edinburgh and Glasgow) and Northern Ireland (Queen's Belfast) because information for these institutions was absent from the relevant data table at the time of writing. Data on entrants from British ethnic minority backgrounds is taken from HESA's HEIDI database for the indicated years (data prior to 2001/2 is unavailable, as was data for 2014/15 at the time of writing). HESA data is used here with the required acknowledgement that "HESA cannot accept responsibility for any inferences or conclusions derived from the data by third parties."

of a place having applied.<sup>3</sup> A wealth of research literature has been generated in relation to (1), and it is clear that a big part of the under-representation at Russell Group universities of students from socio-economically disadvantaged backgrounds and certain ethnic minority groups is poorer performance at school (DBIS, 2013). There is also ample evidence in relation to (2) which suggests that students from less advantaged backgrounds are less likely to apply to university generally and to more prestigious universities in particular (Boliver, 2013). Indeed, this factor drives much of the outreach work carried out by universities using funds committed to this endeavour in their Access Agreements. In relation to (3), which is the focus of this chapter, there is a growing body of empirical literature which has found that the Russell Group and other highly selective universities are less likely to offer places to applicants from state schools (Boliver, 2013; Noden, Shiner and Modood 2014; Boliver, 2015a), lower social class backgrounds (Zimdars, Sullivan and Heath, 2009; Boliver, 2013; Noden, Shiner and Modood, 2014), low HE participation neighbourhoods (Boliver, 2015a), and ethnic minority backgrounds (Zimdars, Sullivan and Heath, 2009; Boliver, 2013; Noden, Shiner and Modood 2014; Boliver, 2015a; Boliver, 2015b) even after taking applicants' qualifications into account. The Russell Group has repeatedly dismissed these findings (Russell Group 2013 and 2015a), even though they have been produced by academic researchers based at a number of their own institutions.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Subsequently steps include (4) accepting that offer of a place, (5) achieving the grades needed for that offer of a place to be confirmed, (6) firmly accepting that confirmed place, turning up at induction week, and still being registered as a student on the HESA census date. These steps are likely to make a smaller contribution to the ultimate social composition of Russell Group universities, but are important areas for further research. They are, however, beyond the scope of this chapter.

<sup>&</sup>lt;sup>4</sup> The studies cited above were carried out by academic researchers at six Russell Group universities: Durham University (Boliver), Oxford University (Heath), University of Manchester (Zimdars), University College London Institute of Education (Sullivan), London School of Economics (Shiner, Noden) and Bristol University (Modood).

## Analysing admissions data

It is possible to make some assessment of the degree to which admissions to Russell Group universities are 'meritocratic' in the narrow sense by analysing anonymised individual level applicant data supplied by the Universities and Colleges Admissions Service (UCAS). UCAS is the administrative body that assists universities in handling applications to almost all full-time higher education courses in the UK. The UCAS dataset analysed in the remainder of this chapter comprises a ten per cent random sample of all 'home' applicants to full-time undergraduate degree courses at UK universities commencing in 2010/11, 2011/12 and 2012/13. The working sample contains information on 68,632 UCAS candidates who collectively submitted 151,281 applications to Russell Group universities in the main admissions cycle. Individual applicants can submit up to 5 applications and so applications, rather than applicants, are taken as the unit of analysis. The Russell Group is defined for the purposes of this analysis as the 20 institutions that were members of the group during the admissions cycles under consideration.<sup>5</sup>

Several measures of the social background characteristics of applicants are available in the UCAS dataset. Firstly, information about applicants' *school type* is used to distinguish between applicants from private schools, selective state grammar schools, and non-selective state schools and colleges. Secondly, applicants' home postcodes have been classified according to the *young higher education participation rate* in their local area, divided into quintiles. Thirdly, information is available about the *ethnicity* of applicants based on self-reports on UCAS forms. It is important to point out that ethnicity information is not communicated to admissions selectors at any point during the admissions decision-making

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<sup>&</sup>lt;sup>5</sup> Durham University, University of Exeter, Queen Mary University of London and University of York joined the Russell Group in August 2012.

process, although it is quite possible that admissions tutors would have an idea of the ethnic origin of some applicants from seeing applicants' names printed on their UCAS forms – a possibility driving David Cameron's pronouncement that UCAS forms should in the future be name-blind (Prime Minister's Office 2015) – and perhaps also from other pieces of information on their form such as home addresses, schools attended, and the substance of personal statements and references. Unfortunately, information on the social class background of applicants is not available in the UCAS dataset. However, information is available on gender and whether or not the applicant is a mature student – these are included as control variables in the statistical models presented later.

The main indicator of applicant 'merit' available in the dataset relates to *attainment at A-level* or in equivalent qualifications, as communicated to UCAS by the exam boards. The Russell Group highlights that "Independent school students enter higher education with better A-level grades than those from state schools." (Russell Group, 2015b: 20) and that "at A-level the gap between those achieving the highest grades from different ethnic backgrounds is substantial." (Russell Group, 2015b: 21). The implications of these statements are that "there is a smaller pool of highly qualified students" (Russell Group, 2015b: 21) from non-traditional backgrounds eligible to apply to highly selective universities in the first place, *and* that those from non-traditional backgrounds who do apply to Russell Group universities tend to be lower calibre applicants with respect to prior achievement. The first of these implications is largely correct and well documented by the available evidence, although it is important to note that (as the Russell Group publication acknowledges) students in selective

<sup>&</sup>lt;sup>6</sup> It is important to note that this is a measure of *actual* attainment at A-level, rather than predicted attainment which is what tends to be available to admissions selectors who make most offers on a conditional basis, requiring the applicant to subsequently achieve the academic entry requirements of their chosen course before their offer is confirmed. Unfortunately, UCAS was not willing to supply predicted grades data as part of the UCAS dataset analysed here. For the purposes of this analysis actual attainment in General Studies A-level is excluded.

grammar schools in the state sector do as well if not better at A-level than their privately educated counterparts on average, and that some ethnic minority groups such as the British Chinese and British Indian groups substantially outperform their white British counterparts at A-level (Russell Group, 2015b). However, the second implication lacks a substantial evidence base to support it, but can be tested empirically using UCAS data.

Of course, in addition to grades and subjects at A-level, admissions selectors may base their decisions on a range of additional criteria, including achieved grades at AS-level and at General Certificate of Secondary Education (GCSE); applicants' personal statements; teacher references; and in some cases subject-specific tests such as the UKCAT test for aspiring Medics and the LNAT test for prospective Law students and formal interviews with admissions selectors. Unfortunately, it has not been possible to include AS or GCSE attainment in the analysis due to restrictions placed by UCAS on the supply of data to external researchers. Information about performance in further tests or interviews where applicable, and information about the nature of personal statements and references, is also unavailable for inclusion in the analysis.

Information is available, however, on whether or not the applicant had studied at A-level each of eight 'facilitating subjects' identified by the Russell Group as often required for entry to

courses at Russell Group universities. These facilitating subjects are Biology, Chemistry, English Literature, Geography, History, Languages, Mathematics and Physics (Russell Group, 2012).<sup>7</sup>

The Russell Group has repeatedly claimed that:

It is still the case that some students are not getting the right advice and guidance on the subjects to study, with the result that many good students haven't gained the qualifications they need for the course they want to apply for.

(Russell Group, 2015b: 25).

This claim, made on anecdotal evidence in the Russell Group publication, is tested empirically below.

Further consideration is also given to the *popularity of the courses* applicants have chosen to apply to. The Russell Group has argued that "There is evidence to suggest that students from state schools may apply disproportionately to the most competitive courses." (Russell Group, 2015b: 31) and that "The fact that BME students tend to apply in much greater proportions to the most competitive courses means that very many able students find that they are unsuccessful in securing a place." (Russell Group, 2015b: 31). It is clear that, by mathematical necessity, applicants choosing more popular courses will be less likely to be offered a place, but the Russell Group provides little evidence as to how large and conclusive a role this plays in determining comparative admissions chances. The variables in the UCAS dataset make it possible to construct a measure of *course popularity* by calculating the initial

<sup>&</sup>lt;sup>7</sup> It has only been possible to control individually for eight A-level generally 'facilitating' A-level subjects, rather than for specific combinations of A-level subjects which are prerequisites for admission to particular

rather than for specific combinations of A-level subjects which are prerequisites for admission to particular degree programmes. This is due to data supply restrictions which mean that instead of information on the specific degree courses to which applicants are seeking entry the dataset only contains information about the broad degree subject areas to which applicants applied.

rejection rate for each degree subject area at each Russell Group university present (in anonymised form) in the dataset.<sup>8</sup>

# How meritocratic is admission to Russell Group universities in the narrow sense?

Table 1 begins by comparing the raw rates at which applications to Russell Group universities from candidates from different school types, HE participation neighbourhoods and ethnic groups, are met with an offer of a university place. It is clear that raw offer rates are some fifteen percentage points higher for private and grammar school applicants compared to applicants from non-selective state schools and colleges, with a similar disparity for those from neighbourhoods with the highest and lowest young HE participation rates. The gap in raw offer rates is particularly large for British ethnic minority applicants from Black Caribbean, Black African, Pakistani and Bangladeshi backgrounds compared to the white British group at between 25 and 33 percentage points. Applicants from Chinese, Indian and Mixed ethnic backgrounds also have lower offer rates than the white group, though the disparities are smaller at 5 to 10 percentage points.

Table 1. Applications to Russell Group universities (2010/11/12 entry)

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<sup>&</sup>lt;sup>8</sup> As noted above, the twenty-three degree subject areas identifiable in the data are relatively broad categories, and each comprises a large number of specific degree programmes with varying levels of numerical competitiveness. As a result, the numerical competitiveness variable used in the analysis that follows is subject to a certain degree of unmeasured heterogeneity, and so the extent to which numerical competitiveness accounts for ethnic group differences in the chances of receiving an offer of a place at a Russell Group university may be under- or over-estimated.

Applicant characteristic	Average offer rate	Average A-level points achieved by applicant	Average number of 'facilitating subjects' at A-level	Mean rejection rate for chosen course				
School type								
Private	61.0	375	1.9	50.0				
Grammar	65.0	372	2.1	44.8				
Non-selective state	45.7	333	1.3	49.8				
Local HE participation								
Top quintile	55.4	363	1.6	49.7				
4 <sup>th</sup> quintile	53.2	350	1.6	48.2				
3 <sup>rd</sup> quintile	46.8	337	1.4	50.1				
2 <sup>nd</sup> quintile	44.8	327	1.3	49.1				
Bottom quintile	39.8	314	1.1	48.5				
<u>Ethnicity</u>								
White British	54.7	348	1.5	47.2				
Black Caribbean	29.6	303	0.8	56.2				
Black African	21.9	310	0.8	58.6				
Pakistani	30.3	318	1.4	57.4				
Bangladeshi	31.2	311	1.6	59.4				
Indian	43.1	360	1.9	57.8				
Chinese	49.6	413	2.0	54.2				
Mixed	47.8	356	1.5	51.7				

Table 1 also makes clear that applicants to Russell Group universities from non-selective state schools and from lower HE participation neighbourhoods, tend to have lower levels of achievement at A-level and fewer facilitating subjects at A-level than their more advantaged counterparts. However, these groups are not more likely to apply to the most competitive courses. A-level achievement levels are also lower for British ethnic minority applicants to Russell Group universities from the Black Caribbean, Black African, Pakistani and Bangladeshi groups in comparison to the white British group and black applicants have also typically studied fewer facilitating subjects at A-level. British ethnic minorities from the Indian, Chinese and Mixed groups, in contrast, have higher levels of A-level attainment and more facilitating subjects at A-level than their white peers on average. It is notable, however,

that all British ethnic minority groups tend to choose courses that are more popular on average than their white peers.

Table 2 reports the results of a series of binary logistic regression models which predict the chances of an application to a Russell Group university being met with an offer of a place in light of the above social background and prior achievement characteristics of applicants. Models 1 to 3 simply reproduce what has been seen already in Table 1 – that before taking any other factors into account, the chances of being offered a place at a Russell Group university are substantially lower for applicants from non-selective state schools compared to private schools (expressed as an odds ratio of 0.54 to 1 in Model 1); for applicants from neighbourhoods with the lowest rates of young participation in HE compared to the top neighbourhoods (odds ratio of 0.53 to 1 in Model 2); and for applicants from all British ethnic minority backgrounds relative to the white group (with odds ratios ranging from 0.23 to 1 for Black African applicants to 0.82 to 1 for Chinese applicants in Model 3).

Model 4 includes school type, local HE participation rate, and ethnicity in the same model together with gender, age group, and timing of application. The odds ratios for school type, local HE participation rate, and ethnicity increase towards unity in this Model but remain substantially below 1.

Model 5 adds applicants' grades at A-level and UCAS point scores for holders of other qualifications as well as whether or not applicants had studied each of eight 'facilitating subjects'. It is clear that higher grades substantially increase the likelihood of being offered a place at a Russell Group university: the odds of receiving an offer from a Russell Group university are improved by having a greater number of A\*, A and B grades at A-level (1.46)

to 1, 1.29 to 1, and 1.20 to 1 respectively) or by having a very high tariff point equivalency score for applicants who have entry qualifications other than A-level (1.37 to 1). It is also clear that five out of eight facilitating subjects are associated with improved chances of being offered a place, namely Geography, History, Languages, Mathematics or Physics. These controls for applicants' prior attainment increase the odds ratios for school type, local HE participation rate, and ethnicity towards 1, but substantial disparities in offer rates still remain.

Table 2. Comparative odds of an offer of admission from a Russell Group

university								
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6		
School type (Private)								
Grammar	1.18*			1.19*	1.14*	0.98		
Non-selective state	0.54*			0.67*	0.86*	0.80*		
Local HE participati	on rate (Top	<u>quintile)</u>						
4 <sup>th</sup> quintile		0.91*		0.95*	0.98	0.95*		
3 <sup>rd</sup> quintile		0.71*		0.85*	0.92*	0.91*		
2 <sup>nd</sup> quintile		0.65*		0.85*	0.95*	0.88*		
Bottom quintile		0.53*		0.75*	0.89*	0.77*		
Ethnic group (White	British)							
Black Caribbean			0.35*	0.51*	0.61*	0.76*		
Black African			0.23*	0.38*	0.45*	0.54*		
Pakistani			0.36*	0.41*	0.51*	0.64*		
Bangladeshi			0.38*	0.44*	0.51*	0.74*		
Indian			0.63*	0.61*	0.62*	0.84*		
Chinese			0.82*	0.85*	0.72*	0.86*		
Mixed			0.76*	0.80*	0.80*	0.88*		
Other			0.47*	0.54*	0.59*	0.46*		
<u>Female</u>				0.90*	1.00	1.25*		
Mature applicant	a.			0.28*	0.73*	1.03		
Application timing (	15 <sup>th</sup> Jan dea	<u> (dline)</u>						
Early (By 15 <sup>th</sup> Oct)				0.63*	0.60*	0.90*		
Late (After 15 <sup>th</sup> Jan)	ı			0.41*	0.39*	0.44*		
A-level grades								
No. of A* grades					1.46*	1.61*		
No. of A grades					1.29*	1.40*		
No. of B grades					1.20*	1.18*		
No. of C grades					0.95*	0.89*		
No. of D grades					0.74*	0.71*		
No. of E grades					0.68*	0.65*		

<u>Tariff point equivalent to A-levels</u>		
420+ (A*A*A* or higher)	1.37*	2.58*
360-419 (AAA to A*A*A)	0.52*	0.87**
300-359 (BBB to AAB)	0.41*	0.71*
240-299 (CCC to BBC)	0.25*	0.40*
<240 (CCD or lower)	0.36*	0.51*
Facilitating subjects at A-level		
Biology	0.89*	1.20*
Chemistry	0.96*	1.09*
English Literature	0.88*	0.89*
Geography	1.32*	1.13*
History	1.07*	1.01
Languages	1.21*	1.07*
Mathematics	1.11*	1.06*
Physics	1.48*	1.14*
Course popularity		0.95*

Note: Figures reported are odds ratios. An asterisk indicates statistical significance at the p. < 0.05.

Finally, Model 6 takes into account course popularity and finds that as the rejection rate increases by one percentage point the odds of receiving an offer of a place is reduced by 0.95 to 1. Importantly, controlling for course popularity appreciably reduces the extent of ethnic group differences in the odds or receiving an offer from a Russell Group university, indicating that ethnic minority applicants have lower offer rates than comparably qualified white applicants partly because they are more likely to apply to oversubscribed courses. However, even after controlling for numerical competitiveness, substantially lower comparative odds of receiving an offer persist for all ethnic minority applicants, as well as for applicants from non-selective state schools and low HE participation neighbourhoods. For those from state schools and low HE participation neighbourhoods, controlling for course popularity in fact reduces the odds ratios to a degree, reflecting the fact that these groups of applicants to Russell Group universities are not more likely than their more advantaged counterparts to choose especially popular courses.

In summary, the above results suggest that admission to Russell Group universities is not meritocratic in the narrow sense of admissions decisions being determined by academic achievement alone. On the contrary, it would appear that applicants from more socioeconomically advantaged backgrounds are more likely to be offered places than applicants from less advantaged backgrounds with the same grades and facilitating subjects at A-level.

It is important to note that research published recently by UCAS (2015: 59-76) suggests that offer rates from "high tariff providers" to applicants from ethnic minority backgrounds, low HE participation neighbourhoods, and the group eligible for free school meals are within the expected margin of error, once predicted A-level grades and specific degree subject and institution applied to, are taken into account. 10 UCAS's findings may seem to contradict those presented in this chapter, but in fact the two sets of findings taken together raise a number of important questions which require further empirical investigation. The UCAS research controls statistically for predicted A-level grades whereas this chapter takes into account actual grades achieved (due to the unavailability of predicted grades in the dataset available to me): if non-traditional students are more likely than others to have their A-level grades under-predicted, they may be less likely to be offered places at highly selective universities than their subsequent actual achievement at A-level would warrant. The UCAS research also focuses on applicants holding three or more A-levels whereas the analysis in this chapter includes holders of BTEC and Access to HE qualifications, who are more likely to be nontraditional students; if these latter qualifications are held in lower regard by highly selective universities this could systematically disadvantage non-traditional applicants. The UCAS research also focuses solely on 18 year olds applying for immediate entry to university rather than all applicants regardless of age; this is problematic given that a substantial number of

<sup>&</sup>lt;sup>9</sup> That is, the 40 or so institutions whose entrants have the highest UCAS point scores on average. <sup>10</sup> The UCAS publication does not report any similar analysis of offer rates by school type.

non-traditional students apply as mature students and many students from advantaged backgrounds take gap years.

# Meritocratic admission to Russell Group universities in the broader sense

The foregoing analysis treats applicants' achievements at A-level and in equivalent qualifications as though they were objective measures of merit. For example, the achievement of AAA at A-level is assumed to imply the same thing about the aptitude and promise of an applicant regardless of their social background. But of course, the pre-university academic achievements of people from comparatively disadvantaged backgrounds will, by definition, have been achieved under more challenging social and economic circumstances than their more advantaged peers (Ward, 2014, 2015a, 2015b). As a consequence, the same grades achieved by applicants from disadvantaged and advantaged backgrounds cannot be treated as equivalent indicators of 'merit'. On the contrary, there is a strong case to be made for weighing formal qualifications against information on the socio-economic background of applicants and offering applicants from comparatively disadvantaged backgrounds university places conditional on lower entry requirements than are asked of their more advantaged peers – for example an offer conditional on AAB at A-level where the standard offer is AAA – or at least prioritising socio-economically disadvantaged applicants over more advantaged ones when making standard offers.

More than a decade ago the Schwartz Report (2004) advocated precisely this model of 'contextualised' admissions policies on the basis that "it is fair and appropriate to consider contextual factors as well as formal educational achievement, given the variation in learners' opportunities and circumstances" (Schwartz, 2004: 7; see also Universities UK, 2003). Since

then there have been numerous high level calls for contextualised admissions policies to be rolled out more widely (Panel on Fair Access to the Professions, 2009; DBIS, 2011; Social Mobility and Child Poverty Commission, 2012; SPA, 2012; OFFA, 2013; CoWA, 2015). However, the evidence-base on which contextual admissions policies rest is still in its infancy. In particular, more work needs to be done to establish which are the most valid and reliable indicators of socioeconomic disadvantage, especially given that many indicators are area-based rather than individual-level measures, and some indicators are not currently available to universities at the point of admissions decision-making. More work also needs to be done to establish how well contextually-indicated students perform in higher education, in absolute terms and relative to their more advantaged peers, to enable universities to identify socioeconomically disadvantaged students who are likely to outperform comparably qualified peers from more advantaged environments and who may therefore warrant lower offers; or who can be expected to perform as well as comparably qualified peers from more advantaged environments and may therefore warrant prioritisation for standard offers; or who are likely to perform well in absolute, but not relative terms and may therefore require additional support to fully realise their potential. The evidence currently available suggests that schoollevel contextual indicators may be associated with better degree performances for students with equivalent levels of prior attainment (Smith and Naylor 2001; McNabb, Pal and Sloane, 2002; HEFCE, 2003; Naylor and Smith, 2004; Smith and Naylor, 2005; Ogg, Zimdars and Heath, 2009; Kirkup et al., 2010; Hoare and Johnston, 2011; Lasselle, McDougall-Bagnall and Smith, 2014; Crawford, 2014a). However, individual-level and neighbourhood-level contextual indicators seem to be more often associated with poorer degree performances (Croxford, et al 2013a,b,c; Crawford 2014b; HEFCE, 2014; Bradley and Migali, 2015), suggesting that universities may need to do more to support socioeconomically disadvantaged students to achieve their full potential.

In its interim report, the Scottish Commission on Widening Access (CoWA) highlighted the fact that entry requirements have increased considerably in recent years and raised questions about whether very high grades are necessary for doing well at university or are largely a device used by popular universities to reduce the pile of eligible candidates to more manageable proportions (CoWA, 2015). Indeed, CoWA suggested that universities should consider revising down their base-line entry requirements – which would make many more socio-economically disadvantaged students eligible for entry – and redesign admissions criteria to take contextual factors into account more fully and to recognise the value of a diverse student population. More research is needed to establish how best to design such a system (or systems) to ensure that participation is widened without compromising student achievement. However, the fact that more than a third of UK universities currently take applicants' socio-economic context into account during the admissions process and over half of all universities state that they plan to use contextual data in the future (Moore, Mountford-Zimdars and Wiggans, 2013; SPA, 2015) suggests that there is real scope for movement towards a university admissions system that is more meritocratic in this broader sense.

#### **Conclusions**

Is admission to highly selective UK universities fair in the narrow sense of being determined by applicants' prior attainment alone? The empirical results presented in this chapter would suggest that the answer is no. However, this answer remains tentative in light of the evidence published by UCAS (2015) which suggests that the UK's third most selective universities make offers to applicants from ethnic minority backgrounds, low HE participation

neighbourhoods, and those eligible for free school meals at rates that are within the expected margin of error once predicted A-level grades and specific course applied to are taken into account. Further research is clearly needed to explore whether non-traditional students are disadvantaged by an admissions system in which offers of university places are made on the basis of predicted rather than actual A-level attainment; by being more likely to hold qualifications other than A-level such as BTEC and Access to HE qualifications; or by being more likely to apply as mature students. Further research is also needed to explore whether state school applicants' offer rates are also within the expected margin of error once predicted grades and specific course applied to are taken into account (the UCAS research does not examine school type differences in offer rates in detail), and whether offer rates for all social groups appear equitable when focusing particularly on high-demand courses. This further research should be possible now that, following a hiatus of several years, UCAS intends to begin sharing detailed applications and admissions data with researchers again via the Administrative Data Research Network (ADRN) from 2017.

The analysis presented in this chapter, and the results of the UCAS research, both suggest that there is considerable scope for admission to highly selective universities to become more meritocratic in the broader sense of taking into account the often challenging circumstances in which people from disadvantaged backgrounds achieve the qualifications required to go to university. More research is needed on this score as well: to establish a solid evidence base regarding the trustworthiness of potential indicators of contextual disadvantage, and to identify where support systems may need to be put in place to support contextually disadvantaged students to realise their academic potential once at university. Given the persistence of inequalities in school attainment, contextualised university admissions policies

represent one of the most promising means of widening participation in higher education, especially at highly selective universities.

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