

## Exploring ethnic, gender and subject inequalities in admission to Russell Group universities

### Aim

1. A research project to explore gender and subject differences in admission to university by ethnicity across different university mission groups.

### Background

2. The Education Committee has agreed a work plan to support widening participation. Two priority areas have been identified: application and admission reform; and black and minority access to higher education.

### UCAS research on evidence of differential acceptance rates by ethnicity

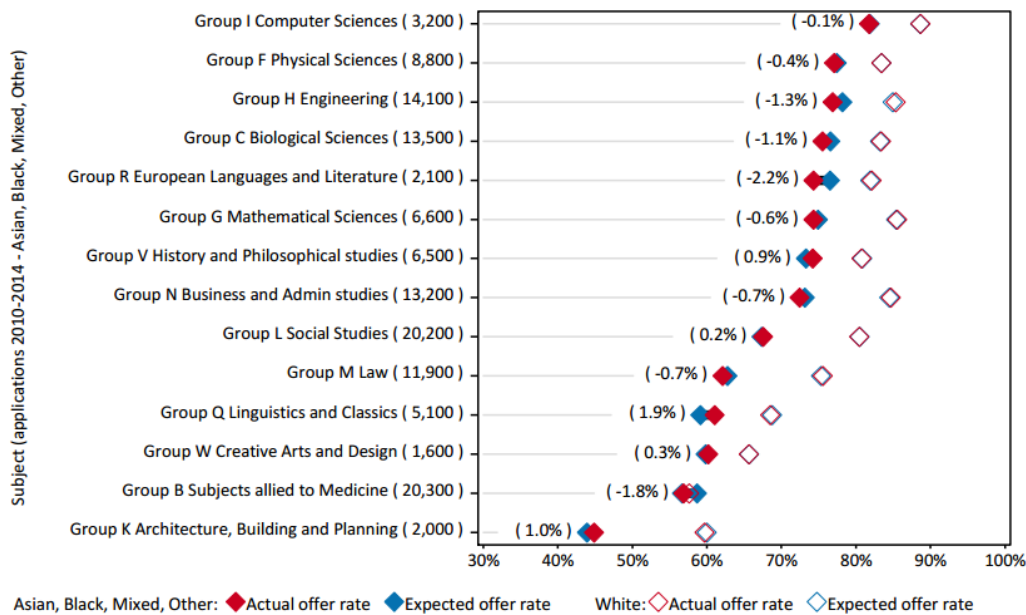
3. In September 2015, UCAS published<sup>i</sup> analysis from which they conclude that 'most' of the actual difference in offer rates between ethnic groups can be accounted for by the different application patterns. Indeed UCAS argues

*"What is clear is that the white group of applicants are more likely to 'play it safe' with their choices, selecting courses where the offer rate is higher.*

*"In contrast, the choices of some other ethnic groups – with the same set of predicted grades – tend to be more ambitious." Mary Curnock-Cook, 18 September 2015<sup>ii</sup>*

4. The data showed that actual offer rates by ethnicity are slightly lower than expected in four subject areas: European languages and literature; subjects allied to medicine; engineering; and biological sciences. Offer rates for black and minority ethnic students were found to be slightly higher than expected in two subject areas: linguistics and classics; and history and philosophical studies.

Figure 1: Actual and expected offer rates by subject group from English higher tariff providers to applications made between 2010 and 2014 from England domiciled 18 year olds studying form higher grade A levels



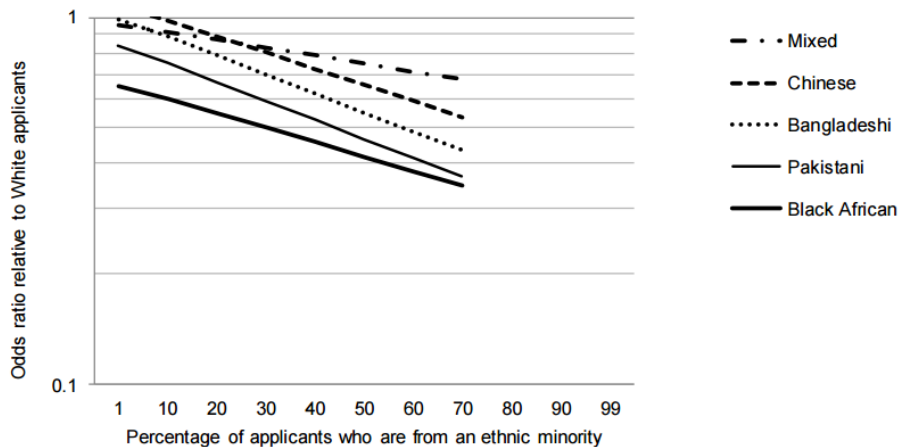
- Two clear limitations of the UCAS data are: first, it presents an aggregated analysis of Asian, Black, Mixed and Other students when there is long-established data to show significant differences in acceptances between ethnic minorities; and second, it excludes those who applied before the 15 October deadline for medicine and dentistry courses, or those who applied to Oxford and Cambridge universities.
- It is important to note that the self-declared ethnicity of a student is not revealed to selectors on the UCAS application form. It could, however, be argued that a number of alternative proxies to ethnicity are available to selectors, including surname, nationality and address.

### Alternative analyses of acceptance rates by ethnicity

- In March 2015, Vikki Boliver published research<sup>iii</sup> exploring ethnic inequalities in admission to Russell Group universities. Boliver’s research found that students from black and minority ethnic backgrounds received lower offer rates from Russell Group universities relative to white applicants with the same grades and facilitating subjects at A level.
- In addition, after controlling for the numerical competitiveness of the subject area at the chosen institution, the findings showed ‘*substantially lower comparative odds*’ of acceptance to Russell Group institutions for students from black and ethnic minority backgrounds than their white counterparts.

9. The lower competitive odds of receiving a place were found to be highest for students from black African (0.54 to 1), Pakistani (0.64 to one), Bangladeshi (0.74 to 1), and black Caribbean (0.76 to one) backgrounds. As such the findings showed that ethnic disparities in acceptance rates increased as the proportion of ethnic minority applicants increased.

*Figure 2: Association between the percentage of ethnic minority applicants and the degree of ethnic inequality in the odds of receiving an offer from a Russell Group University*



Note: The slopes are truncated at 70 on the x-axis to reflect the actual range of values in the data.

10. There are three limitations to Boliver's research which arise from UCAS' data restrictions to third party researchers. First, applicants' prior attainment is measured using actual rather than predicted A level grades data – assessors mostly base their decision on predicted grades supplemented by GCSE attainment. Second, no data on an applicant's grades at GCSE were provided to independent researchers. Third, control has been taken for eight A level 'facilitating' subjects rather than specific combinations of A level subjects required per course because of the broad categorisation of subject area provided by UCAS.

### **UCU research, existing and proposed**

11. The proposed piece of research will contribute new data to the field and strengthen understanding about the offer rate for black and minority ethnic students by gender, subject and university group.
12. UCU is interested in exploring acceptance rates by gender in addition to ethnicity, subject and university group in particular because in recent years UCAS has highlighted<sup>iv</sup> the differential application rates to higher education by gender. Indeed their analysis has found that the percentage of men applying to higher education decreases as the extent

of disadvantage increases. Exploring any patterns in admission by gender, ethnicity and subject choice could give a clearer understanding of the outcomes of application and admission policy and practice.

13. Furthermore, in June 2015, UCU published a report of its undergraduate application and admission survey. The report highlighted members' concerns about the transparency, fairness and accessibility of the higher education system. Over 70% of respondents agreed or strongly agreed that students should apply to higher education after they receive their examination results, a post-qualification application system. UCU believes that PQA and the trial of a name blind application process could support fair access, by supporting institutions to select students according to their achievements and their potential using more reliable assessment methods.

*Figure 3: Support for post-qualification application, taken from UCU undergraduate application and admission survey*

Create a system which means students can apply for their courses after they receive their examination results	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Further education staff	27.17%	47.28%	8.70%	4.35%	12.50%
Higher education staff	27.66%	40.61%	12.82%	6.73%	12.18%
Total FE & HE	27.42%	43.95%	10.76%	5.54%	12.34%

## Research proposal

14. UCU will work with Vikki Boliver to publish an analysis of individual level UCAS application data to further explore ethnic inequalities in admission to Russell Group universities by gender, ethnicity and subject group.

15. It is envisaged that in addition to contributing to the field of research in relation to fair access to higher education, this research will also shed light on how changes to the application and admission process might support a reduction in the spaces for unconscious bias in these processes.

## Methodology

16. A UCAS dataset representing a 10 per cent random sample of individual level applicant data for home students applying to full-time, undergraduate degree courses commencing between 2010 and 2012 will be used. This data set represents 68,632 candidates who collectively

submitted 151,281 applications to Russell Group institutions. The data set will be analysed using binary logistic regression models.

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<sup>i</sup> [https://www.ucas.com/sites/default/files/gbanalysis\\_note\\_2015\\_05\\_web\\_0.pdf](https://www.ucas.com/sites/default/files/gbanalysis_note_2015_05_web_0.pdf)

<sup>ii</sup> Havergal, C, (18 September 2015) 'No admissions bias' against ethnic minority students, Ucas says, Times Higher Education online <https://www.timeshighereducation.com/news/no-admissions-bias-against-ethnic-minority-students-ucas-says>

<sup>iii</sup> Boliver, V. (2015) Exploring ethnic inequalities in admission to Russell Group universities, Sociology <http://dro.dur.ac.uk/14964/2/14964.pdf?DDD34+ngkh22+d700tmt>

<sup>iv</sup> UCAS, (2013), Submission to the Select Committee inquiry into under-achievement in education by white working class children, <https://www.ucas.com/sites/default/files/ucas-select-committee-response-to-inquiry-into-underachievement-in-education.pdf>