The pervasive problem of the Higher Education BME performance gap: reflections on prior experience, policy and placements. (0058)

<u>Gurkiran Birdi, Elisabeth Moores, Helen Higson</u> <u>Aston University, UK</u>

The pervasive problem of the Higher Education BME performance gap: reflections on prior experience, policy and placements.

Introduction:

An attainment gap of Black and Minority Ethnic (BME) students has been reflected in the UK Higher Education statistics since the 1990s, and has also been reported in the USA (Horn, Peter, & Rooney, 2002) and The Netherlands (Severiens & Wolff, 2008). A report by the Equality Challenge Unit (2011) stated that for the academic year 2009-10, 66.5% of White students who were studying for a first degree were awarded a 1st or 2:1 compared to 49.2% of BME students. The highest attainment gap was between White and Black students (29.8%).

The reason for the attainment gap appears to be complex, and multiple factors - structural, organisational, cultural, and financial - are all of significance (Richardson, 2008; Berry & Loke, 2011). Broecke & Nicholls (2007) conducted a large scale analysis of HESA data and concluded that although the BME performance gap was reduced after controlling for a number of variables (including prior attainment, age, gender, disability, type of institution and discipline), it was not eliminated. They speculate that taking account of factors such as parental education, parental income and type of school attended might further reduce the gap.

In this study, we investigated the BME performance gap at Aston University. Aston University is a small multicultural University based in central Birmingham. Aston University prides itself on its placement year provision, with many of its students taking a placement year as part of their degree. Jones, Green and Higson (2015) reported on the beneficial effects of a placement year on final year performance across two UK Universities. Reddy and Moores (2012) showed the benefit held regardless of ethnicity, gender and socioeconomic background, but also noted that these factors influence whether or not students actually choose to take an optional placement year. Placement experience is therefore an important factor to consider and might be expected to further reduce any attainment gap.

Thus, this study explores the interplay between a number of factors which might be expected to have an effect on degree performance, and more specifically whether a BME performance gap remains after accounting (statistically) for these factors. By excluding students with various demographic characteristics and with different experiences from the majority of our sample, we created a more homogenous sample to investigate the influences of: gender, ethnicity, placement experience, prior attainment, socioeconomic status and previous parental experience of HE.

Method:

Performance (stage average percentage) and demographic data were obtained from students from academic years 2010-11 to 2014-15. In an attempt to match students from various backgrounds as closely as possible without extraneous variables into our statistical analyses, the following exclusions were made:

- I. Students with overseas tuition fee status: this group might be expected to experience a range of difficulties with language and acclimatisation different from Home students
- II. Students from independent schools: this group (<10%) shows quite a different pattern in terms of ethnicity and performance and our data suggest that these students do not typically perform as well as other students with similar entry qualifications.
- III. Students entering with qualifications other than A levels: data suggest that students with BTEC qualifications in particular tend to underperform relative to their peers with similar UCAS tariffs
- IV. Students with missing or refused data on parental educational background: we wanted to include this as a dichotomous (yes/ no) variable for simplicity so omitted those without data
- V. Students who reported being from 'mixed' or 'other' backgrounds, or refusing information: these groups were relatively small in number in our sample so we omitted them to provide a more reliable analysis.

Results:

The included sample (n=4066) had the characteristics as follows: 54% female, 50% defined as "UCAS excellent" (see below), 43% white/ 45% Asian/12% Black, 46% had taken a placement, 43% were first generation at University. Figure 1 shows stage average mark (percentage) by ethnicity, placement status and gender. It can be seen that females are scoring higher than males, white students higher than both Asian and Black students, and placement students higher than non-placement students.

Figure 1. Stage average mark percentage shown by ethnicity, placement status and gender. Standard error bars shown.

Variables analysed in a multivariate ANCOVA were: gender (male/ female), ethnicity (White/ Asian/ Black), previous parental participation in HE (yes/ no), UCAS entry tariff (covariate), Socioeconomic status (covariate) and whether or not the student had taken a placement (yes/ no). In addition, a 'UCAS excellence' variable was created to split students into UCAS higher (320 points or above) vs. lower (lower than 320 points) performing students. This analysis served to investigate the role of ethnicity in attainment whilst employing statistical controls for a range of demographic factors and the interactions between them.

Significant main effects of gender ($F_{1,4016}$ = 7.13, p<.01), ethnicity ($F_{2,4016}$ = 25.09, p<.001) and placement status ($F_{1,4016}$ = 48.13, p<.001) were found. UCAS entry tariff was a significant covariate ($F_{1,4016}$ = 88.29, p<.001). Socioeconomic status was not a significant covariate and parental education background had no significant effect ($F_{1,1016}$ = 4.1). Females, white students, students with high entry tariffs and students who had taken a placement performed best. Gender, ethnicity and UCAS excellence all interacted significantly with placement status ($F_{1,4016}$ = 4.73, P<.05; $F_{2,4016}$ = 4.46, P<.05; $F_{1,4016}$ = 18.17, P<.001). Taking a placement reduced both the gender and the ethnicity gap, but its effects were more positive for students with lower entry tariffs.

Conclusions and future directions:

- I. The ethnicity gap in performance remains even when controlling for a number of demographic and experiential factors and so cannot be explained in this way.
- II. The gap occurs in students with both higher and lower entry qualifications.
- III. Placement experience appears to reduce the ethnicity gap, particularly in students with lower entry qualifications, but does not eliminate it. It also serves to reduce the gender gap.
- IV. Further research will attempt to determine whether the size of the ethnicity gap changes over the years of study
- V. To alleviate fully the observed gap will require going beyond what we already do.

References

Berry, J., & Loke, G. (2011). Improving the degree attainment of Black and minority ethnic students. *London: ECU/HEA*.

Broecke, S. & Nicholls, T. (2007). *Ethnicity and Degree Attainment*, DfES Research Report RW92, London: DfEs.

Equality Challenge Unit (2011). The experience of black and minority ethnic staff in higher education in England. *London: ECU*.

Horn, L., Peter, K., & Rooney, K. (2002). Profiles of Undergraduates in US Postsecondary Education Institutions: 1999-2000. *Education Statistics Quarterly*, *4*(3), 79-86.

C.M. Jones, J.P. Green & H.E. Higson (2015): Do work placements improve final year academic performance or do high-calibre students choose to do work placements? *Studies in Higher Education*, DOI:10.1080/03075079.2015.1073249

Reddy P.A. and Moores, E. (2012). Placement year academic benefit revisited: effects of demographics, prior achievement and degree programme. *Teaching in Higher Education*, 17, 153-165.

Richardson, J. T. (2008). The attainment of ethnic minority students in UK higher education. *Studies in Higher Education*, *33*(1), 33-48.

Severiens, S., & Wolff, R. (2008). A comparison of ethnic minority and majority students: Social and academic integration, and quality of learning. *Studies in Higher Education*, *33*(3), 253-266.

Singh, G. (2011). Black and minority ethnic (BME) students' participation in higher education: Improving retention and success: A synthesis of research evidence.