The Gender and Ethnicity Attainment Gap Research Project
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PedRIO paper 2

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EXECUTIVE SUMMARY
The Gender and Ethnicity Attainment Gap Research Project – Executive Summary
Debby Cotton, Rosemary George & Mel Joyner, December 2010

Introduction:

In the context of a government target to achieve 50% participation in higher education in the UK (Labour Party manifesto, 2001), the success rates of different groups of students (particularly those designated as ‘non-traditional’ students) has come under considerable scrutiny. Of interest is not simply access to higher education, but the varied experience of different student groups, studying different subjects at different institutions. Investigation of ‘the student experience’ has included retention rates, academic achievement, progression into employment and opportunities for extra-curricular activities amongst different groups. In many areas the differences are stark: Research by Broecke & Nicholls (2008) reveals that students from ethnic minority backgrounds obtain poorer degree results than white students, even when controlling for prior attainment, age, gender and discipline. They also found that women were more likely to achieve better degree classifications than men, except when it came to attaining a first, where there was no statistically significant difference between the two sexes.

A recent report by the Equality and Diversity team at the University of Plymouth indicated that attainment at this institution is following the trends reported nationally: White students are more likely to obtain a good degree (classified here as a first or 2:1) than black and minority ethnic (BME) students (Moon, 2008). In the case of gender, female students at the University of Plymouth are more likely to obtain good degrees when compared to their male counterparts, and this difference persists even in many science subjects where male students are generally more successful. The gender attainment gap at Plymouth was found to be greater than the national average, according to HESA data.

In order to explore some of the possible reasons for these gaps, a small piece of research was undertaken to investigate the similarities and differences in social and academic experiences of different groups of students (white, BME home, BME overseas, male and female), and to elicit the views of selected teaching staff. This summary outlines the key findings from the project.

Key Findings:

a) Motivation:
Although the quantitative findings were inconclusive in this regard, the qualitative data suggest that BME students are more likely to be extrinsically motivated (by course reputation or future career), while white students are more likely to be intrinsically motivated (by interest in the subject, personal development etc.) This may mean that BME students are more likely to adopt surface approaches to learning as suggested by Ridley (2007). BME students also reported being more strongly influenced by family when choosing a degree programme and this might result in their
choosing courses in which they have little interest. In male dominated disciplines such as engineering, women were perceived, both by staff and students, as being more determined.

b) **Confidence and anticipated attainment:**
Whilst confidence is generally viewed as a positive attribute in learning new skills, there is evidence from this research that some groups were over-confident about their abilities and over-estimated their potential degree outcomes. This applied particularly to male students and to BME overseas students, two groups who currently underperform. There were large differences in the proportions of male and BME overseas students who estimated that they would achieve a first or 2.1 and the proportion of those groups who were statistically likely to achieve this. Women were more likely to anticipate a 2:2 degree classification, and were less likely to over-estimate their potential degree outcome. They also reported significantly higher anxiety levels. Female BME students had the lowest level of expectation of achieving a ‘good degree’.

c) **Study time and attendance**
There is no evidence from this research that BME home or overseas students spend less time studying or are more likely to skip lectures than white students. In fact, BME students (both home and overseas) seem to be less likely to skip lectures than white students, and many staff viewed BME overseas students as being generally hardworking and motivated compared to home students (the relative paucity of BME home students meant that staff were unlikely to attribute characteristics to this group). However, male students did report lower study hours and were more likely to skip lectures than female students. BME home students were more likely to hold a part time job, and male students were more likely to work long hours in paid employment; however, female students (especially female BME home students) were more likely to have childcare responsibilities. A recurring theme of women having to work harder in order to prove themselves appeared in the female focus groups.

d) **Study habits**
There is little evidence of differences in flexibility of study habits between white and BME students (in terms of place and way of studying). However, BME overseas students expressed a stronger preference for learning through memorisation than either white or BME home students. BME students in general expressed a stronger preference for using internet resources for studying than white students. However, it is not clear that study-related factors alone are sufficient to explain the attainment gap for these groups. Female students had the most flexible study habits and also reported strong peer support for studying. They were perceived by staff as being organised and conscientious. Male students expressed a stronger preference for using internet resources than female students, indicating perhaps that female students are more information-literate. Male students were more likely to be fixed in their approach to studying, reported being discouraged from studying by their peers and were wary of being associated with a ‘geeky’ stereotype.

e) **Teaching and assessment**
There was evidence of some tension between student and staff expectations of teaching and assessment in higher education across all groups. This was particularly true of BME overseas students, who expressed some concern about the perceived lack of contact time and need for independent study. Staff felt that students from BME backgrounds did not always participate well within the classroom environment, and some BME students reported being unwilling to ask questions in class for fear of reinforcing prejudiced expectations about lack of ability. In addition,
writing was mentioned by staff as being a key issue influencing success in higher education, and writing skills were viewed as being more problematic for BME overseas and male students.

f) Support needs
Students across all groups were somewhat unhappy with the extent and amount of academic support offered by staff, whereas staff tended to be concerned about students who did not seek support when it was required. Whilst UK students expressed some concerns about the sufficiency of their prior education in preparing them for university-level study, in the case of BME overseas students, this could be compounded by language issues. There is some evidence that female students were more likely to ask for academic support than male students.

g) Social integration
Male students seemed to place more importance on the social aspects of university life, while women tended to place importance on academic aspects. Students suggested that involvement in sports and the drinking culture might impact on academic work (for male students). BME students tended to be less strongly engaged with the social life of the university in general. The social difficulties encountered by BME Home and BME overseas students were different. BME overseas students reported facing issues of integration and mixing with home students. BME home students were more likely to report issues of isolation and loneliness, possibly owing to the small numbers at Plymouth. Both BME overseas and BME home students reported not feeling comfortable speaking in English with friends at University.

h) Experiences of being a minority
BME students identified some challenges but also some opportunities arising from being part of a minority group at this institution. Social difficulties of integration for overseas students, given language and other barriers were reported; however, the lack of other students from the same ethnic group was seen as providing an incentive for students to mix. Some BME students reported a lack of cultural awareness of home students and, although most were reluctant to consider racism, there are reports of identified discrimination particularly from BME overseas students. However, students also described a range of coping strategies which they drew on, and some felt that the experience of being in a minority enhanced their personal resilience and resourcefulness.

Conclusions and Recommendations:

This research has identified a number of differences between the groups of students which may go some way towards helping to explain the observed differences in degree outcomes. Examples of factors which may contribute to the success of female students in HE include: Good attendance at lectures; spending time studying outside classes; having well developed writing skills; flexibility in study habits; strong support from peers; willingness to ask for advice and support when needed; and realistic expectations about likely degree outcomes. In order to reduce the gender gap, it would therefore be advisable to encourage male students to engage in better study habits and make regular attendance at classes mandatory; to offer writing support for those in need; to provide regular checks on understanding and feedback on progress; to encourage students to seek support from tutors (and ensure that tutors provide this support); and to warn about the risks of over-confidence and too great a focus on social activities. It was notable that when staff were
asked to describe the characteristics of a successful student, they attributed many of these qualities to female students.

Interpreting the ethnicity attainment gap is more problematic, particularly because of the small number of BME students involved in the study, and the difficulties in disentangling the issues relating to overseas students or non native English speakers. In addition, a number of the attributes of female students (such as being hard-working and conscientious) were also attributed to BME students. However, some possible explanations for the attainment gap include: differences in intrinsic interest related to motivation for undertaking higher education; over-confidence in degree outcomes, perhaps arising from lack of familiarity with the UK system; difficulties with writing or with English language; and lack of integration into the social life of the university.

Although evidence is not conclusive from this study, the impact of prejudice and racism should not be dismissed as a potential contributory factor. Possible actions to reduce the ethnicity attainment gap might include: providing more information and advice at the application stage to ensure that students are clear about expectations (of them and of teaching staff); easier transfer process if students decide to change degree programme; writing and English language support for those in need; more activities aimed at enhancing integration of students from different cultures.

Staff development is also a key factor in tackling the attainment gap, since there are a number of actions which staff could take to mitigate the impacts of ethnicity or gender. It is clear from this study that both staff and students, whilst overtly expressing the view that they did not ‘see’ gender or ethnicity, were influenced by widespread stereotypes about different types of student. There was only limited engagement with a more critical view of race and gender, and little reflection on the ways in which gender and ethnicity might influence the everyday interactions of staff and students. Ways in which staff might enhance their teaching to the benefit of all students include:

- providing more explicit guidance on autonomous learning (why it is important and how much time commitment might be expected to be successful);
- demonstrating what a ‘good assignment’ looks like, and explaining what its key features are (including aspects of the writing style, criticality and analytical thinking);
- helping students understand plagiarism, using specific examples and focusing on respect for the author’s integrity, rather than exclusively focusing on academic dishonesty;
- being explicit about the need for criticality and analytical thinking, and explain clearly to students what this means in practice;
- changing teaching methods to ensure that all can participate in classes where appropriate (via structured discussion methods or audience response systems etc.);
- allocating students to groups, rather than allowing them to self select on all occasions, in order to provide a more diverse learning context;
- providing learning opportunities which require all students to participate (e.g. group activities where each person has a specific role; structured discussions in which each person has a turn to speak etc.) to reduce the potential for discussion to be dominated by an individual or a specific group of students;
- encouraging students to respond to questions in lectures, or use electronic voting equipment to check students’ understanding, as they may be afraid to ask even if unsure;
• using more diverse modes of assessment which draw on other skills aside from the written word (e.g. practicals, presentations, posters);
• building up the level of writing in assignments gradually, in order to 'scaffold' development of writing abilities in the discipline;
• providing feedback on student writing at an early stage of the programme and signposting students to available support for assignment writing and English language (including Learning Development and the English Language Centre);
• enabling students to undertake self assessment of their own skills (through an online resource, or with personal tutors) with links to appropriate support services;
• ensuring that there is a safe environment for students to ask questions – through face to face tutorials or through e-mail or an online discussion space;
• drawing on the experiences and expertise of international students where possible by including course content which refers to contexts outside the UK.

References:


I. Introduction

In the context of a government target to achieve 50% participation in higher education in the UK (Labour Party manifesto, 2001), the success rates of different groups of students (particularly those designated as ‘non-traditional’ students) has come under considerable scrutiny. Of interest is not simply access to higher education (HE), but the varied experience of different student groups, studying different subjects at different institutions. Investigation of ‘the student experience’ has included retention rates, academic achievement, progression into employment and opportunities for extra-curricular activities amongst different groups. In many areas, the differences are stark: Students from ethnic minority backgrounds, for example, have lower completion rates in HE than white students (Yorke, 1999), and obtain poorer degree results than white students, even when controlling for prior attainment, age, gender and discipline (Broecke and Nicholls, 2008). NSS results indicate that ethnic minority students are in general less satisfied with their HE experience than are white students (Surridge, 2007). In addition, the under-performance of male students in HE (as in other levels of education) is of increasing concern. Female students now represent 49.2% of the entire UK student population (DIUS, 2009) and a recent study suggests that they outperform male students in terms of degree outcomes at all levels, with the exception of the proportion gaining firsts - where no statistically significant difference between the two sexes was identified (Broecke and Nicholls, 2008). This particular finding contrasts with previous research which reported that more males tend to attain firsts than females (Leman, 1999).

Quantitative studies - Defining the parameters

Much of the research on student attainment by gender and ethnicity has been quantitative in nature and has focused on identifying demographic and socio-economic characteristics of students that could influence attainment. Fielding et al. (2007) analysed NSS and HESA data to study patterns of association between attainment and other socio-economic factors such as age, type of institution, gender and entry qualifications. The study found that entry qualifications, gender and the type of institution attended are some factors that could influence student attainment. It also highlighted patterns related to attainment of BME groups and indicated that BME males do less well then BME females. Moreover, institutions with a higher proportion of BME students tend to have greater differentials in attainment between minority ethnic groups and white groups.

Derek (2005) carried out a quantitative analysis of UCAS points and suggested that the reasons for low attainment of BME groups may be connected to their relatively higher participation rates, which resulted in lower prior attainment levels when compared with white students. This has been explored in more detail by Richardson (2008) who demonstrated that the likelihood of BME students attaining a good degree increased by roughly 50% when the effects of entry qualifications were controlled. However, the study also found that the effects of age, gender, mode of study and
subject of study all interacted with the effect of ethnicity (Richardson, 2008) making it problematic to discern causality with respect to any single factor.

Farsides and Woodfield (2007) undertook a study which looked solely at gender differences in undergraduate degree performance. The study found that the gender gap in academic attainment was most dependent on the subject of study, with the reported female advantage in obtaining good degrees disappearing in the ‘hard sciences’ and Biological sciences, where males were found to perform better. However, the report also emphasized the implication of sampling strategies on the interpretation of results. Potential sampling biases that could occur due to higher proportions of women in social sciences and humanities and higher proportions of men in the ‘hard sciences’ were highlighted as a factor for consideration.

**Qualitative studies – Expanding the definitions**

Although such quantitative studies have helped considerably in defining the nature of the attainment gap, they provide little insight into aspects of student life that may influence the attainment levels of different student groups. Literature on student retention has identified a number of key aspects of the student experience which impact on students’ likelihood of withdrawal, and also arguably on their chances of success. For example, Tinto (1993) identifies aspects of the academic environment (including interaction with staff), and social system (such as extra-curricular activities and peer group integration) as playing a key role in the student experience. He concludes that students who are less well integrated into the academic and social settings are more likely to withdraw from study. Tinto’s model has implications for research into attainment gaps, since it provides fruitful areas for investigating differences in the student experience of specific groups. Previous research which has utilised Tinto’s model suggests that, ‘on average, ethnic minority students have less contact with their fellow students and teachers, and are, therefore, less socially and academically integrated’ (Meeuwisse et al., 2010, p. 94 Berger & Milem, 1999; Eimers & Pike, 1997; Nora & Cabrera, 1996; Severiens & Wolff, 2008a).

A study by Connor et al. (2004) noted that more BME students than white students reported facing difficulties at university, which may reflect this somewhat lower integration into the HE environment.

Further evidence of the importance of integration in the HE community is obtained from research undertaken at the University of Cambridge, which investigated three ethnic groups identified as low attainers – namely Black Caribbean, Pakistani and Bangladeshi. The research compared the experiences and characteristics of high and low attainers within each of the three ethnic groups, and found that strong academic performers displayed a feeling of ‘fitting-in’ at Cambridge, had adequate financial resources, and displayed high intrinsic motivation levels (Scales & Whitehead, 2006). Although a direct link to ethnicity was not outlined, it is noted that there was a higher proportion of students displaying characteristics of weaker academic performers – including a fear of not fitting in and severe financial hardship - within the three selected ethnic groups (Scales & Whitehead, 2006). A further variable identified in a study by Ridley (2007) was the impact of less effective forms of study behaviour within BME student groups. Ridley’s research suggested that black students were more likely to use a ‘surface approach’ to studying when compared to white groups. The variation between different groups in adopting a surface approach to studying was reported as a factor of some concern.
Finally, Stuart et al. (2008) conducted a study which focused on student experience of extra-curricular activities and its impact on attainment. They looked at the differences in the kinds of extra-curricular activities that students participated in, based on their unique socio-cultural backgrounds. The study found that the types of extra-curricular activities varied in line with the demographic profiles of students. Compared to students from ethnic minority backgrounds, white students spent more time with friends and in clubs and bars, and were involved in more university-based activities. Black students spent more time in the library, with their families and were involved in more solitary activities and less university based activities (Stuart et al. 2009, p.54). This study provided an insight into the perceived connections between extra-curricular activities and their role in academic performance, as well as improved chances of employment. However, the study does not consider differences by domicile, which could prove helpful in understanding the unique challenges of the overseas BME student.

The influence of pedagogic practices – Beyond the deficit model

Richardson (2008) in a review of existing literature on the gender and ethnicity attainment gap notes that, ‘as with gender differences, the contingent nature of this phenomenon [attainment differences by ethnicity] suggests that it is at least partly attributable to variations in the students’ academic context rather than to inherent or constitutional characteristics within the students themselves.’ (p.14). This review highlights a need to investigate factors aside from those inherent in student backgrounds and to look beyond ‘the deficit model’ to explain the attainment gap. The need for studies which look at student engagement with their academic contexts has been highlighted as a viable approach that may help explain the differential attainment gaps. A few recent studies have looked at the influence of teaching strategies and pedagogic practices across universities on student experience and its consequent influence on attainment. A research study conducted at the University of Wolverhampton on developing effective practice in promoting equality and diversity in the curriculum revealed a lack of adequate staff awareness of the needs of non-traditional students and underdeveloped student support systems (Pinnock, 2008). Institutional racism and the role of indirect discrimination have also been mentioned as possible influences (Connors et al., 2004).

The Plymouth context

Prior research at the University of Plymouth follows the trend reported nationally – that students from minority ethnic backgrounds consistently attain lower degree classifications when compared to their white peers (Moon, 2008). Fielding et al. (2007) suggest that the ethnicity attainment gap is normally greater where there are high numbers of BME students, therefore it would be expected that the gap at Plymouth would be lower than average, since the institution has relatively low numbers of BME students. Whilst the ethnicity attainment gap varies from year to year, the gap at Plymouth does appear to be smaller than the national average – at least for the last 2 years (see Appendix 1). It should also be noted that approximately ¾ of the BME students at Plymouth are from overseas, so the number of BME home students in the study was relatively low.

In the case of gender, the research identifies a heightened tendency for female students at the University of Plymouth to obtain good degrees (classified here as firsts and 2:1s) when compared to their male counterparts – and this difference persists, even in science disciplines where nationally it is generally less marked (Applied Psychosocial Sciences being an exception to this
rule). Moreover, the gender attainment gap at Plymouth was also found to be greater than the national average.

II. The Current study

In the light of these studies, the need for a deeper investigation into possible causes of the attainment gap was identified, and for research which considered the academic environment as well as expectations and experience of university life more widely. The study reported here sought to identify different perspectives on the experience of various student groups, and their potential impact on the attainment gap in the specific context of the University of Plymouth. This institution provides an interesting case study, owing to its position in the South West of England, and in a locality which has low numbers of ethnic minority students (and local residents). The repercussions of this on the unique socialisation patterns of students from BME backgrounds will be given particular attention.

In examining the nature of the student experience, various aspects of university life that may influence academic attainment were studied. These included not just study patterns, but also participation in extra-curricular activities, teaching and learning habits, motivation, influences on higher education choices, social life, part-time work habits and aspiration levels. Particular attention was given to the student experiences of BME UK domiciled as well as BME overseas students – a category that has not received focused attention in existing research. The study also examined both staff and student perspectives on the attainment gap.

Aims and Objectives

The primary objective of the project was to investigate possible explanations for noted differences in student attainment by comparing student experiences based on Ethnicity and Gender. This was to be accomplished by:

- Collecting and analysing student accounts of study and social experiences that may impact on attainment.
- Comparing differences in experiences of UK domiciled and international students that may explain variations in attainment levels.

This approach does not seek to provide a causal or predictive model of the factors influencing attainment. Instead, it seeks to uncover the unique and individual student experiences that may help explain the gap in attainment levels of specific student groups.

Research Questions

In the light of these objectives, the following research questions were formulated:

- What are the similarities and differences in student experience between students from ethnic minority backgrounds and those from white backgrounds?
- What are the similarities and differences in student experience between male and female students?
In what ways and to what extent might identified differences in student experience influence the differential attainment of these groups?

Research Participants and ethical clearance

Pre-defined student groups were identified based on gender and ethnicity characteristics. Following the research objectives, three comparative structures of student groups were formulated. These were:

- Black and Minority Ethnic (BME)¹ UK domiciled students and White² students
- Black and Minority Ethnic (BME) Overseas students and White students
- Male students and Female students

Ethical clearance was obtained from the Faculty of Education Ethics Committee. Consent was obtained from all participants and all data anonymised.

III Methodology

The qualitative approach to the project was conceived in response to prior research around the issue, which has largely been quantitative (Broecke & Nicholls, 2007; Naylor & Smith, 2004; Powdthavee & Vignoles, 2007; Richardson, 2008). A lack of in-depth qualitative data on the issue of ethnicity and gender based attainment gaps has been identified, which this research aimed to address. Keeping in mind the research context, a qualitative approach with three data collection methods was adopted. To augment the validity of the qualitative data generated, ‘across-method triangulation’ (Denzin, 1978, p.302) of both data sources and methods were adopted. This method is based on the rationale that combining dissimilar methods and sources serves to ‘achieve the best of each while overcoming their unique deficiencies’. (ibid)

Data were collected from both students and members of staff. The three methods of data collection were-

- An online questionnaire to elicit a wide range of student responses
- Focus group discussions with targeted student groups
- Semi-structured interviews with members of staff

Sampling Rationale

Annual Programme Monitoring data for three academic years: 2006-07, 2007-08 and 2008-09 were analysed to identify school-specific trends in attainment gaps by gender and ethnicity. Student and staff participants were recruited from the schools identified as a result of this exercise.

Gender Sampling Rationale:

¹ Based on HESA categorization of BME as consisting of Asian Other, Bangladeshi, Pakistani, Indian, Chinese, Other, Black African, Black Caribbean and Black Other. [www.hesa.ac.uk](http://www.hesa.ac.uk)
² Based on HESA categorization of ‘White’ as consisting of British, Scottish, Irish, Irish Traveller and White Other. [www.hesa.ac.uk](http://www.hesa.ac.uk)
Two criteria were used to select which schools of study\(^3\) would be used.

- A reasonably consistent pattern of the gender attainment gap over the last three years
- More than 15 enrolled students in each pre-defined student group at the relevant school of study

The following table represents the gender attainment gaps within each of the selected schools between 2006 to 2009.

**Figure 1: Gender Attainment Gap by selected Faculties**

<table>
<thead>
<tr>
<th>Dominant gender</th>
<th>More successful gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological and Biomedical Sciences</td>
<td>female</td>
</tr>
<tr>
<td>Geography, Earth and Environmental Sciences</td>
<td>male</td>
</tr>
<tr>
<td>Applied Psychosocial Sciences</td>
<td>female</td>
</tr>
<tr>
<td>Business</td>
<td>male</td>
</tr>
<tr>
<td>Computing &amp; Mathematics</td>
<td>male</td>
</tr>
<tr>
<td>Engineering &amp; Marine Sciences</td>
<td>Male</td>
</tr>
</tbody>
</table>

The table above demonstrates three patterns of gender attainment. The School of Biological and Biomedical Sciences is female-dominated with females performing better, the school of Geography, Earth and Environmental Sciences is male-dominated with females performing better while the School of Applied Psychosocial Sciences is female-dominated with males performing better.

**Ethnicity Sampling Rationale:**

The three schools that had the highest percentage of BME students over 2006 to 2009 were used for the study. According to APM data, these were the Business School, the School of Computing & Mathematics and the School of Marine Sciences and Engineering.\(^4\)

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\(^3\) The programmes included under each school of study reflect the revised faculty structure made effective in 2009.

\(^4\) According to the revised faculty structure made effective in 2009, the school of Tourism and Hospitality falls under the Business School.
Online Questionnaire

All students currently enrolled on Bachelor courses (classified as ‘live’ students on the University student database) within each of the selected schools were selected as respondents to the online questionnaire. This enabled the researchers to access a wide student base, which was considered particularly important given the low proportion of ethnic minority students at the University. The questionnaire was administered via Perseus Web-Survey software. Students were sent an email link to the online questionnaire and completed responses were entered into a database. A total of
6000 students across all selected schools were contacted from which 1040 responses were obtained, giving a response rate of 17%.

The questionnaire consisted of a combination of closed and open-ended questions. The primary issues addressed through the questionnaire were motivation, expectations of university life, study patterns, faculty support, confidence, social inclusion, family influence, assessment, part-time work, living arrangements, funding sources and anticipated attainment. Attitudes to study behaviour and social confidence were measured through Likert scale questions, while other factors were measured through multiple choice questions. The purpose of the questionnaire was to serve as a preliminary data collection tool to identify the general trends and patterns of student experience at the University of Plymouth, and not to elicit highly nuanced views of the issue.

**Semi-structured Interviews**

Staff Interviews were used to probe into the staff perspectives and perceptions of the attainment gap. A minimum of two members of staff were interviewed from each of the six schools. A total of 21 semi-structured depth interviews were conducted. Staff were asked about potential explanations for group differences in academic performance, student support requirements and assessment preferences within their particular discipline. Of the 21 staff interviews, 3 respondents were from BME backgrounds, one from a mixed black and white background and 17 from white backgrounds. This is substantially higher than the proportion of BME staff in the university more widely, which stood at 4.3% in 2010 (Staff Baseline Data Report, E&D, 2010), although the selected schools had higher proportions of BME staff within them.

In terms of gender, seven respondents were female and 14 were male. This is not representative of the staff gender balance of the university as a whole, which in 2010 consisted of 59% female staff. However, it must be noted that all the faculties selected had significantly higher proportions of male staff members, with the exception of the School of Applied Psychosocial Sciences which had a higher proportion of female staff members.

**Focus Group Discussions**

Students who completed the online questionnaire were given an opportunity to volunteer to participate in focus group discussions. Purposive samples of students were recruited from the volunteers, in order to ensure adequate representation from the three targeted student groups.

Six focus group sessions were held in total. These were:

- Students from BME Home backgrounds (selected from all six schools)
- Students from BME Overseas backgrounds (selected from all six schools)
- Male (White) students from the School of Biological Sciences
- Female (White) students from the School of Biological Sciences
- Male (White) students from the School of Geography
- Female (White) students from the School of Geography

The objective of the focus groups was to gain a more refined insight into the issues already
uncovered through the online questionnaire and staff interviews. The decision to conduct focus groups with homogenous ethnic groups was made with the intention of facilitating an atmosphere that was more conducive to the expression of candid opinions.

Students from the School of Applied Psychosocial Sciences did not participate in the focus group discussions, owing to difficulties in recruiting sufficient numbers of male volunteers. It was also not possible to recruit BME Home and Overseas students for each faculty, owing to the small numbers of BME questionnaire respondents. However, this did not impact on the nature of the information collected on general student expectations from University and the academic and social experiences at University, which were not discipline-specific.

Analysis

The qualitative and quantitative data gathered were analysed in the following stages:

- The results of the questionnaire were analysed using SPSS to compare the differences between groups of students in response to key questions about their motivations, behaviours, and experiences. Statistically significant findings were noted. Group differences which were not statistically significant due to small sample sizes were noted and compared further with the findings from the qualitative data.
- Interviews and focus groups were transcribed fully, and coded using NVivo qualitative data analysis software. The constant comparative method was used to draw out themes and patterns of response (Silverman, 2005). Five structures of comparison were formulated:
  - BME students and White Home Students
  - BME Overseas students and BME Home students
  - Students and Staff
  - BME Staff and White Staff
  - Male students and Female students

These structures of comparison also aided triangulation techniques in the analysis of data.

- Three rounds of coding were performed with the aim of unpicking all the thematic strands inherent within the data. Initial codes were reviewed and refined in the light of emergent themes from the second round of coding. This ‘cycle of comparison’ eventually produced a final set of ten themes which will be discussed in further detail below.

- The extent of evidence for each theme arising from the different respondent type was noted, and the frequency with which each criterion was associated with each specific target group was tabulated. This allowed insights into staff and student perceptions of the qualities and nature of each target group. Variations in the data within each thematic category were also noted.

- The emergent themes from the qualitative data were compared with the findings from the quantitative data. Those themes that were found to be convergent as well as divergent across both research methods were noted.
IV Findings

Quantitative Findings

The online questionnaire uncovered some statistically significant differences between different groups. The key quantitative findings are described briefly below:

**Motivation**: This was measured based on 4 Likert-scale questions:

- ‘I believe that a University education is important’
- ‘It was important to my family that I attend University’,
- ‘I came to University to increase my career prospects’ and
- ‘I came to University for personal development’.

While both White and Home BME students were somewhat more likely than overseas students to express strong agreement that they were attending university to enhance career prospects, this difference was not statistically significant. However, the qualitative data suggest that both BME Home and BME Overseas students were much more likely to be heavily influenced by family beliefs (described, along with career optimisation as an extrinsic motivational factor by Reay *et al*, 2005; Scales and Whitehead, 2006) and by the belief that a university education is very important (an intrinsic motivational factor – Reay *et al*, 2005; Scales and Whitehead, 2006). There was little distinction between male and female students for motivation, even when controlling for ethnicity and fee paying status.

**Confidence and Anticipated Attainment**: Students were asked to predict their likely degree outcome on completion. Findings indicate that BME overseas students were most confident about getting a first, while white home students were least confident about getting a first. BME Home students and female students were both more likely to anticipate gaining a 2:2 than other groups.

Most of the variance in anticipated degree outcome across groups taking into account fee paying status, ethnicity and gender can be explained statistically within one group – female BME home students. While a slightly lower proportion of female white students expected to achieve at least a 2:1 than their male counterparts (81.3% to 85.5% respectively, not statistically significant at 0.05), the “expectation gap” widened to 66.8% for female BME home students to 88.6% for male BME home students – and in spite of the relatively small numbers, this outcome is statistically significant at 0.05. Small numbers make comparisons within the BME overseas group virtually impossible to draw conclusions from, but there is no evidence to support any difference in expectation levels for this cohort.

When predicted findings are compared with actual results from previous cohorts, it was clear that BME overseas students and male students in particular over-estimated their likely degree outcomes (see figure 3): It is clear that all groups of students over-estimate their chances of achieving a ‘good degree’ – but this is strongest for BME overseas students, and for male students (difference significant at 0.01).

**Figure 3**: Anticipated vs. Actual degree outcomes for the selected student groups.
Female students were least likely to over-estimate their degree outcomes of the groups studied. Female students, however also were more likely to be anxious about academic work than were male students (significant at 0.01) with 42.6% of the female students in the sample indicating that they were “very anxious” before an exam or a class assessment, compared to only 25.9% of male students. There were no statistically significant differences across ethnicity and fee status groups, and within-group numbers made analysis taking multiple variables into account impossible.

**Study time and attendance:** Female students were found to spend more time studying than male students. Some 25.2% of female students completing the survey reported studying more than 16 hours a week compared to 18.9% of men; conversely, 17.2% of the male students reported studying less than 5 hours a week compared to 10.9% of women (both statistically significant at 0.01). In spite of a slight tendency for Home BME students to report spending less time studying, there were no statistically significant differences when taking into account ethnicity and fee-paying status. However, when ethnicity and fee-paying status is controlled for, the noted gender differences in study time remain only for white students; there was no discernable difference between male and female students in either the Home BME or Overseas BME groups.
In terms of reported tendency to miss lectures, results suggest that BME overseas students were least likely to miss classes, followed by BME home students and then white home students, though again these differences (due to small numbers in some of the cells), were not statistically significant. Male students (at a reported 30.7%) were almost twice as likely to miss at least one class a week than were female students (16.5%) (significant at 0.01). As above, this difference is only statistically significant for white students. When ethnicity and fee-paying status is controlled for, male Home BME and male Overseas BME students are no more or no less likely to miss lectures than their female equivalents.

There were differences in part time working habits which may explain some of the differences in attendance amongst these groups. The questionnaire findings indicated that BME Home students were most likely to hold a part-time job, and male students were more likely to work more than 10 hours per week than were female students. Female BME overseas students were the least likely (by some way) out of all the groups under consideration to hold a part-time job; while for all other groups, at least 30% were employed, this figure was only 12.5% for the aforementioned group. However, women were twice as likely as men to have childcare or family commitments - but these were a relatively small proportion of the cohort in absolute numbers. This was true both for white students and for BME Home students. No BME Overseas students reported having child care or family commitments. Of all groups, female BME Home students, at 20.6%, included the largest number of individuals reporting child care and family commitments, though again, the small group size means that this result should be viewed with caution.

**Study habits:** Students were asked about their preferred approaches to study. Findings were mixed; those which were statistically significant include:

- BME Overseas students expressing a stronger preference for learning through memorisation (significant at 0.01) than White or BME Home students.
- Male students expressing a stronger preference for using internet resources for studying than female students (significant at 0.01). When control for ethnicity and fee paying status was introduced, this preference only held for White students (significant at 0.01), with no differences in preference across gender for the other groups.
- BME Home and BME Overseas students expressing a stronger preference for using internet resources for studying than White students (significant at 0.05)
- Male students expressing a stronger preference for studying in groups compared to female students (significant at 0.05)

The concept of study flexibility was created by combining three variables: ‘Study style’, ‘preference for studying in a group or alone’, and ‘types of study resources used’. Each of these ordinal variables was structured with 5 discrete categories with the “middle” category representing no strong preference. These values were recoded in order to remove the direction of the preference – so for example those expressing an extreme preference to studying alone were combined with those expressing an extreme preference to studying in groups to form a single category of extreme preference. This recoding formed three new variables with values of 1 to 3, with 1 representing full flexibility and 3 representing an extreme preference. The sum of these variables was then calculated to form an overall measure of flexibility, with a minimum score of 3 (the most flexible) and a maximum score of 9 (the most inflexible) available for any case. An independent-samples t-test was then carried out to test for differences in the mean score between men and
women. Male students had a higher mean score (5.86 out of 9 compared to 5.60 out of 9 for female students and while the difference is small, it is statistically significant at 0.01), and thus reported less flexibility in their study preferences. A one-way ANOVA comparing mean scores across ethnicity and fee-paying status yielded no statistically significant results.

Social integration: There was no significant difference in ‘feeling part of the social life’ among the student groups. However, BME students expressed more ambivalent views about the statement ‘I feel part of the social life at University’ while white students expressed stronger (both positive and negative) views about the statement. BME students found more problems integrating perhaps because they come in larger groups very often? Both BME overseas and BME home students reported not feeling comfortable speaking in English with friends at University, and this may give a partial explanation for the lack of integration felt by some in these groups. Male students were more likely to feel part of the social life of the university than female students (65% male, 57% female).

Qualitative Findings:

Staff perceptions of the characteristics of a successful student:
Staff identified a number of characteristics which, in their view, were indicative of a successful student. These included (in order of most to least frequently cited):

- Good writing skills
- Highly motivated (shows interest in the subject and works hard)
- Strong prior educational background
- Good organisation and time management skills
- Willingness to ask for academic and pastoral support when necessary
- Good mathematical skills
- Regular attendance at classes
- Ability to adjust to the university’s social and academic environment

Some of these attributes were associated more frequently with one or more group of students, indicating that these attributes were viewed as gendered and/or dependent on country of origin. (Generally ethnicity per se was not mentioned, but international students were deemed to have different characteristics to home students). The number of times each characteristic was mentioned by staff and students in relation to the different student groups was mapped and analysed. It was found that female students were most often cited in relation to the characteristics of a successful student. This was mainly due to a perception of female students as hard-working, conscientious and well-organised. Overseas students were also viewed as being hard working and conscientious; however they were also described as having poor written skills and difficulties adjusting to university life.

Good writing skills were identified most often as a weakness of students for whom English is a second language, but also as an area in which male students might perform less well:

“People come from a very different educational background but that doesn’t prevent them from doing well, what prevents them from doing well is not having the language ability.” (Business 1)
Motivation was another a key factor which staff identified as important, picking out particular, students who appeared to be intrinsically interested in the subject, rather than focusing on getting a job after graduation. Whilst this wasn’t specifically linked with gender or ethnicity, the findings from our questionnaire suggest that BME students may be more career-focused than white students, therefore this may have implications for the success of different groups. Staff understanding of motivation also appeared to be linked to the need for students to cultivate independence and skills of autonomous learning. Although they felt that the ability to ask for help when required was crucial, they also believed that students were often unwilling to work on their own:

“Inability to apply what they’ve been taught ... a reluctance to go and do any work using text books, they expect to have everything handed to them, they’re reluctant to go and find things for themselves.” (Maths 1)

Good organisation and time management skills were highly valued by staff, and this was a characteristic which staff overwhelmingly viewed as gendered, with female students being seen as generally more organised than male students:

‘Generally speaking I think that girls are more dedicated and get on with it whereas some boys will leave it till the last minute and do the minimum. But that’s a bit of a generalisation’ (Biology 2)

Willingness to ask for support provided a more variable response – with some staff viewing support-seekers as time consuming (and noting that it was often the students who did not need help who would ask for it!), but others observed that students seeking academic support were generally more successful. Mature students, and those from partner colleges were identified by staff as having a greater tendency to ask for support, and some felt that female students might be more willing to ask for help. Concerns were raised about weaker students who for whatever reason did not come forward for support or who withdrew from contact with staff.

The need for good mathematical skills was widely agreed upon as an important factor. The extent of this theme may, in part, be explained by the dominance of scientific subjects in this research, but it is of interest, since it was an area in which male students were generally perceived to have greater success than female students:

‘if a student has done maths and has done chemistry at A Level they are generally speaking more able but that again is, that’s a gut feeling, I haven’t got any statistical basis to that.’ (Biology 1)

Hardly surprisingly, attendance was also seen as a key factor influencing student success, and the number of students who did not attend lectures and seminars was a concern to many staff members:

‘If they’re not attending classes, they’re doomed!’ (Maths 2)

This issue was mentioned by staff in a range of disciplines, and was noted as being highly variable amongst individual students. Most staff felt that there was little difference between different groups of students (in terms of ethnicity or gender), although some noted the increased tendency of male students to skip classes.
The final indicator of success was adjustment to the university environment which was raised as an issue by several of the staff respondents. This is potentially problematic for overseas students who may have to deal with language and cultural issues, but is probably a more widespread concern linked to the transition from school to university. Success in the first year was viewed as crucial by many academics:

“Normally, if students get through the first year, they get through the rest of the course” (Computing 1)

This factor was raised particularly in relation to the difficulties of cultural adjustment of overseas students studying in the UK higher education system:

‘In China they tend to be taught by a lecturer and they’re culturally used to accepting everything that that person says, because they’re the expert. They’re not used to critically appraising that or disagreeing in some way. And even with written work, culturally they tend to accept it as being this is an expert, if they’re saying then it must be right. So that’s very different to what we try to train our students to do, which is to critically appraise and argue against everything and try to work out whether the evidence is there or not to support these ideas. So they’ve got to try to adapt to a different higher education system.’ (Business 2)

In conclusion, staff views of ‘the successful student’ paint a picture which may align more closely with the characteristics attributed to female students and those from the UK or other English-speaking countries. This may provide some insight into origins of the attainment gap.

Staff and student perceptions of teaching and learning

Staff felt that students from BME backgrounds did not always participate well within the classroom environment. The perception was that BME students (BME overseas students in particular) preferred to approach lecturers outside of class time or not at all. Staff members were generally uncertain of the reasons for this. Some staff had a few insights into the probable explanations for this. These included the feeling that overseas students were generally reluctant to admit that they don’t understand something and that they prefer to worry alone. Some staff also recognised the need for lecturers to make an effort to win their trust to persuade them to ask for support.

‘Obviously you could say that overseas students need more guidance so they ask lots of questions and come and see you lots of times or they tend to be reluctant to do that. Now whether that’s language, whether they’re shy, they’re meeting somebody new, because they won’t have seen me before and I don’t think I’m – you know, they can come and knock on the door and talk to me. Or whether they think they should be doing things on their own without any support, it’s hard to say.’ (Computing 1)

It was also felt that Chinese students had difficulties in adjusting to autonomous learning practices, although staff remarked on increasing expectations and need for support from both home and overseas students. This was particularly strong with overseas students and foundation degree students but to a lesser extent with all student groups.

In the focus groups, students – particularly BME overseas students - expressed some concern and uncertainty about the expected roles of teacher and learner in higher education. Some BME
overseas students expected that they would receive much more formal teaching and felt quite unprepared for the extent of independent learning required. Students mentioned being dissatisfied with the time as well as the extent of help offered by tutors to clarify doubts. Whilst UK students expressed some concerns about the sufficiency of their prior education in preparing them for university-level study; in the case of overseas students, this could be compounded by language issues:

‘. there was a natural expectation that we knew exactly what was going on. If we throw this symbol up and start going off on this particular calculation you will know exactly what we’re talking about because you were taught this at A Level and if you then explain well I didn’t do an A Level in maths – one or two moments there was a small silence when you could see the lecturer just trying to figure out a different route. And sometimes they couldn’t, they’d just say well talk to your colleagues, which made it a bit difficult for me to have to go out and try to find out how to do something.’ – Male UK Student - GEES

‘Actually (my foundation degree) has little connection with my current course and most of my course is about the definition, concepts and basic technique and I think some of them are hard to understand and it’s hard to follow the teacher.. (Right, do you think that’s because of the language issue?)
No, partly it’s because of language and partly because of the knowledge. ... There is a gap between the foundation course I think. It started from zero I think and so some of them, some of the courses, basically it’s the concept and some general knowledge, I can understand about 70% of the course. And so some of the courses are a little bit technical’ – Male Chinese student (Computing)

Staff and student perceptions of support requirements

Students were generally unhappy with the extent and amount of academic support offered by staff:

‘But if you’ve done the work and you just want a little nudge it doesn’t take somebody more than three or four minutes to say yeah that’s great or you’re not quite there, try reading so and so and so and so and come back and see me again. It’s quick and easy and there’s too many of them just can’t be bothered.’ – Male UK student, Biology

Ironically, however, the general perception among staff members was that some students did not ask for enough support – particularly the weaker students who would benefit most from additional support outside of the classroom:

‘Very often the people who sign up for the tutorials are the people who are doing OK. And the ones who are really struggling don’t come, they hide.’ Business 1

Many students selected alternative sources of support - particularly, although not exclusively, for pastoral issues. These might include: lab technicians in science courses, friends/peer support, online resources or social networks such as Facebook. There seemed to be a general lack of awareness among students that giving pastoral support falls within the remit of the duties of academic staff. Most reported using other sources of support such as family and friends for
pastoral issues.

Motivational Influences

When students were pressed on the rationale for their choice of degree programme, BME students appeared to place more importance on course reputation when choosing a University than White Home students. White students were more likely to come to University for personal development or for subject interest, while BME students were more likely to be influenced by family when choosing courses. Staff interviews highlighted more instances of BME students who were unhappy with their choice of programme, an issue which they attributed to family influence on course choice. White home students were more likely to look at University as a transition stage to explore course options and discover their areas of interest, and were more likely to express a deep interest in their chosen discipline.

In terms of motivation to study, female students were generally perceived (by both staff and students) as being more motivated than males. This was particularly the case in disciplines such as engineering which are male dominated:

‘My personal view is women are more emotional and that could work to their advantage and push them, it could be a driving force for them to work harder, to prove something to society, especially like with the feminist movement. Trying to prove that you’re equal, that you can achieve, basically you’re as capable as man is, so it gives you that extra push, you’ve got that motivation. Because generally while you’re studying you always need motivation, you always, always need that. And most students suffer from lack of motivation, so when you have that extra thing over the other gender it does help the girls.’ – Female student, Engineering.

However the same rationale did not appear to apply to ethnic minorities. Being a minority in this case, was associated with being the odd one out, and in most cases seemed to affect the confidence levels of BME students:

‘We have to accept it at times, as much as we like try to hide from the fact, like oh yeah we’re always the same, there’s always that little thing that you feel like when you’re in a room full of white people, you feel like everyone is looking at you funny. They just assume because you’re black you’re probably – or because you’re like this probably you don’t know how to speak English, probably you don’t understand anything. So at times it’s that little thing that you want to prove oh yes I can do it, which is the wrong approach. If you need help, go and ask for help, don’t just think oh I can do it myself and sit at home while work is piling up. I think it does like contribute to why black people don’t get proper degrees.’ – BME Home Female, Engineering

There are some indications in the data that men felt discouraged from studying by their peers and were wary of being associated with the ‘geek’ stereotype. Women on the other hand were seen as being supportive of each other in a study environment and were enthusiastic about the benefits of group studying. Moreover, a recurring theme concerning the need for women to work harder in order to prove themselves appeared in the female focus groups:
‘That’s what I find a lot of my guy friends are like – yeah, yeah I’m going out again, I’ve got all my notes, we’re going out running, we’re going to do some sports and then you know, that’s just like the side you see and the side you don’t see is them staying up all night and catching up. So to their mates they’re bragging about being out all the time and you know, and not working much but are really trying to keep on top of things and so the guys that don’t do catching up think everyone else is the same as them and not working very hard.’ – Female student, GEES

‘But the other thing I would say is girls, I don’t know, they seem – I can’t really explain it, they don’t plagiarise each other but they seem to do a lot more kind of group work and they seem to try and kind of push each other up a lot more and they try and support each other a lot more. Whereas with guys you find a lot more kind of natural competition sort of thing. So they’re not trying to spite each other but they just don’t really kind of try and help each other as such and they won’t go to the library and kind of do group sessions together and all kind of chat about the assignments.’ - Male student - Biology

**Discipline-specific Findings**

Gender: Findings from the School of Applied Psychosocial Sciences were particularly interesting owing to the lower proportion of male students with male students performing better. There were some indications that male students at the school tended to be more confident, willing to lead and put themselves forward when compared to female students. Whether this was a result of opting for a non-traditional course such as Applied Psychosocial Sciences or due to general male overconfidence was unclear. However it is also important to note that these are based on a limited number of staff interviews.

Male students were also reported as motivated and focussed in ‘hobby-based’ subjects such as diving and surf science. In general, increasing the number of field-based and practical work could be one way of increasing motivation, which was frequently reported as lacking in male students.

Within male dominated disciplines such as Engineering and Computing, female students were found to be more motivated and focussed when compared to male students. The need to assert themselves in male dominated environments was mentioned by some staff members.

> ‘I mean they do tend to be quite determined, I think that when they see themselves in what essentially is a male dominated subject they do seem quite intent on doing well.’- Computing 1

The staff interviews also highlighted female student experiences of being a minority in a male dominated environment. Issues uncovered were similar to those highlighted by BME Home students, such as discomfort with being singled out. (See section 1.4 on ‘The experience of being a minority’)

> ‘But to be honest not all women are interested in being singled out as women on these courses. Some of them, they’re here, they’re quite happy being students and they don’t want anything special or unique, they don’t want to be seen as being different.’ – Engineering 3

Discipline-specific findings in relation to ethnicity were less easily formulated, owing to insufficient numbers of BME students at the University. At the Business School which had the highest numbers of BME students (a majority of whom were BME Overseas students), there were comparatively more references to issues related to integration.
The School of Applied Psychosocial Sciences also reported some incidents of racism outside of the university environment. This is possibly owing to the sizeable practice element in the course.

**Perspectives on social life at University:**

Students in this research were asked about their perspectives on social life at the university, and responses of the different groups showed some variation in views. Male students seemed to place more importance on the social aspects of university life, while women tended to place importance on academic aspects. This particular finding reflects earlier work on the importance of extra-curricular activities such as sport, pubs and bars and serving on councils etc. to male students. (Stuart *et al.*, 2009). BME students were more ambivalent when asked if they fit in at university, while the views of white home students were either strongly positive or negative. Among the BME students, the social difficulties encountered by BME Home and BME Overseas students were different. BME Overseas students were more likely to face issues of integration and fitting into the Home environment by mixing with home students. BME Home students were more likely to face issues of isolation and loneliness, probably owing to smaller numbers of Home BME students at Plymouth.

* I made a European friend just like now, she’s the only (foreign) student, only foreign students talk to us, the others I don’t know why, maybe they think our English is no good, or something else, they just don’t like communicating. (Female Overseas student – Business)

* I know Chinese students are quite indoorsy and it’s like computer games and surfing the internet and don’t like socialising and go to clubs and last year I sometimes – I go to the club and I find lots of people (are) very kind and I think that most of the barriers are language, I think most times I cannot understand and they cannot understand me. And the second barrier I think is different culture, different thinking… Chinese students think they (clubs) are evil places and some of them think from the TV that clubbing is (bad) and dealing the drugs and the parents worrying about the students who want to go to the bars, So most of the Chinese people are wary of that. (Male Overseas Student – Computing)

* I’m not saying people here are ignorant, but there is also a big size of the population who still thinks that somebody who comes here should be like them. (Male BME Home student, Biology)

**The experience of being a minority**

BME students (both home and overseas) identified a number of challenges associated with being part of a minority group. These included fitting in with social activities, particularly the drinking culture which is so dominant in UK universities, and some sporting activities. Given that some academic staff identified drinking to access as a reason for student failure, the lack of emphasis on alcohol consumption should have conferred some advantages; however, it made social integration difficult for many students. Another social issue identified was the lack of understanding and acceptance of different cultural, religious and ethnic backgrounds. Only 4.6% of the student population at the University come from BME backgrounds. The figure is one of the lowest in the UK and reflects the demographic nature of the south west itself. BME students from outside of the South West region found the general lack of awareness of diverse cultures difficult to understand:
‘…people were so ignorant. I mean my housemates, my flatmates were all from here and they had no idea what Islam was or why. First of all, I mean I don't know why, but I expect people to know why I'm wearing a headscarf, it means I'm a Muslim. And they didn't know, I was like – I didn't get offended or anything but then you explain to them things and they literally have no idea what you’re on about. The amount of ignorance that I found in my first year was – I was shocked to say the least.’ – Female Home BME student

Some BME students also indicated that they had concerns about asking for support, and were concerned about prejudice:

‘You go to first year and realise that you don’t understand anything, but from experience, from people I know, they would not go and ask for help because they think oh I’m black, he’s going to think I’m stupid. Whereas for a white person they’d be going to ask for help if they need help. Where a black person’s got pride, they’ll be like one, I’m black, two, if I ask for help this person’s going to think I’m stupid, so I think it’s got to do with pride.’ - Female Home BME student

Interestingly, the student participants also identified some advantages of being part of a minority group. These included the opportunity for greater interaction with students from a wide range of backgrounds. This was particularly important to overseas students, many of whom value highly the opportunity to mix with students from the host country:

‘That’s the one thing I like most about Plymouth, you don’t have big groups from the same culture, so it forces you to mix with people from different cultures, actually to allow yourself to enjoy the diversity. Because it’s very beautiful, once you allow yourself and become tolerant towards other people it’s beautiful what you find out about cultures.’ - Female Home BME Student

The impact of being a minority also reflected in student attitudes towards working hard and integrating within the university environment. There seemed to be a belief that the challenges faced by BME students were different and more complex than those faced by other students. As a response to this, however, students attempted to be more resourceful in dealing with difficulties and developing coping strategies. This was seen as a useful skill for later life:

‘But it’s up to us to you know, wriggle out and make our way.’ - Male BME Home student

Racism
Students were asked if they had experienced any discrimination, both within the university and in the south west in general. The perspectives of home and overseas students were variable, and it is possible that there was a difference in the way BME home students and BME overseas students perceived discrimination. In particular, there seemed to be some reluctance on the part of home students to accept the possibility that they might be experiencing racism particularly at the University. Some BME Home students disregarded ethnicity itself as a factor that influenced their
daily interaction with other students, and one mixed race staff member noted the difficulty that white students had in understanding the reality of racism

‘There may not be any overt racism, there probably isn’t. Well there might be out on the street, but there isn’t in the classes or anything, but I still think that their experiences are not understood and so many of the students, however good they are in many ways, the white students, just can’t seem to grasp that racism is a reality. So I think the black and minority ethnic students can be put in a very difficult position sometimes’ – Mixed race female staff member

In addition to a general sense that racism was not part of their university experience, many BME students seemed to adopt the view that racism was ‘all in the mind’. Acknowledging racism as an everyday factor was seen as creating an additional barrier to fitting in at University:

‘I really don’t see ethnicity when I talk to people, I don’t see colour or religion.. I think it’s all in your head and it’s the way you perceive things. If you don’t have that mentality, then you won’t even – when you’re talking to somebody you won’t even suspect anything they say is like racist. Whereas if you have it in your head, even if they’re the nicest people on earth you’ll still be paranoid and think oh maybe they said this, maybe they meant that.’ – Female BME Home student, Architecture

‘I think people of minority races, they usually think ‘Oh they’re not understanding, I’m not being helped in that area because I’m black or because of my religion. And it’s not the case, if you look beyond that and think, ‘No’, just don’t look at people and think ‘Oh there’s a black person, there’s a white person, just look at and think ‘That’s my tutor and I’m trying to work for my degree.’ – Female BME Home student, Engineering

Overseas students, on the other hand, held different views. Some BME Overseas students, having experienced racism in some form, were aware of differential treatment, but also attributed these experiences to one-off incidents:

‘Sometimes I think it’s a problem... I have the experience...one night I was walking in the street with my friends and a teenager drove a car and went to a traffic light and they opened the window and said something rude to me and then they drove away .. But I think it’s just partly teenagers of Plymouth. In every country we have bad people. And this doesn’t apply to all Plymouth people. - BME Overseas Student, Computing

One member of staff also mentioned a racist incident of which she was aware, but these reports were infrequent in our study:

‘There was a student who was in one of my groups and she was getting racism from some of the (students) she shared a house with and ended up having to take it through the system. Other than that I think it’s subtle..we probably do it very subtly as well ourselves (the lecturers). It certainly wouldn’t be intentional
V. Conclusions:

This research has identified some possible contributory factors to the gender and ethnicity attainment gaps. Although the conclusions must be provisional, based as they are on a single case study, they do provide some interesting insights into the experiences of students which may be of wider generalisability. Key conclusions are outlined below:

There is no evidence from this research that BME home or overseas students spend less time studying or are more likely to skip lectures than white students. The self-reports of study time from the questionnaire indicate no difference between these groups, and suggest that BME students seem to be less likely to skip lectures than white students. Indeed, many staff viewed BME overseas students as being generally very hardworking and motivated compared to home students (the relative paucity of BME home students meant that staff were unlikely to attribute characteristics to this group). BME home students were more likely to hold a part time job, and BME Overseas students also expressed a strong preference for learning through memorisation and BME students expressed a stronger preference for using internet resources than did white students. Whilst this may help understand the differences, it seems unlikely that study-related factors would, on their own, explain the attainment gap for BME students. In many ways, they have similar affective and behavioural habits to those usually attributed to female students, who perform very well in higher education.

Perhaps more plausible is an explanation based on differences in motivation to engage in higher education, and social integration once at a UK university. Although the quantitative data did not provide a clear difference in terms of motivation, we could speculate that it may be that the growth of the employability agenda across the sector and at the UoP may account for this. Moreover, the findings suggest that BME students are more likely to be extrinsically motivated (by course reputation or future career), while white students are more likely to be intrinsically motivated (by interest in the subject, personal development etc.) This may mean that BME students are more likely to adopt surface approaches to learning as suggested by Ridley (2007). BME students at Plymouth are often entering with somewhat lower qualifications than white students, therefore this may impact on their approaches to study and their outcomes. Our findings also suggest that BME overseas students overestimate their likely degree outcomes. This may be due to a failure to understand the requirements of the UK system, although this characteristic is shared with male white students, as is the perceived limited writing abilities of these two groups. The problems of over-confidence about results, and the centrality of writing in higher education assessment practice may therefore be contributory factors in explaining the attainment gap.

On arrival at university, BME students at Plymouth seem to find the difference in academic and social culture problematic, and may continue to find social integration difficult throughout their time in higher education. This may stem from language difficulties, although it may also be that some white students are unable or unwilling to engage academically or socially with BME students. It is also probably the case that the social infrastructure of the university caters primarily to a white home student audience. Previous research has emphasised that learners value social support and friendships highly (York & Longden, 2007), and the impact of being less well integrated has been
reported in previous studies, in particular with respect to student retention (Tinto, 1993) but with potential impacts on academic outcomes. In addition, although attitudes towards racism and discrimination varied amongst different groups of students, there were some hints that this may be a factor influencing BME student integration. BME home students seemed reluctant to acknowledge that racism was a factor to be dealt with in their daily interactions, not perhaps in obvious overt manners but through ‘the everyday business of racism’ (Gillborn, 2006, Delgado & Stefancic, 2000) which include subtle articulations of discrimination that may or may not be intentional. BME overseas students on the other hand, seemed more likely to acknowledge and identify instances of discrimination. This aspect should certainly not be dismissed as a potential contributor to the ethnicity attainment gap.

In terms of gender, there were a number of relatively clear differences between male and female students. These included the tendency to skip lectures (which was higher in male students) and hours of independent study (which was lower in male students). The obvious conclusion is therefore that male students perform less well in higher education simply because they work less hard than female students. Whilst there could be a self-report bias which means that male students are less likely to admit to working hard, the views of staff members about gender differences in this study correlated very strongly with the students’ self-reports. The question remains, however, as to why male students apparently take their studies rather less seriously than female students. It may be that they are so confident in their degree outcomes that they feel that additional study is unnecessary (male students were also more likely to over-estimate their potential degree outcome). However, although male students expressed a preference for studying in groups, there also seem to be more social barriers to indulging in study-related activities for male students, with the negative associations of being a ‘geek’ and a lack of social support from other male students. It is worthy of note that although BME students may suffer from lack of social integration, both students and staff in our research suggested that the opposite may be a contributor to male underperformance, and that male students could be too focused on sports and socialising at the expense of academic work.

Female students reported higher levels of anxiety about study and were less confident about degree outcomes, yet generally perform well in higher education. This may be simply a matter of being hard-working, organised and conscientious, although it may also be a result of the somewhat better writing abilities of female students, their access to supportive study networks, and their flexible approaches to study (in terms of working in groups and individually, using a wide range of resources and having no strong preference for assessments). It is possible that by encouraging male students to develop similar flexible and supportive strategies, the gap could be reduced.

It was also clear from this study that both staff and students, whilst overtly expressing the view that they did not ‘see’ gender or ethnicity were influenced by widespread stereotypes about different types of students. Whilst these stereotypes may have some basis in fact, they are not necessarily a helpful way of viewing the student population. There seemed to be only limited engagement with a more critical view of race and gender, and little reflection on the ways in which gender and ethnicity might influence the everyday interactions of staff and students. International students were all too often viewed through the lens of a deficit model – requiring too much support from staff or being problematic to work with for students. Very rarely was the suggestion that interaction
with overseas students might enhance the learning opportunities for all suggested as a potential benefit.

VI Recommendations

Some key recommendations for future practice arising from the study are as follows:

- Provide greater opportunities for student induction into the UK academic culture by, for example, demonstrating what a ‘good assignment’ looks like, and explaining what its key features are;
- Engage in a discussion with students at the start of the year about expectations of the role of the tutor and learner.
- Assist transition from school to university by providing more explicit guidance on autonomous learning (why it is important and how much time commitment might be expected to be successful);
- Be explicit about the need for criticality and analytical thinking, and explain clearly to students what this means in practice;
- Provide more information and guidance on plagiarism which was poorly understood by students from all groups. Emphasise respect for the author’s integrity as a rationale for correct citation, rather than exclusively focusing on academic dishonesty;
- Consider using more diverse modes of assessment which draw on other skills aside from the written word (e.g. practicals, presentations, posters);
- Build up the level of writing in assignments gradually, in order to ‘scaffold’ development of writing abilities in the discipline;
- Provide feedback on student writing at an early stage of the programme and signpost students to available support for assignment writing and English language (including Learning Development and the English Language Centre);
- Enable students to undertake self assessment of their own skills (possibly through an online resource, or with personal tutors) with links to appropriate support services for those who need further guidance;
- Draw on the experiences and expertise of international students where possible by including course content which refers to contexts outside the UK;
- Provide learning opportunities which require all students to participate (e.g. group activities where each person has a specific role; structured discussions in which each person has a turn to speak etc.) to reduce the potential for discussion to be dominated by an individual or a specific group of students;
- Allocate students to groups, rather than allowing them to self select on all occasions, in order to provide a more diverse learning context;
- Create an environment that encourages non-traditional students to ask for support outside of the classroom (there was some indication that overseas students prefer email contact and one-to-one support);
- Facilitate students in changing their programme choice if they feel that they have made the wrong decision;
- Encourage students to ask questions in lectures, or use electronic voting equipment to check students’ understanding, as they may be afraid to ask even if unsure;
• Organise inter-cultural social events and provide spaces where students can meet which are not tied to the ‘drinking culture’;
• Consider setting up a peer mentoring scheme to assist with transition for all students;
• Provide more staff development and guidance on diversity and inclusivity, encouraging personal reflection on underlying beliefs about student characteristics and notions of ‘the successful student’.
• Prepare students for the possibility of overseas employment by understanding and recognising cultural differences in how skills are understood and deployed.

VII Limitations of the study

The first limitation of this study is, naturally, the difficulty of drawing conclusions from a student population which includes relatively small numbers of the type of student which is of interest (in this case, BME students). Whilst Plymouth provides an interesting case study in many respects, the findings relating to ethnicity should be treated with some caution. Another limitation of the study arises from the problematic nature of categorizations such as ethnicity and home/international students. Whilst we anticipated that the group of ‘Home – BME’ students would be of UK origin, this was frequently not the case, and our focus group of students who fell into this category included BME students who had only been in the UK for 4-5 years. However, it was also the case that there were significant differences in social and academic expectations of University between the home BME and international BME student groups, therefore conflating these groups would not be advisable.
References


6. Ethnicity and Gender Gaps in Student Attainment,(2008), Equality & Diversity (E&D), University of Plymouth.


12. Labour Party General Election Manifesto, 2001

13. Leman, Patrick J.(1999)'The role of subject area, gender, ethnicity and school background in the degree results of Cambridge University Undergraduates', Curriculum Journal, 10:2, 231 — 252


APPENDIX 1: The ethnicity attainment gap at the University of Plymouth and the UK

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Good Degrees (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
</tr>
<tr>
<td>UoP BME</td>
<td>44%</td>
</tr>
<tr>
<td>UoP White</td>
<td>57%</td>
</tr>
<tr>
<td>UoP Ethnicity Gap</td>
<td>13%</td>
</tr>
<tr>
<td>White students nationally (HESA)</td>
<td>N/A</td>
</tr>
<tr>
<td>BME Students - HESA</td>
<td>N/A</td>
</tr>
<tr>
<td>UK Ethnicity Gap</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Appendix 2: Attainment of Students by Domicile and Ethnicity at the University of Plymouth

<table>
<thead>
<tr>
<th>Domicile/Ethnicity</th>
<th>Good Degrees (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
</tr>
<tr>
<td>UoP BME UK</td>
<td>46%</td>
</tr>
<tr>
<td>UoP BME Overseas</td>
<td>53%</td>
</tr>
</tbody>
</table>

Appendix 3: The Gender Attainment Gap at Plymouth and the UK

<table>
<thead>
<tr>
<th>Gender Group</th>
<th>Good Degrees (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
</tr>
<tr>
<td>UoP Female</td>
<td>61%</td>
</tr>
<tr>
<td>UoP Male</td>
<td>50%</td>
</tr>
<tr>
<td>UoP Gender Gap</td>
<td>11%</td>
</tr>
<tr>
<td>UK Female (HESA)</td>
<td>62%</td>
</tr>
<tr>
<td>UK Male (HESA)</td>
<td>55%</td>
</tr>
<tr>
<td>UK Gender Gap</td>
<td>7%</td>
</tr>
</tbody>
</table>
PedRIO Papers

Paper 1
Widening Participation: PedRIO Horizon Scanning Report
Debby Cotton, Pauline Kneale and Tricia Nash

Paper 2
The Gender and Ethnicity Attainment Gap Research Project
Debby Cotton, Rosemary George and Mel Joyner

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