NAVIGATING TOWARD SUCCESS: BLACK AND MINORITY ETHNIC STUDENTS IN POSTGRADUATE SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS COURSES IN ENGLAND

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Abstract

This thesis aims to address a paucity in the literature of the experiences of 'home' Black and Minority Ethnic (BME) students in postgraduate (PG) education in England, with a particular focus on Science, Technology, Engineering and Mathematics (STEM). This is done by (1) identifying institutional barriers to access to and progression through PG study, including the role of Widening Participation (WP) policy and (2) the factors facilitating educational success of BME students.

This thesis uses a multi-faceted framework of intersectionality (Crenshaw, 1991), Critical Race Theory (CRT) (Gillborn, 2008), Bourdieusian thinking tools (Bourdieu 1997) and Yosso's (2005) community cultural wealth (CCW) capitals (aspirational, linguistic, social, navigational, familial and resistant). It argues for the addition of what is theorised as *perspective capital* to the CCW framework, which can be seen as a resource that allows people of colour to make contributions to the field, stemming from a perspective which is not readily available to people from dominant groups.

The data includes semi-structured initial (n=15) and follow up interviews (n=10) with BME students in PG STEM courses, semi-structured interviews with university staff (n=18), student survey (n=246) and various policy and marketing documents.

The data suggests that the lack of intersectional thinking in the conceptualisation of WP policy has had negative impacts on BME students. Furthermore, BME students in this research experienced othering. This stemmed from academics' discourses marking racial difference and from how the organisational structures of the PG field relegated these students to a category of needing support. This had negative impacts on their progression and mental wellbeing. However, students in this study had a range of capitals at their disposal, which allowed them to navigate the PG field.

This thesis makes a significant contribution to knowledge by developing Yosso's work to include a new notion of perspective capital and fine-tuning the conceptualisations of linguistic and social capitals within the CCW framework.

Declaration

| I hereby declare that, except where explicitly stated, the work presented in this |
|---|
| thesis is entirely my own. |
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Table of contents

| ABSTRACT | III |
|---|-----------------|
| DECLARATION | IV |
| TABLE OF CONTENTS | V |
| LIST OF FIGURES | IX |
| LIST OF TABLES | X |
| ABBREVIATIONS | XI |
| ACKNOWLEDGEMENTS | XIII |
| 1. INTRODUCTION – SETTING THE SCENE | 1 |
| 1.1. Introduction | 1 |
| 1.2. Rationale and motivation for conducting this research | 1 |
| 1.3. Research questions | 4 |
| 1.4. 'Race' and 'race' terminology | 4 |
| 1.5. Higher education in England and 'race': an overview | 7 |
| 1.6. What is Widening Participation? | 8 |
| 1.7. Educational success | 10 |
| 1.8. Thesis outline | 11 |
| 1.9. Conclusions – highlighting the contributions | 14 |
| 2. 'RACE', POSTGRADUATE EDUCATION AND WIDENING | |
| PARTICIPATION. | 16 |
| 2.1. Introduction | 16 |
| 2.2. BME students in PG education | 17 |
| 2.3. Experiences of BME students at earlier educational stages | 19 |
| 2.4. BME students and STEM education | 22 |
| 2.5. Widening participation overview 2.5.1. Three phases of WP policies | 25 26 |

| 2.5.3. | Discourses of financial, aspirational and attainment barriers to HE | |
|--------|--|----|
| - | ipation | 30 |
| 2.5.4. | , | 32 |
| 2.5.5. | Retention and success at undergraduate study | 33 |
| 2.5.6. | Widening participation in postgraduate education | 36 |
| 2.6. (| Conceptualisations of educational success of BME students | 38 |
| 2.7. | Conclusions | 41 |
| 3. AT | THE INTERSECTIONS – THE THEORETICAL FRAMEWORK | 42 |
| 3.1. I | ntroduction | 42 |
| 3.2. I | ntersectionality | 43 |
| 3.3. (| Critical Race Theory and whiteness: understanding racist structures | 47 |
| 3.3.1. | Racism as endemic | 48 |
| 3.3.2. | | 49 |
| 3.3.3. | • | 50 |
| 3.3.4. | 1 0 | |
| | · | 54 |
| 3.3.5. | <u> </u> | 55 |
| 3.3.6. | CRT, the possibility of change and the under-theorisation of agency | 56 |
| | Bourdieu: structure and agency | 60 |
| 3.4.1. | , • | 62 |
| 3.4.2. | Bourdieusian theory and 'race' | 63 |
| | Community cultural wealth | 65 |
| 3.5.1. | Perspective capital | 68 |
| 3.5.2. | CCW and agency | 70 |
| 3.6. | Conclusions: the framework coming together | 71 |
| 4. ME | THODOLOGY | 73 |
| 4.1. I | ntroduction | 73 |
| 4.2. (| CRT-informed critical approach | 74 |
| 4.2. | or informed critical approach | /4 |
| 4.3. F | rom one university to another – the background story | 77 |
| 4.4. F | Phase one of data collection | 79 |
| 4.4.1. | Research sites | 80 |
| 4.4.2. | Interview participants | 81 |
| 4.4.3. | The state of the s | 83 |
| 4.4.4. | Critique of phase one and changes for phase two | 84 |
| 4.4.4. | Critique of phase one and changes for phase two | 64 |
| | Phase two of data collection | 86 |
| 4.5.1. | Follow up interviews | 86 |
| 4.5.2. | • | 87 |
| 4.5.3. | Institutional and national documents | 89 |
| 4.5.4. | Critique of phase two | 90 |
| 4.6. E | Ethics | 91 |
| 4.7. F | Final data | 92 |
| 4.7.1. | University sites | 93 |
| | | |

| 4.7. | | Interviews – students | 96 |
|--------|--------|--|--------|
| 4.7. | 3. | Interviews – staff | 97 |
| 4.7. | | Survey – respondent characteristics | 99 |
| 4.7. | 5. | Institutional and national documents | 101 |
| 4.8. | Ana | lysis | 102 |
| 4.8. | | Linking discourse analysis and critical 'race' methodology | 102 |
| 4.8. | | Interviews | 103 |
| 4.8. | | Survey | 104 |
| 4.8. | 4. | Institutional and national documents | 105 |
| 4.9. | Posit | ionality and knowledge production | 106 |
| 4.10. | Con | clusions | 116 |
| 5. V | VHIT | ENESS OF WP POLICIES | 117 |
| 5.1. | Intro | oduction | 117 |
| 5.2. | | of intersectional thinking as an example of whiteness | 118 |
| 5.2. | | Class versus 'race' | 119 |
| 5.2. | 2. | Class and 'race' | 122 |
| 5.3. | Und | ergraduate focus as a diversion | 123 |
| 5.3. | 1. | Ignorance of data as a sign of White privilege | 124 |
| 5.3. | 2. | Discourses of WP as supposedly fully addressed at UG level | 125 |
| 5.3. | 3. | Passing on the responsibility for WP and equality to UG education | 127 |
| 5.4. | Stud | lent deficit approach | 129 |
| 5.5. | Prot | ecting Whiteness through ineffective WP policies and practices | 131 |
| 5.6. | Con | clusions | 135 |
| 6. 1 | THE \ | WHITENESS OF THE PG FIELD – RACIALISED EXPERIENC | ES OF |
| BME | STU | DENTS IN PG EDUCATION. | 137 |
| 6.1. | Intro | oduction | 137 |
| 6.2. | Meri | tocracy as whiteness | 138 |
| 6.2. | | Meritocracy as a tool to hierarchise PG field | 138 |
| 6.2. | 2. | Lack of transparency and fairness of admissions | 144 |
| 6.2. | 3. | Naming the unwritten rules of the admissions game | 145 |
| 6.3. | Othe | ering as a tool of whiteness | 148 |
| 6.3. | 1. | Othering the body | 149 |
| 6.3. | 2. | Othering by gender | 153 |
| 6.3. | | 'Acceptable' otherness | 157 |
| 6.3. | 4. | Motivations, othering and underrepresentation | 159 |
| 6.4. | | nomic imperatives, ethnic diversity and (the lack of) meritocracy – a ca | ase of |
| intere | st con | vergence. | 162 |
| 6.5. | | teness of organisational structures | 169 |
| 6.5. | | Not for people with diverse responsibilities | 172 |
| 6.5. | | Not for people with hidden disabilities | 173 |
| 6.5 | 3 | Organisational structures and White privilege | 174 |

| 6.6. | Impact of whiteness on the students and the PG field | 175 |
|------------------------------|--|---|
| 6.7. | Conclusions | 179 |
| | NAVIGATING TOWARD SUCCESS – FACTORS CONTRIBUTING T STUDENTS' EDUCATIONAL SUCCESS | ΓΟ 180 |
| 7.1. | Introduction | 180 |
| 7.2. | Science capital as particularly strong for BME students | 181 |
| 7.3. 7.3. | 2. Aspirational capital 3. Social capital 7.3.3.1. Role models 7.3.3.2. Facilitators 7.3.3.3. Sponsors 7.3.3.4. Differences in access to social capital 4. Navigational capital 5. Linguistic capital 6. Resistant capital | 186 187 190 194 196 197 200 202 205 211 214 |
| 7.4. | Conclusions | 221 |
| 8. (| CONCLUSIONS, CONTRIBUTIONS AND RECOMMENDATIONS | 223 |
| 8.1. | Introduction | 223 |
| 8.2. | Key contributions to theory | 224 |
| 8.3. | Key contributions to knowledge | 225 |
| 8.4. 8.4. 8.4. 8.4. | • | 229 229 231 231 |
| 8.5. | Limitations and further research | 233 |
| 8.6. | Closing remarks | 234 |
| REFE | ERENCE LIST | 235 |
| APPI | ENDICES | 258 |

List of figures

| Figure 6.1 Student motivations for taking a master's or other PGT course, by ethnic group | ity |
|--|------------------|
| Figure 6.2 Students who agreed and strongly agreed with statements "overall I feel belong to the university community" (relating to current PGT and PGR course) or "overall I felt I belonged to the university community" (relating to the past PGT course) | |
| Figure 7.1 Students who agreed and strongly agreed with a statement "my family has strong influence on the development of my interests", by ethnicity group and discipled | ad a |
| Figure 7.2 Students who agreed and strongly agreed that at least one parent had education or a job in the broad area of their academic discipline, by ethnicity group discipline. | |
| Figure 7.3 Main sources of funding for current masters and other PGT students, by ethnic group. | 185 |
| Figure 7.4 Students who agreed and strongly agreed that they had been encourage by a UG lecturer to take on PG study, by ethnicity group | 188 ed 192 |
| Figure 7.5 Students who agreed and strongly agreed with the statement: "there was one (or a few) influential teacher(s) who helped me develop my interest", by ethnicit group and discipline | s ty |
| Figure 7.6 Students who agreed and strongly agreed that they had a role model wh was (1) the same ethnicity and (2) the same gender as they were, by ethnicity group | |
| Figure 7.7 Students with parents who had no higher education degree, but were in professional job, by ethnicity group, % indicates the percentage of students from a particular ethnicity group who met the criteria | |
| | 206 |
| | |
| | |

List of tables

| Table 3.1 Community cultural wealth - main interrelations of capitals | |
|--|-----------|
| | 69 |
| Table 4.1 Type and number of data units collected | |
| Table 4.2 Description of universities | 93 |
| Table 4.2 Description of universities | 95 |
| Table 4.3 Interviewed students | |
| T 11 441 | 96 |
| Table 4.4 Interviewed staff | 98 |
| Table 5.1 WP expenditure by category of spend in 2014-15 access agreements (AA) | 50 |
| and 2019-20 access and participation plans (APP) for the five research-intensive universities | |
| 1 | 122 |
| Table 6.1 BME representation in prospectuses versus actual institutional data | |
| | 152 |
| Table 6.2 Aspirations to undertake PhD and other doctoral studies, by ethnicity grou | ιρ 162 |
| - Table 6.3 Students' overall sense of advantage and disadvantage throughout the ent | |
| educational journey, by ethnicity group | |
| | 169 |
| Table 6.4 Students' explanations of the sense of disadvantage | 170 |
| ۔ Table 7.1 Parental support as the main source of income for masters and other PGT | 170 |
| students, by age and ethnicity group | |
| 1 | 189 |
| Table 7.2 Students who agreed and strongly agreed that they had a role model in the discipline, by ethnicity group | eir |
| | 204 |

Abbreviations

AA – Access Agreement

APP - Access and Participation Plan

BME – Black and Minority Ethnic

BTEC – Business and Technology Education Council (vocational exams, equivalent to A-

levels)

CCW - Community Cultural Wealth

CRT - Critical Race Theory

CWS - Critical Whiteness Studies

FSM - Free School Meal

GCSE – General Certificate of Secondary Education (exams taken by pupils aged 16)

GM - Global Majority

HE – Higher Education

HEFCE - Higher Education Funding Council for England

HEI - higher education institution

HESA - Higher Education Statistics Agency

IAG - Information, Advice and Guidance

IOE - UCL Institute of Education

MPhil – Master of Philosophy /research masters

NSF – National Science Foundation

OFFA - Office for Fair Access

OfS - Office for Students

PI – Principal Investigator

PG – Postgraduate (education)

PGR – Postgraduate research (education)

PGT – Postgraduate taught (education)

PhD – Doctor of Philosophy / Doctorate / Doctoral studies

POC – people of colour

STEM – Science, Technology, Engineering and Mathematics

UEL – University of East London

UG - Undergraduate (education)

UK – The United Kingdom of Great Britain and Northern Ireland

US/USA – The United States of America
WP – Widening Participation

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1. INTRODUCTION - SETTING THE SCENE

1.1. Introduction

This thesis focuses on British Black and Minority Ethnic (BME) students in postgraduate (PG) education in England, with a particular attention paid to the areas of Science, Technology, Engineering and Mathematics (STEM). It aims to expand the knowledge of the experiences and factors conducive to their educational success, including the role of Widening Participation (WP) policy and practice in improving their access to and participation in postgraduate education. This chapter provides a context for the study and begins with the outline of the rationale for investigating these topics, arguing from both social justice and economic perspectives. Stemming from this rationale, I present the research questions which drive this thesis. I will then provide a brief overview of the higher education sector with an emphasis on the position of students of colour within HE and in detail in postgraduate education and an overview of the WP policy and its main focus areas and developments over the last 20 years. In this chapter, I will problematise some of the key terms used throughout the thesis, such as: underrepresented or traditional students; 'race', students of colour, Black and Minority Ethnic (BME) students, Global Majority students; and educational success. I will complete the chapter by providing a chapter-bychapter outline of the thesis and the main contributions to knowledge.

1.2. Rationale and motivation for conducting this research

This section engages with external and internal motivations for researching the experiences of BME students in postgraduate education in STEM fields. In general, the proportion of 'home' (i.e. not international) BME students in postgraduate education is lower than in undergraduate education, and in particular postgraduate research education seems to suffer from the biggest underrepresentation of BME students in both STEM and non-STEM fields, with Black students being the most underrepresented (Advance HE, 2018c; ECU, 2015). This fact provides the first motivation for researching student experiences and the factors which lead to this underrepresentation.

Interests in the STEM fields are often heavily set in economic discourses with many authors arguing for STEM areas to be key to preserving national wealth (Gayles and Ampaw, 2011; Riegle-Crumb and King, 2010; Royal Society, 2008; Strayhorn, 2011) and the need to maintain a competitive edge by the leading economies through utilising their full human resources' potential (Leggon, 2010). This, in turn, can arguably be achieved by increasing the numbers of BME students in postgraduate education as they are the fastest growing demographic in the UK (CaSE, 2014; ONS, 2017; Royal Society, 2008). This rationale, I argue, sits comfortably within the interest convergence theory, which stipulates that any progress towards racial equality is achieved only due to the interest of people of colour aligning with those of the dominant (White) group (Bell, 1980). Interest convergence stems from Critical Race Theory, which in turn forms part of the theoretical framework of this thesis. I discuss it further in Chapter 3.

Another set of motivations for increasing numbers of students of colour in higher education stems from social justice discourses, whereby it has been argued that just societies should provide an equality of opportunity to all sections of society, with the majority of support for equalising such opportunities concentrating on those with the most need (Rawls, 2001). Education is often seen as the way to provide social mobility and improve social justice, with certain STEM fields, such as medicine and medicine aligned subjects often seen as particularly conducive to this purpose, particularly for BME students (Greenwood and Bithell, 2005).

Further motivation for taking on this research stems from a significant paucity of scholarship in the area of 'race' and postgraduate education in England, which I deal with in more detail in chapter 2. While there is some research on the composition of the student body (Advance HE, 2018b; HEA, 2017; Muijs and Bokhove, 2017; Wakeling, 2007), there is very little research which looks at the experiences of BME students in postgraduate education, and in particular, research that foregrounds 'race'. An exception to this may be in the area of initial teacher training (Basit et al., 2007; Carrington et al., 2001; Hoodless, 2007; Thompson and Tomlin, 2013). However, to the best of my knowledge, no

such studies concentrating on questions of 'race' in postgraduate STEM exist in England. This is why it is pertinent to conduct this research.

Throughout the years of working on this PhD, one set of questions in particular has been repeatedly directed at me: Why are *you* doing this research? What got *you* interested in this topic? What is *your personal* motivation for investigating these issues? I quickly realised that what these questions were really asking about was why was a *White person* researching racism, something that presumably was viewed as not a problem for White people. This is not how I see the issues of racism. For me, while very distinct, they sit within a wider area of seeking social justice. And so, in this sense, I see my views aligning with those of Martin Luther King Jr:

Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly.

(Martin Luther King Jr, Letter from the Birmingham Jail, 1963)

In fact, it was thanks to learning about my White privilege that I was also able to better perceive of my other privileges and structural oppressions impacting me directly, such as xenophobia and homophobia, and other oppressions having a broader, more indirect impact in the society. Additionally, as DiAngelo (2018) argues racism is not an issue for people of colour but an issue for White people as it was created by us. Therefore, I see challenging and addressing the issues of racism as contributing to the overall process of fostering good relations and equality among people, which I hope will translate into not only improved racial relations but also greater acceptance and understanding of a variety of differences. I explore the role of my positionality as a White researcher further in chapter 4.

Therefore, taking into consideration all of the above sources of motivations – economic interests, paucity in literature, broader and personal social justice concerns – conducting this research seems pertinent. For this purpose, I formed research questions which I outline in the following section.

1.3. Research questions

- 1. What is the role of WP policy in improving BME access to and success in PG education?
- 2. What is the role of institutions in shaping the experiences of 'home' BME students in PG education, with a particular attention to STEM fields?
- 3. What are the experiences of 'home' BME students in PG education, with a particular attention to STEM fields?
- 4. How do BME students negotiate their presence and success in the PG field?

1.4. 'Race' and 'race' terminology

In this section I highlight some of the different benefits and drawbacks of using terms describing people of colour and their links with the concept of 'race'. There is no perfect way of referring to people who are not racialised as White as one group. This is simply because any grouping risks essentialising, by giving a false internal homogeneity and an external heterogeneity, i.e. people in a group being supposedly all the same while different from another group (Gunaratnam, 2003). The term Black and Minority Ethnic, or BME, is often used in higher education (HE) in the UK. It is a problematic term as it not only homogenises a very diverse group, but also forces individuals to self-identify in a limited, prescribed way, which is enforced, for example, on a variety of forms that students need to fill in when going through the system, which in turn are often used for statistical purposes. It is also confusing because some White people may also be seen as ethnic minorities, such as White Irish or Traveller communities. While students do not usually refer to themselves as BME (Rollock et al., 2015) the term remains useful for the purposes of showing wider statistically significant trends affecting the whole student population. People of colour (POC) is often used in the USA and is becoming more and more popular in the UK, precisely because of the minority groups not identifying with the term BME (Rollock et al., 2015). Another term, Global Majority (GM), has been gaining popularity among minority ethnic groups and anti-racist activists in the UK and the US, as it emphasises that non-White groups are actually numerically larger than White people in the world, which is meant to be

empowering (Syed, 2015). While this stresses the global dimension of White racism it again risks essentialising the different groups within that term. The issue of power comes into question. In certain contexts, such as Brazil or microcontexts like East London, people of colour can be a numerical majority but are with no systemic power and therefore in a minority position, which introduces another useful term – minoritised. This term emphasises that the numerical dimension is not as relevant as the quality of life that people who face systemic racism have to experience, regardless of whether they are recognised as a visible minority or not – such as the Gypsy Roma Traveller community (Okolosie et al., 2015). This then leads onto the conceptualisation of 'race' which introduced the supposed difference between White people and people of colour in the first place.

Different concepts of 'race' as well as racism have been present in human societies. Although now widely discredited in Western societies, the biological concepts of 'race', based on phenotype (observed physiological/bodily properties), mostly skin colour, can be traced back to colonial times and the need for cheap labour (slavery). Developed from there, the pseudo-science of eugenics, propagated a belief in supposed inherent differences between "races", resulting in the alleged superiority of one 'race' over another (Chitty, 2001). Some authors argued that genetic differences meant that, on average, White people were more intelligent than Black people (Hernstein and Murray, 1994; Rushton, 1997). However, any such supposed differences, for example in IQ testing, have since been explained by socio-cultural inequalities rather than biological differences (Eyferth, 1959 in Jencks and Phillips, 1998). Thanks to the progress in DNA sequencing the theory of biological human "races" has been disproved. For example, intra-racial DNA differences can often be greater than inter-racial ones; at the same time genetic differences between people of different skin colour (i.e. different phenotype) are just as big as genetic differences between those people immune to malaria and those who are not (Mason, 2000; Ratcliffe, 1994; Zamudio et al., 2011). The term 'race' has also been closely linked, and often mistakenly used interchangeably with the term ethnicity.

Ethnicity, or ethnic group is defined as a group of people who share common ancestry, language, and cultural heritage that can be clustered together, e.g. Nordics, Slavs, Mediterraneans, East Africans, African Americans, British Black Caribbeans, British Black Africans, East Asians, Pacific Islanders. From both a genetic and cultural point of view these can be further broken down. For example, Slavs can be grouped as Polish, Czech, or Russian, which falls along national lines, but within Poland there is also a population of Kashubians; Mediterraneans can be Spanish, Portuguese or Italian, but within Spain there are also Catalonians. Thus, the notion of ethnicity is also problematic and not a straightforward solution to the issue of 'race' as a form of categorisation.

Currently it is understood that 'race' is a sociological concept (Gillborn, 2008). Hence why I adopt, following others, the use of vertical commas. As such 'race' can be created, recreated and retired as and when needed by a society (Delgado and Stefancic, 2001). For example, in 19th century England there was a distinction made between English and European "races" and as Kirk (1985) argues domestic racism in the UK concentrated on the Irish perceived as a 'race'. Recently, anti-Polish sentiments in the UK have risen, and in particular after the Brexit vote in 2016, leading to the racialisation of Poles, with criticisms concentrating on supposed stealing of British jobs and putting burden on schools, hospitals and council housing (Cole, 2012a).

Self-identification is another important theme in conceptualising 'race' and ethnicity (Housee, 2008). For example, Nicola Rollock and her colleagues (2015) found that British Black Caribbean participants in their research were more likely to find it meaningless to identify in racial terms (as Black), as it was too broad a category, but instead tended to identify through their ethnicity.

It is important to note, that although terms 'race' and ethnicity are highly problematic, nevertheless, they remain important categories of research, even if essentialising, as they reflect some of the lived experiences for people and their circumstances (Cole, 2011; Gunaratnam, 2003). For example, in the UK Black people are more likely to be in income poverty (Crown, 2018; Kenway and Palmer, 2007). Black Caribbean students are underrepresented in the higher tiers of mathematics and science GCSE examinations despite having similar

prior attainment as their White counterparts (Strand, 2011). BME job candidates have been found to have to send significantly more applications than similarly qualified and experienced White people to achieve the same number of job-interview invitations (Wood et al., 2009). BME students within STEM areas are less likely to progress to scientific careers and Black people are underrepresented in STEM industry roles (The Royal Society, 2014).

Thus, the terminology describing 'race', and the concept of 'race' itself from which that terminology derives, remain problematic, with no consensus on the use of a particular term and the discussions of nomenclature often acting as a distraction from discussing other issues (Okolosie et al., 2015). Therefore, in this thesis I use the terms POC, BME, GM, and minoritised interchangeably, without ascribing more positive or negative connotations to any one term in particular.

1.5. Higher education in England and 'race': an overview

In this section I present the existing nationwide data on the composition of the student body in higher education in the UK with a particular attention paid to students of colour and postgraduate education. Students of colour make up 23.9% of the undergraduate (UG) population, 22.0% of postgraduate taught (PGT) education and only 16.8% of postgraduate research (PGR) students (Advance HE, 2018c). At PGR level they are well represented (i.e. on par with UG) in such subject areas as architecture (23.4%), computer science (23.8%), engineering (22.9%), and medicine (26.6%), and under-represented in biological sciences (13.2%), physical sciences (11.4%) and veterinary sciences (7.5%) with similar trends also being displayed in PGT education (Advance HE, 2018c). However, Black students in particular seem to be heavily under-represented in PGR education as compared with UG, with only half as many (as a proportion of all PGR students) taking up research degrees as undergraduate degrees (ECU, 2015). This is significant as getting a doctorate is often a gateway to progression into academia.

There is a common discourse that students of colour are over-represented in higher education compared to the proportion of people of colour in the general population (Advance HE, 2018c; Singh, 2009). While this is true, this is an incomplete picture of the ethnic composition in HE which hinges on the assumption that BME students are one homogenous group, juxtaposed against White students. This masks a whole variety of issues of diversity and distribution. For example, the term "Asian students" incorporates Indian students who are very well represented as well as Bangladeshi students who are heavily underrepresented in HE. Secondly, BME students are concentrated in modern, teaching-intensive universities and under-represented in researchintensive institutions. Advance HE (2018c) data reveals that as many as 30.9% of BME and 14.8% of Black students go to universities affiliated in the Million+ mission group (typically modern institutions), while only 20.1% of BME and only 3.3% of Black students go to Russell Group universities (research intensive institutions). This is compared with 69.1% of White students in Million + and 79.9% in Russell Group institutions (Advance He, 2018c). Thirdly, it concentrates on the numerical representation rather than the outcomes of these students, with BME students being more likely to drop out and less likely to achieve a good class degree (Advance HE, 2018c).

1.6. What is Widening Participation?

Widening Participation (WP) is an umbrella term for initiatives to increase the number and the diversity of students in HE in the UK. It is important for this research to investigate its role in PG education as it has been one of the key policy areas for dealing with issues of access and participation of BME students in higher education for over two decades (Kettley, 2007; OfS, 2018a). The target audience of WP activities have been students referred to as 'non-traditional' or from 'underrepresented' backgrounds. This nomenclature is problematic as it can be interpreted as the 'traditional' students being somehow more entitled to access higher education, while at the same time portraying others as in need of help, playing to the deficit discourses (Milner, 2007). On the other hand, it can also be interpreted as a recognition that the HE institutions (HEI) and cultures have been set up to normalise and advantage certain groups of the population, i.e. White, heterosexual, Christian, cis-gender, able-bodied, young, middle/upper class men (Cabrera, 2014). And so, the 'non-traditional', or Widening Participation groups have been identified as coming

from lower socio-economic backgrounds, ethnic minorities, disabled students or those having specific learning difficulties, looked after children, mature students, women in STEM, and others. Concentrating on 'underrepresented' students can be seen as underpinned by considerations of a proportional representation of these groups in HE versus the general public, with WP only more recently focusing on the attainment and retention rates of these 'underrepresented' students, as compared to 'traditional' students.

Thus, Widening Participation concentrates on several key stages in the student life cycle: admissions, retention or continuation rates, degree outcomes, and progression to further study or employment. Since becoming a high-profile policy of the Labour government in 1997, WP has shifted the focus of its attention to these areas of work, creating three distinctive phases. The first phase concentrated on aspirations and attainment to allow increased access to higher education (1997-2010 Labour government) (DfES, 2003). This was followed by a shift of focus towards improved access to prestigious universities (Coalition government 2010-2015/16) (BIS, 2011). The current phase of WP policy emphasises improving the outcomes of WP students (2016 – present) (OfS, 2018a). I discuss these phases and their impact on BME students in more detail in chapter 2.

Despite WP efforts, BME students tend to have worse outcomes than White students. For example, while, as mentioned above, BME students are more likely to go to university, they are less likely than their White counterparts to be accepted to the most prestigious UK universities, even when controlling for prior attainment – such as types of qualifications (academic A-levels vs vocational BTECs), A-level subjects and scores (Boliver, 2013). They are less likely to achieve a good class undergraduate degree, even when controlling for other factors such as entry qualifications, subject studied or socio-economic background (Advance HE, 2018c; Broecke and Nicholls, 2007; HEFCE, 2015a, 2013a). They are also less likely to be in graduate employment, not only 6 but also 40 months after graduating (HEFCE, 2015b).

As a key policy for diversifying student body, widening participation forms a key interest of this thesis, driving the first research question about the role that it plays in improving BME access to and success in PG education.

1.7. Educational success

Reaching postgraduate level, particularly postgraduate research education – the highest on the educational ladder – can be seen as a form of success and particularly so for BME students who have to navigate an educational system which, as I will argue in this thesis, is often hostile to them. However, majority of research on the educational achievement of people of colour has been entrenched in deficit discourses (Eunyoung Kim and Hargrove, 2013; Yosso, 2002). As the thesis aims to identify the ways in which BME students navigate and achieve success in the PG field and therefore engage in the debate on educational success from a strength rather than deficit model approach, it is worth problematising in this section the conceptualisation of educational success.

The majority of literature, especially WP literature, understands educational success in terms of achievements – such as good participation and progression rates, completion rates and attainment (e.g. pass rates of GCSEs or degree classification). This is what Gurnam Singh (2018, 2009) calls objective success, which is juxtaposed against subjective success – which refers to the students' individual perceptions, such as sense of achievement or belonging.

While the subjective approach to educational success can arguably provide a richer understanding of student experiences, the distinction itself is somewhat binary as objective and subjective success will often, but not always, align. Objective success can be further problematised by questioning why is it assumed to be such, who determined it as the 'norm' and what does that mean for those who did not participate in the decision-making process. The objective educational success is by far the most prominent approach to conceptualising success, and is driven by national agencies and policies (HEFCE, 2015a; OfS, 2018b), while the subjective approach to educational success is the subject of investigations mostly for educational psychologists and

to a lesser extent sociologists of education (Rhamie and Hallam, 2002; Rollock et al., 2015). Therefore, the majority of literature concentrating on educational success investigates why the differences in attainment occur and how to minimise them (Sadeghi et al., 2013).

My initial assumption in this thesis was based within the objective paradigm, whereby I defined students who progressed to postgraduate, masters and doctorate education often within prestigious, research-intensive universities, which can be seen as the top of educational ladder, as having achieved educational success. However, through exploring the literature on BME experiences and the data from this research it became apparent that viewing success as merely progressing through to PG education would be too simplistic. Therefore, in the findings chapters 6 and 7 I report on students' experiences and the ways in which they navigate the White world (Rollock, 2011), which problematises educational success as often achieved in hostile conditions, impacting mental health and self-esteem.

1.8. Thesis outline

In the next chapter, 'Race', Postgraduate Education and Widening Participation, I review and critically assess the literature exploring experiences of BME students at postgraduate level. As this literature is very limited in England, I investigate the literature at earlier educational stages to look for possible impacts on students in PG education – such as their representation and experiences. I also review literature pertaining to Widening Participation – from access to UG study, to success and progression to PG study. I argue in this chapter that the literature has largely moved away from deficit discourses, however, that is not yet evident in the WP policy and practice itself.

The following chapter, At the Intersections – the Theoretical Framework, introduces the theoretical lenses used in this research. In its intersectional spirit the theoretical framework is employed to interrogate social structures impacting the experiences of BME students and is based on the Bourdieusian thinking tools (capitals, habitus, field) and Critical Race Theory (CRT). Following these frameworks racism can be understood not just as the abhorrent, direct and violent acts but as systemic and structural oppression, in which the reproduction

of (dis)advantage happens due to the dominant groups (White middle/upper class) having the privilege of implicitly dictating the rules of the (educational) field and masking them in the discourse of 'norm' (meritocracy) (Bourdieu and Passeron, 1990; Gillborn, 2008; Lynn et al., 2013; Yosso, 2005). Particularly useful here, I employ the concept of whiteness which recognises, validates and centres White cultures, bodies and knowledges at the expense of those of people of colour. Racism and whiteness understood that way concentrate not on one's intent to be malicious against people racialised as other but on the (unequal) outcomes perpetuated by social institutions and the society at large (Ellison and Langhout, 2016; Gillborn, 2012a). To interrogate how BME students navigate toward success in the PG field I use Yosso's (2005) framework of Community Cultural Wealth (CCW) capitals which builds on Bourdieusian thinking tools and CRT. CCW capitals include: familial, resistant, aspirational, navigational, social and linguistic capital (Yosso, 2005). In the chapter I argue that the value of this combined framework (intersectionality, Bourdieu, CRT, CCW) lies in its versatility of use for the analysis of lived experiences of different communities. I also refine certain capitals within the CCW framework, such as highlighting close links between linguistic capital and middle-classness and distinctive functions of the social capital. In particular, I develop what I call *perspective capital*, which supplements Yosso's framework. Perspective capital can be seen as a resource that allows people of colour to perceive of their positionality vis-a-vis structural oppressions and use that perspective to make contributions to the PG field which are not readily available to people from dominant groups, earning them legitimacy in the field. I further argue that perspective capital was one of the key building blocks of other capitals contributing to students' success and should be added to the CCW framework.

The methodology chapter outlines the approach and techniques used to generate and analyse the data. In this section I also describe the final data used in the research which includes semi-structured initial (n=15) and follow up (n=10) interviews with BME students in PG STEM courses, semi-structured interviews with university staff (n=18), student survey (n=246) and various policy and marketing documents. I argue that the way the CRT-informed methodology was used in this study addresses its common drawbacks of (1) the

lack of interdisciplinary approaches, (2) the disconnect between theory and analysis, and (3) the lack of diverse sources of data (Baber, 2016). The chapter provides a critique of the methods used, including the strengths and weaknesses and problematises 'race' research as done by a White researcher. While I cannot claim to be outside of the structures of whiteness and deny the impact that it has on data generation, I argue in the chapter that by self-disclosure of my identities during the interviews and the close mapping of the analysis onto the theoretical framework I attempted to mitigate against the reestablishment of White dominance in the research process.

The following three chapters are based on the analysis of the findings from the data, moving from national policy level analysis, to institutional level and finally to student level analysis. In Chapter 5, Whiteness of WP Policies, I analyse how the nationwide WP policy, practice and the discourses which drive them have been enacted at the researched universities. By focusing on analysing the intersection of 'race' and social class I argue that the lack of intersectional thinking in the conceptualisation of WP policy has had negative impacts on BME students. By highlighting the emphasis of WP activity at the undergraduate (UG) level and WP's student deficit approach, i.e. blaming the individual for the failure, instead of the system, I argue that WP, contrary to what it professes, can actually serve as a barrier rather than a facilitator of access to and participation in PG education for students of colour. I also argue that the way WP has been enacted could be interpreted as an example of protecting whiteness.

In chapter 6, Whiteness of the PG field – Racialised Experiences of BME Students in PG Education, I argue that PG education at the five research-intensive universities under investigation was steeped in whiteness. This, I argue, manifested itself through how the field has been constructed. For example, the salience of *de jure* meritocratic discourses in the face of *de facto* unfair and non-transparent admissions such as lowering admissions standards for international students could be seen as an example of interest convergence aimed at maintaining whiteness of the PG field. In that chapter I also argue that BME students in this research experienced othering stemming both from academics' discourses marking racial difference and from how the

organisational structures of the PG field relegated students of colour to a category of needing support. I further argue that this had negative impacts on their progression and mental wellbeing.

In the final chapter of findings, Navigating toward Success, I analyse how BME students in this research navigated and succeeded in the postgraduate field. I argue that their success was not always easily achieved and that it stemmed from their agency to operationalise a variety of interconnected capitals rather than the systemic support of the field. I also argue, by closely mapping the data analysis onto the theoretical framework, how the CCW framework could be enhanced by (1) paying closer attention to its interactions with social class, as in the example of linguistic capital, (2) by detailing three distinctive functions of social capital as role models, facilitators and sponsors; and by adding perspective capital to the CCW framework which often underpins other forms of capital.

And finally, in the concluding chapter, I summarise the key contributions to knowledge and theory as stemming from a first study of its kind in PG STEM field concentrating on BME students and enhancing the understanding of how BME students negotiate educational success. In this chapter I also provide recommendations for institutions to help support their students of colour, such as systematising students' access to the forms of social capital which can facilitate their success. I also provide recommendations for WP policy and practice such as the need for re-centring 'race' in WP policy conceptualisations. However, as I highlight, given the omnipresence of whiteness in HE, such solutions are neither easily identified nor applied and require the right motivation for implementation. This I argue can come from meaningful interest convergence.

1.9. Conclusions – highlighting the contributions

This chapter aimed to introduce the context for the research by providing an overview of the higher education sector, WP policy and the position of BME students within them. It also began to problematise the notions of 'race' and educational success. I explore all these in more detail throughout the thesis.

Thus, in this thesis I make significant contributions to theory and knowledge. By looking at an under-investigated area of research, using critical approaches informed by critical 'race' methodology, I shed light on the experiences of 'home' BME students in PG STEM courses in England, the role of institutions in shaping these experiences and the role of WP policy and practice in improving access to and progression through PG study. I argue that whiteness, understood as an oppressive societal structure privileging White people, influenced WP policy and PG fields within the researched universities, impacting lived experiences of BME students at these institutions. Through my close engagement with theory and data analysis I argue what an improved conceptualisation of agency of students of colour, as stemming from deploying their capitals, may look like. In particular, I argue for (1) the addition of, what I theorise as perspective capital to the CCW framework, (2) fine-tuning of linguistic capital by highlighting its links with middle-classness, and (3) the systematisation of social capital into three distinctive sources of support: role models, facilitators and sponsors. I also argue that the way that the theory, data collection and analysis worked in this thesis addresses common shortfalls of CRT scholarship in higher education as argued by Baber (2016): (1) the disconnect between CRT theoretical tenets and the actual analysis of findings not employing these tenets, (2) lack of interdisciplinarity, and (3) lack of diverse sources of data, in particular quantitative data.

2. 'RACE', POSTGRADUATE EDUCATION AND WIDENING PARTICIPATION.

2.1. Introduction

In this chapter I critically evaluate a range of literature pertaining to the research. I innovatively connect the literature on 'race', PG STEM education and WP, which are not often associated. I begin the chapter by arguing that the literature on BME students in PG STEM in England is virtually non-existent, which means that issues of 'race' and racism in PG education have been undertheorised. Thus, I argue that there is a need to investigate how and to what extent postgraduate education has been built on deeply ingrained racist assumptions and how that impacts students of colour. I then explore and critically evaluate literature from related fields, e.g. at undergraduate (UG) and pre-university levels, in order to help understand the possible influences on BME students in PG education. I argue that the academic literature has largely moved away from employing student deficit discourses, i.e. blaming the student or their demographic characteristics for educational failure, to exploring the influences of oppressive societal structures, such as racism, and how they influence educational institutions. Therefore, I argue, following other authors, that the existing literature on undergraduate and pre-university education in England deems the education system as racist (Bhopal, 2018; Gillborn, 2008; Warren, 2007). This will be investigated throughout the entire thesis by analysing the empirical research conducted for this doctorate. The following part of the chapter reviews literature pertaining to Widening Participation (WP) efforts. This is important as WP has been a key policy for diversifying the student body in England. I argue that since 1997 WP has had three distinctive phases, demarcated by different governments, however, the WP efforts have been largely ineffective. Furthermore, I argue that while WP literature concentrating on UG issues has been moving away from student deficit approaches the WP in PG literature is still under-theorised and often stuck on deficit discourses. As I argued in the introduction chapter reaching PG education – the top of educational ladder, particularly for Global Majority students can be seen as educational success. Thus, the final part of the chapter

deals with literature on educational success of BME students which I argue has been under-theorised at PG level.

2.2. BME students in PG education

At first glance, the literature concerning people of colour in education seems extensive. However, on further investigations, there remain under-researched areas, and as I argue in this section, the literature on 'home' BME students in postgraduate education is extremely limited and thus so is the understanding of the lived experiences of these students. Therefore, the aim of this section is to provide a critical review of the literature on BME students in PG education in England, while at the same time to outline what is known about their situation and experiences. I argue further that there are three main ways in which, i.e. to what extent, the literature has engaged with issues of 'race' in PG education, and that there is a need for research with an explicit focus on 'race' in order to provide a thorough understanding of lived experiences of BME students. However, it has to be remembered that this focus on 'race' does not negate intersectionality of experiences, for which I argue in the theoretical framework chapter.

Some research has looked at the experiences of PG students in general, using their 'race' only as one of the multiple characteristics (Advance HE, 2018b; HEA, 2017; Muijs and Bokhove, 2017). For example, Hopwood and Paulson (2012) found that "the perceptions and assumptions of others based upon their bodily appearance, were an important part of the daily negotiation of doctoral study." (p. 671). Hopwood and Paulson's research concentrated on the bodily experiences in which 'race' was just one of the aspects, along with gender, body size, or age. As their theoretical framework did not concentrate explicitly on 'race' but on the body, this may raise questions as to what extent the research understood 'race' beyond the physical/biological aspect. Another example in which 'race' was only one of the factors are the Postgraduate Taught and Postgraduate Research Experience Surveys (run by the Higher Education Academy, now Advance HE, since 2009 and 2007 respectively) which have been gaining popularity and increasing their reach among HEIs and thus helping understand the whole PG population. However, it was not until recently that they started providing analysis by ethnicity, despite collecting these data, indicating a slowly growing interest in this area. The findings from the surveys suggested that BME students, in both postgraduate taught (PGT) and postgraduate research (PGR) education seemed to have higher levels than White students of satisfaction overall and in areas like supervision, teaching or assessment (Advance HE, 2018b; HEA, 2017). However, the research methodology applied in them did not fully disaggregate home and overseas students of colour, therefore, these results remain tentative (Advance HE, 2018b). And while BME students in these reports may be more satisfied with teaching and research aspects of university, research such as this gives very little information about their experiences of inclusion and belonging. I, therefore, argue that the research which does not use theoretical lenses with explicit and in-depth focus on 'race', even if within intersectional frameworks, risks undertheorising and therefore under-analysing the impact of 'race' on lived experiences of students.

Other researchers, while concentrating explicitly on BME students, investigated PG experiences alongside UG. For example, Arday (2018) looked at the mental health of both UG and PG students of colour in the UK and found that instances of both direct and systemic racism were impacting their mental health and that they often lacked culturally appropriate support, which would recognise racism as one of the factors impacting mental health. Rhamie and Hallam (2002) investigated factors contributing to academic success of African-Caribbean people who have been successful in undergraduate and/or postgraduate education, arguing for the key impact of family, school and community, which fostered a sense of belonging. However, as the studies were aggregate in nature it is difficult to distil from them features pertaining exclusively to PG education. Nonetheless, they may be useful in shining some light on certain issues of BME students, suggesting that the issues observable at UG level may potentially continue onto PG education.

Very little research, with the exception which I discuss below, has concentrated explicitly both on BME students and exclusively on PG education. Arday (2017) interviewed 20 BME doctoral students and found that they had high levels of aspirations for an academic career, however, they often lacked the appropriate support, e.g. mentors they could rely on. Students further reported micro-

aggressions, i.e. repeated subtle ways of othering (Kohli and Solórzano, 2012; Matias, 2012; Sue et al., 2008) and a general sense of isolation and exclusion, as often they were the only person of colour in their faculty. Respondents also feared being typecast, through their research, as only specialising in 'race' (Arday, 2017). Perhaps an exception to the paucity of literature on 'home' BME students in PG education is in the area of Initial Teacher Training (ITT). Here, the research has looked into motivations of BME learners for taking on ITT courses, arguing a strong influence of family and cultural expectations to find a respectable job (Butt et al., 2010; Thompson and Tomlin, 2013). BME studentteachers also reported being aware of structural barriers to applying (such as perceived lack of role models and non-inclusive curricula), financial burdens (linked to BME students being older and having familial responsibilities) and experiences of overt racism (Basit et al., 2007; Carrington et al., 2001; Hoodless, 2007; Thompson and Tomlin, 2013). Research also pointed to the underperformance of BME students in PG teacher training and lower completion rates, often linked to experiences of racism (Basit et al., 2007; Hoodless, 2007). BME student-teachers were found feeling being othered and experiencing racism from both pupils and other teachers (Bhopal and Rhamie, 2014). BME student-teachers were also found to fear that their contributions to school and teaching may be tokenised and only seen through the prism of 'race' (Wilkins and Lall, 2011). On the other hand, building strong relationships with tutors and supervisors has been shown to contribute to positive experiences of BME trainee teacher students (Butt et al., 2010).

The above research begins to highlight commonalities in experiences of BME students as marked by 'race'. However, it is very limited and patchy at PG level. Therefore, to help better understand BME students in PG education I turn to literature on BME students in pre-PG education – such as UG and school education, to look for themes and debates impacting their experiences.

2.3. Experiences of BME students at earlier educational stages

In this section I call upon richer literature concerning BME students at pre-PG educational stages to identify the issues that they encounter, which I argue are

tinted by racism and may play a part in their PG experiences. This in turn will help to form the basis for the investigations in this thesis.

Much of the literature concentrates on attainment. While governmental statistical reports on primary and secondary attainment only showed the differentials in achievement by ethnicity, with Black students under- and Indian students out-performing compared to White students (DfE, 2018), peer reviewed literature sought to understand why these differences were occurring, pointing towards the systemic faults within the educational system (Gillborn, 2012a, 2008). These investigations demonstrated that BME pupils were underentered into top tiers of GCSE (exams taken at 16) in maths and science compared to similarly qualified White pupils arguing for the impact of institutional racism, i.e. the institutional culture, processes and practices which disadvantage students of colour (Strand, 2007). They also argued that the educational policy favoured types of assessments known to disadvantage BME pupils, such as subjective teacher assessments (Burgess and Greaves, 2013; Gillborn, 2008). These are important as good results at GCSE can often be a gateway to university and later on postgraduate education.

Other research looked into rates of exclusions from education – short term or permanent. Here, similarly to investigations of attainment differentials, the government reports only demonstrated the statistics – with figures indicating that Black Caribbean pupils were three times more likely to be permanently excluded in 2015/16 when compared to the rest of the student population (DfE, 2017). Wider literature, however, argued that the reasons for this overrepresentation in exclusions was due to institutional racism as enacted by conscious and unconscious biases of teachers and their perceptions of Black Caribbean boys as supposedly disruptive and challenging authority (Strand, 2011; Youdell, 2003). More recently, exclusions have been linked with schools' pressures to perform well in league tables, suggesting that students perceived as weaker, which due to institutional racism often includes BME students, were being forced out of education to improve GCSE results, which in turn are used to create school rankings (Ashdown, 2017; Mansell et al., 2016).

Perhaps unsurprisingly, qualitative data further reinforces the notion that many BME students have more negative experiences of schooling. Research drawing on the voices of BME students and their parents reported them experiencing direct and indirect racism, such as bullying and lower expectations, which in extreme cases resulted in them being put in special needs groups (Rhamie, 2012; Rollock et al., 2015), thus limiting their educational development/progression.

Other research looked at issues of identity – such as BME pupils having to negotiate their identities against the assumptions of being poor and/or working class, and struggling with identity in academically good but mainly White establishments (Ball et al., 2013), as well as being simultaneously invisible (due to teachers lacking knowledge of how to properly recognise and engage with BME pupils) and visible (seen as markedly different and singled out and having their identities defined by stereotypes) (Rollock et al., 2011).

At undergraduate level research also looked at the at the differential results for BME students as well as at the role of institutional racism in these outcomes and argued that it was at the centre of the foundations of higher education institutions. Higher education has been argued to be created to serve a narrowly defined category of student, assumed to be White, male, economically secure, able-bodied, middle-class, fully informed and a rational decision maker who is flexible, resilient, and autonomous (Bancroft, 2013; Bhopal, 2018; Cabrera, 2014; Chadderton, 2018). Therefore, researchers looked at the clashes between students' cultures and those of institutions, which foreground whiteness, for example, the centrality of alcohol in social life of the university, which often side-lines Muslim students (Pilkington, 2013), the secular and individualistic character of the institutions juxtaposed against often more religious and community focused cultures of BME students (Bhatti, 2011) or the lack of recognition of BME figures within the curriculum (Jessop and Williams, 2009).

The above examples indicate how educational policies, practices, attitudes and expectations can result in differential progress and experiences for students along racial lines. Researchers, therefore, argued that education in the UK can

be seen as racist as, regardless of the intentionality of its policies and practices, it continues to (re)create unequal and more negative outcomes for BME students (Gillborn, 2008; Warren, 2007). Although students from different ethnic groups tend to have different outcomes, which I discuss further on in the chapter, the different and often more negative outcomes and experiences for BME students throughout the entire education system have a potential impact on their access to and success in PG education.

2.4. BME students and STEM education

As the above section looked at BME students at different educational stages, I now turn to examine the literature on their experiences in the particular area of STEM education. I argue in this section that the current literature on BME students in STEM education in the UK is very limited and there is a need to build a stronger evidence base to inform policy and practice, particularly at PG level. From the literature it can be deduced that the relationship between people of colour and science has been complicated by racism, which, as I argue below, manifested itself through the othering of their bodies and lack of recognition of intellectual contributions.

Firstly, for a long time contributions of BME people to science have been disregarded, such as, for example, the Australian First Nations' or South American indigenous tribes' contributions to astronomy (Green and Green, 2010; Johnson, 2014) referring to them as savages instead. Traditionally, scientific epistemology assumed objectivity of theories and data, which allowed researchers to claim "truths" about the researched populations. However, this has been challenged by feminist and anti-racist researchers as merely a set of practices produced in, and therefore biased by a predominantly White and male environment, thus, beginning to allow more recognition for contributions of women and people of colour within science (Green, 2009; Harrell, 2015).

Secondly, science, or pseudo-science rather, of eugenics, has also been used to establish false biological differences between the bodies of people of colour and White people and to position the former as supposedly sub-human species. Eugenics was a strong trend in science in 19th and early 20th centuries (Chitty,

2001, Saini, 2019), which was used to justify such atrocities as slavery or the Nazi holocaust. Often, when people of colour were present in sciences, it was actually their bodies that were experimented on, with infamous examples of anaesthesia-free gynaecological experiments on enslaved Black women (Ojanuga, 1993) or infecting African Americans and indigenous Americans with syphilis without administering treatment to test the disease's long-term effects (Hodge, 2012). As a result, even until today, people of colour have to struggle with their bodies being othered and often relegated to areas other than STEM – such as sports or dancing for Black men or hyper-sexualisation of Asian women (Donnor, 2005; Park, 2009).

Literature overseas, particularly from the US and South Africa has looked at a number of issues relating to POC in STEM, such as numeral representation in STEM education and workforce (Concannon and Barrow, 2009; Gayles and Ampaw, 2011; Hurtado et al., 2009), self-confidence (Beasley and Fischer, 2012; Johnson, 2012; Kachchaf et al., 2015; O'Brien et al., 2015), issues explicitly connected to racism such as stress related to being a minority in a predominantly White environment (Clark et al., 2012; Malone and Barabino, 2009), challenging racial stereotypes (Snyder, 2014) or adjusting to forms of being (dress, language, behaviours) seen as more White and therefore more acceptable (Carlone and Johnson, 2007; Ong, 2005). Thus, the international literature engaged with the processes of othering. While it may be more extensive than UK scholarship (as I will argue below), it seems to concentrate on the individuals dealing with their otherness rather than intuitions othering the individuals. Therefore, in this research I will not only investigate the impacts of othering on individuals but also how institutions enact this othering.

However, literature examining 'race' in STEM and STEM education (university and pre-university level) in England is very limited and has not yet explored the multitude of issues that overseas literature has dealt with. Moreover, it seems to have had little impact on STEM education policy and practice, as the participation in subjects with traditional BME underrepresentation has remained very low throughout the years (Gartland, 2014; Gorard and See, 2009). It has mostly concentrated on issues of pipeline, i.e. supply of students who study STEM and, what is closely linked to it, factors influencing subject choice and the

make-up of STEM student populations. Effects of student characteristics on participation and success have been measured, noting differences among minority ethnic groups, with the already mentioned research demonstrating that Black Caribbean students were underrepresented in higher tiers of KS3/GCSE science and maths exams, even when controlling for prior attainment (Strand, 2007). There is also evidence that gender and socio-economic status play a role in the take up of science by BME students at school, alongside 'race', with the perceptions of science being a White middle-class male domain (Archer et al., 2015a; Gorard and See, 2009). Choice of STEM route has therefore been linked to (1) the creation of one's identity as a scientist and, linked to it, personal agency situated within a plethora of wider factors (society, schools, national policies) (Reiss et al., 2011), and (2) the knowledge of career paths, or rather, the limitation of this knowledge, which concentrated mostly on medicinerelated careers (Archer et al., 2015a; Greenwood and Bithell, 2005). Despite this, studies have found that BME students were highly motivated to study a STEM subject at both pre-university and university levels (Archer et al., 2015a; CaSE, 2014). However, the above research used psychological and psychosocial approaches concentrating on individual motivations and barriers which failed to recognise the importance of structural oppressions.

Even less is known about STEM and 'race' at PG level. Overall, the proportion of BME students in PG STEM education is lower than that at UG level, especially at postgraduate research (PGR) level where BME students make up only 17.9% of the population compared with 24.9% at UG level (Advance HE, 2018c). D'Aguiar & Harrison (2015) examined who returns to education (PG STEM) after entering the workforce and found that women and BME graduates were more likely to return to PG education, which the authors linked to lower employment rates or underemployment of returners. However, they noted that overall STEM graduates had lower rates of returning to PG education than the rest of graduates.

Even despite the paucity in UK literature, there seem to be similarities between the overseas and the UK literature in terms of the investigations of the issues faced by BME students in STEM. However, more research is required in the UK which critiques social institutions rather than individual approaches, particularly at PG level. One of the main ways by which universities operationalise their efforts to broaden education to include BME students is Widening Participation policy and practice, which I discuss next.

2.5. Widening participation overview

This section critically reviews the literature on WP policy, practices and discourses. As I highlighted in the introduction chapter the concept of Widening Participation (WP) is important to this study as it has been one of the key drivers for expanding higher education to people of colour (Kettley, 2007). Widening participation can be characterised as a range of activities and policies designed not only to increase the number of students in higher education (HE), but in particular the proportion of students from the so-called 'underrepresented' or 'non-traditional' backgrounds. Alongside the institutional and governmental policies – which have had different iterations over the years – there exists also a rich body of literature/knowledge about issues of access and success of diverse students in higher education (HE), which also often includes a critique of the said policies. Therefore, this section provides an overview and critique of key debates in WP scholarship. Firstly, I outline three distinctive phases of WP policy and its effectiveness since 1997. I then concentrate on issues of access to higher education, retention and successful completion, arguing that the literature has moved away from student deficit discourses to structural approaches, before moving onto the literature on WP in PG education, which has been limited thus far.

In the UK 'underrepresented' or 'non-traditional' backgrounds usually include students from low-income households, with no family experience of higher education, certain ethnic minorities, looked after children, disabled students or students with learning difficulties (like dyslexia or Asperger's syndrome). This can also include redressing gender imbalances in particular fields, e.g. women in physics or men in primary teacher training. Efforts to widen access to education are not new, with most authors pointing to the origins of WP in the post-World War 2 times of growth and expansion (Brown et al., 1997; Kettley, 2007). However, some higher education institutions (HEIs) claim their roots in the ethos of WP (even before it was called that) to much earlier. Nevertheless,

WP gained significant traction when it became one of the high profile policies of the Labour government, in power 1997-2010 (DfES, 2003).

WP has been linked with the processes of marketisation in HE, i.e. the injection of neoliberal market mechanisms into the sector (McCaig, 2011; Naidoo et al., 2011). By introducing a diversity of students and institutions as well as finance arrangements successive governments have been argued to be driving market differentiation (McCaig, 2011). Subsequently, the market mechanisms have been argued to create winners and losers and to relegate WP students to the less prestigious (lower status) universities, giving them worse outcomes in terms of employment and social mobility (Archer, 2007). Therefore, the following two sections review WP policy to outline its three distinctive phases in order to identify its drawbacks and assess its effectiveness. The sections that follow build on this by reviewing in depth the debates within the WP literature.

2.5.1. Three phases of WP policy

In this section I analyse the differences between Widening Participation (WP) policies since 1997 until the present day, these three phases, driven by successive governments, are referred to as (1) Widening Participation (1997-2010) (DfES, 2003), (2) Widening Access (2010-2016) (BIS, 2011) and (3) Access and Participation (2016 – present) (OfS, 2018a).

The first phase, under the Labour government (1997-2010), was heavily skewed toward improving the access of underrepresented and/or disadvantaged groups to universities (Burke, 2012). The flagship policy of the government then was reaching a target of 50% of young people being in HE by 2010 (DfE 2003). While this was a target to increase the numbers of students in general not just WP students, expanding the numbers of the latter group was seen as beneficial to achieving that goal (DfE, 2003). The government's main tool for achieving this was the establishment of Aimhigher partnerships which aimed to raise attainment and aspirations among disadvantaged pupils. However, the literature has pointed out that the focus on raising attainment and aspirations was entrenched in a neo-liberal philosophy of individual responsibility and in a student deficit model (Minter, 2001; Reay and Crozier, 2010). Therefore, on the one hand students were seen as having low

aspirations if they did not wish to go to university, and on the other hand they were positioned as requiring help to be moulded into the existing structures and cultures of HE (Reay et al., 2001), and it was supposedly the student's fault if they failed.

With the Conservatives in government since 2010 (in coalition with Lib Dem until 2015) came a change in the direction of WP policy. The 2011 white paper 'Students at the heart of the system' (BIS, 2011) sanctioned an increased focus on access to particular types of universities, seen as prestigious (i.e. research intensive) and therefore, supposedly offering better, i.e. more transformative outcomes for diverse students, which can be interpreted as the attempts to reinforce the hierarchy within the HE sector (Colley et al., 2014). This phase also saw the tripling of student fees. Universities wanting to charge higher fees had to produce Access Agreements in which they would outline how they were going to spend up to 30% of their additional fee income on students' access, retention/completion and progression to further study or employment. In that way, and unlike the first phase, the second phase aimed to take a 'whole student life-cycle' approach (HEFCE, 2012a). In 2014-15 the total access agreement expenditure reached £725 million, out of which £543 million was spent on direct financial support for students (OFFA, 2016). This indicates that the majority of WP expenditure was directed toward issues of socio-economic class, due to the neo-liberal assumptions of finance being the main barrier to participation (Usher et al., 2010).

The 2016 white paper 'Success as a Knowledge Economy' (BIS, 2016) followed by the Higher Education and Research Act (2017) brought about another change in the direction of WP policy. A newly formed HE regulator, the Office for Students (OfS), now requires universities wanting to charge higher fees to submit Access and Participation Plans (APP), which replace Access Agreements. The OfS website and the guidance for the 2019-20 and 2020-21 APPs (OfS, 2019, 2018a) puts an emphasis on closing the gaps in student outcomes, particularly retention and attainment gaps for BME and disabled students. However, as I argue in Chapter 5 the actual enactment lags behind and is still perpetuating older WP mistakes.

In summary, WP policy concentrated on aspirations, attainment and finance (mainly phase one), issues of access and admissions (mainly phase one and two) and student outcomes (mainly phase two and three) – which are discussed in detail in the following sections. However, before exploring these debates in more detail, in the section that follows I investigate the effectiveness of the WP policies.

2.5.2. Effectiveness of WP policies

Establishing causality between WP outreach activities and a greater uptake of university places by non-traditional groups is difficult, especially in the light of the general lack of long-term evaluations of impact of WP activities (Hammond et al., 2015). However, looking at the statistical trends in the whole sector can shed light on how effective or ineffective WP policies and practices have been in general in implementing positive changes for non-traditional students, especially from BME backgrounds. Therefore, by presenting the statistical data below, I argue that WP policies and practices have had little to no effect, particularly for BME students.

According to Higher Education Statistical Agency (HESA) the proportion of students from lower socio-economic backgrounds (NS-SEC 4-7) has increased from 28% in 2002-03 to 35% in 2017-18; on the other hand, the proportion of students from low participation areas has not changed much between 1998-99 and 2017-18 and remains at around 11-12% (HESA, 2019, 2016). Combining multiple characteristics (gender, ethnicity, participation neighbourhood, type of secondary school and Free School Meal status) the Universities and Colleges Admissions Service (UCAS) indicates that although participation over a ten year period (2006-2016) has increased faster for the least advantaged students from 7.8% to 13.6% (+5.8 percentage points and an increase of 74%), the entry rate of the most advantaged students increased at a similar level from 47% to 52.1% (+5.1 percentage point) and were significantly higher (UCAS, 2016), with the gap not changing between 2014 and 2018 (UCAS, 2019). These statistics are even worse for high tariff (higher status) universities where only 2.3% of the most disadvantaged students were accepted in 2016 - up by 0.8 percentage point since 2006, compared with 24.5% of the most advantaged, up by 1.1 percentage point since 2006 (UCAS, 2016). That means that despite the WP

efforts the gap between the proportion of the most and least advantaged students at the most prestigious universities has actually increased, maintaining if not increasing their elitism (Colley et al., 2014).

Looking at the participation rates of BME students, Black students turned from the least to the most likely ethnic group to go to university over a ten years period up to 2016 (UCAS, 2016) and second most likely after Chinese learners in 2018 (UCAS, 2019). While BME students had the most significant increase in participation rates out of all the WP students (UCAS, 2016), this cannot be seen as a straightforward success story. This is because analysing where BME learners study and what their outcomes are reveals several issues. Breaking down access rates of BME students by types of universities, White students had higher rates of access to high tariff institutions than BME students, with Black students having the lowest rate of entry to these universities, at just 7% in 2018 (UCAS, 2019). This suggests that the majority of progress in access of BME students to universities has been within the modern universities, which are seen as less prestigious and on average provide inferior employment outcomes when compared with research-intensive institutions (Advance HE, 2018c; Bhattacharyya et al., 2003; Kettley, 2007; Tatlow, 2015). Furthermore, looking at the whole student life-cycle (i.e. beyond just admissions), by socio-economic status and ethnicity indicates significant disparities. For example, there is a 13.6 percentage point attainment gap in the rate of receiving good degrees between BME and equally qualified White students (Advance HE, 2018c). BME graduates also have worse employment rates and salaries not only 6 but also 40 months after obtaining their degrees (HEFCE, 2015b).

Therefore, while the statistics for the rates of participation for BME students increased significantly over time, they were not so positive for high tariff university entries and remained consistently negative in terms of their comparative outcomes. This, I argue, suggests that WP policies and practices have had very little *meaningful* impact on BME students. In the following sections, I review the WP literature which highlights the main discourses and focus areas within WP.

2.5.3. Discourses of financial, aspirational and attainment barriers to HE participation

In this section I highlight the shifts in debates around access to higher education. Initially policy and literature pointed to financial needs, attainment and aspirations (Moore and Dunworth, 2011) as the main facets of WP work and barriers to HE participation. Thus, research on the costs of university acting as a barrier proposed one of the explanations for the different participation rates between students from lower and higher socio-economic backgrounds (Connor, 2001; Greenhalgh et al., 2004).

However, with time it became apparent for most researchers that finance did not feature as a major concern inhibiting progression to HE, and at most it was a factor in where, not if, students chose to study (Davies et al., 2008; Mangan et al., 2010; Usher et al., 2010). Therefore, another body of research looked at low aspirations, arguing that this was among the strongest predictors of progression to HE (Chowdry et al., 2009; DCSF, 2010). This was accompanied by defining aspiration in a very narrow way which equated high aspirations with going to university, as opposed to seeking other routes to well-paid and satisfying employment. The above approaches may be criticised for their insistence on individual deficits rather than the institutional/structural reasons as to why students may be losing their aspirations.

However, the latest understanding of issues of access to HE, which informs the current government policy for Access and Participation (OfS, 2018a) has shifted away from focus on aspirations and instead concentrated on prior attainment. This has been linked to research which argues that GCSEs (exams taken at 16) were the best predictor of access to HE (Crawford, 2014). This is based on the fact that the demographics of pre-GCSE pupil population are different than those of post-GCSE and in particular taking A-levels, which in turn closely resemble the demographics of HE students (Crawford, 2014), i.e. it is the attainment at GCSE level which statistically explains most of the data on who goes to HE and who does not. However, the research itself does little to identify why the different attainment occurs at GCSE level and how to address the differentials.

The WP literature identified two main approaches to how the differences in attainment may be closed (Moore et al., 2013; Stevens, 2007): (1) supporting the student to level up with better performing students while largely maintaining the educational field unchanged/unchallenged (student deficit model) or (2) supporting the institution to transform in order to provide better results for a wider range of students (structural approach). Looking at the first approach, it can be noted that the literature on pre-university attainment differentials concentrated on explanations in terms of students' characteristics, e.g. gender, 'race'/ethnicity and social class, rather than external systemic faults, such as sexism or racism (Gillborn, 2012a; Gorard and See, 2009; O'Brien et al., 2015). These understandings of barriers to WP have been both misplaced and heavily located within the deficit discourses, i.e. situating students as the problem, deeming them unprepared for higher education and therefore blaming them for their failure (McKay and Devlin, 2016).

The second approach, which currently dominates the WP literature takes the focus away from the deficit model and looks more at the way institutions have been set up to (dis)advantage certain groups over others. For example, social class and classism have been theorised as having an influence on access to university, in particular how institutional habitus (Reay et al., 2001) of schools and universities have not been recognising the cultural capitals of students from lower socio-economic backgrounds (Bourdieu, 1997; Mills, 2008). In fact, the majority of research explicitly linked to WP concentrated on (the impact of) class (Doyle and Griffin, 2012; Gorard et al., 2006; Moore et al., 2013; Robinson and Walker, 2013) rather than 'race', with the latter being mostly side-lined to areas of literature more explicitly linked to 'race' and racism in education (Stevens, 2007).

With the wealth of research in the area it became apparent that single cause explanations could not give a full account of the barriers to education, therefore there was a need for a multi-faceted approach. Researchers looked at, for example, intersections of different demographics (Smart and Rahman, 2008; Strand, 2011, 2010) or a combination of internal (e.g. school efficiency) and external (e.g. economy, labour market) factors impacting participation (Adnett and Slack, 2007; Moore, 2004). Fuller and Paton (2007), for example, proposed

a participation model linking situational (e.g. distance to school, neighbourhood, ability to pay fees), institutional (e.g. timetabling, admissions, policies) and dispositional (i.e. student attitudes, psychology) factors, thus emphasising the interconnectivity between the institution and the individual. Similarly, in this thesis an interaction between the student and the institutional factors will be explored, looking at students' capitals used to navigate the HE field and institutional policies and practices creating barriers and opportunities for the students.

2.5.4. Admissions to undergraduate study

Admissions has been another important focus of WP literature. Therefore, in this section I draw attention to different ways researchers looked into explaining differences in admissions to undergraduate study.

Here, the WP literature concentrated on access to UG study and the fairness and transparency of admissions policies (Warikoo and Fuhr, 2014; Zimdars, 2010). Some researchers looked at HE as a whole, and taking prior attainment as a point of reference, argued that on the whole there was little sign of inequalities in admissions - be it based on gender, ethnicity or social class (Broecke and Hamed, 2008; Gorard, 2008; Noble and Davies, 2009). However, these investigations were limited, as at most they exposed the inequalities embedded at earlier educational stages, with, for example, students from private schools being more likely to achieve higher qualifications and thus also more likely to enter top universities (Zimdars, 2010), or conversely, BME students being more likely to take non-standard level 3 qualifications (e.g. BTECs or A-levels outside of the so called "facilitating subjects" group) which meant that admissions for them was usually limited to a certain group of universities (Bhattacharyya et al., 2003; Russell Group, 2011, Advance HE, 2018), seen as less prestigious. On a more granular level researchers found that, even when accounting for the students' qualifications, BME applicants were less likely to be accepted to the Russell Group of research intensive universities, seen as more prestigious institutions (Boliver, 2013). That is despite the fact that BME students are proportionately over-represented in HE compared to the general population and, contrary to a common belief, which often views them as non-aspirational, have higher personal and familial

aspirations for HE participation than their White counterparts (Archer et al., 2015a; McCulloch, 2014). However, the above issues of the fairness and transparency of admissions have not been dealt with much at PG level.

2.5.5. Retention and success at undergraduate study

Another area of interest for WP is retention (or conversely attrition) and success (i.e. completion with a good class degree). In this section I argue that the literature investigation into retention and success of BME students has moved away from student deficit models and started paying more attention to institutional factors creating disadvantage.

The increased focus on the issues faced by WP students while at university has been especially strong in recent years with the concentration of the policy making bodies (like HEFCE and OFFA until recently, now taken over by the Office for Students) driving the agenda (BIS, 2014; OfS, 2018b). While investigating retention, researchers looked at such factors as institutional habitus and the idea of fitting in (Bhatti, 2011; Callender and Jackson, 2008; Chowdry et al., 2009; Furlong, 2005; Reay et al., 2001; Reay and Crozier, 2010), the influence of curriculum, which reflects the diversity of the student body (Holgate, 2015; Jessop and Williams, 2009; Smith, 2002), students' expectations and pre-course information, advice and guidance meeting the reality (Bennett and Kane, 2010; Quinn et al., 2005; Roberts, 2011; Schofield and Dismore, 2010; Thomas, 2011) and student finance (Harrison and Baxter, 2007; Hatt et al., 2005; OFFA, 2015). A major influence on retention efforts has been a report "What works?" (Thomas, 2012) which, based on an extensive literature review and case studies from seven projects across the country, concluded that developing a student's sense of belonging with the institution was the best way to improve retention.

Retention has been investigated in general for a long time with models ranging from emphasis on the student to emphasis on institutional factors (Bean and Metzner, 1985; Tinto, 1975). However, relatively little attention has been paid to explaining BME retention in particular. It is well known that BME students, and in particular Black students, have had higher attrition rates than their White counterparts. From 1996/97 all the way until the latest figures of 2018 Black

students have consistently had the lowest retention rates (Advance HE, 2018c; ECU, 2017; HEFCE, 2010), with the worst drop-out rates being in London (SMF, 2017). However, there is a need for further investigations into the reasons behind the higher attrition rates among BME students, as this may lead to lower rates of them progressing to postgraduate education, where in turn retention issues may be replicated. However, data on retention in PG education is not currently widely available. For example, while HEFCE produced reports on the state of PG education (see: HEFCE, 2012b, 2013c) including rates of retention and completion, these neither broke down the data by ethnicity nor were regular, annual reports.

From the limited research it is known that there is a statistically significant positive correlation between the proportion of Black students at an institution and their drop-out rate (SMF, 2017), i.e. the more Black students at an institution, the more likely they are to drop out, which could partly account for the higher London BME drop out effect, with the region having the highest proportion of Black learners (16%). While this research does not presuppose causality between a number of Black students and their retention rates, I argue that it may problematise the assumptions of building the feeling of belonging as an answer to retention issues, which were argued for in the "What works?" (Thomas, 2012) report. The relatively limited literature on the specific BME retention gap has argued that a complex matrix of factors can be responsible for the attrition, including but not limited to: non-inclusive curricula, lack of rapport with academic staff, lack of friendships with students of similar ethnicities, student satisfaction or living off campus and other financial factors (SMF, 2017; Stevenson, 2012). However, a quick analysis of these can exclude some of the above factors. For example, a HEFCE (2013b) report looked at retention differentials adjusted for age, subject and entry qualifications and found that these could not explain the gap among different ethnic groups. There is also a big difference between satisfaction levels (as measured by the National Student Survey) of Black or Black British African students versus Black or Black British Caribbean students, with the latter being significantly less satisfied with their course (HEFCE, 2018) but hardly any difference in the attrition rates between the two groups (ECU, 2017). Ability (or lack thereof) to form friendships with people who "look like me" also does not easily explain

increased attrition, as higher rates of BME students drop out in more diverse universities where these student would have higher chances of meeting other students from similar backgrounds (SMF, 2017). Additionally, finance has been shown to be a weak predictor of attrition, particularly in London (Nursaw Associates, 2015; SMF, 2017), suggesting that issues of retention are complex and demand further investigations.

As stated earlier, successful completion is commonly understood as achieving a good class of degree, i.e. first or 2.1. degree classification. The debates here have concentrated on the so-called racialised degree awarding gap, which, arguably, has become the most visible and researched topic concerning the intersections of 'race' and WP scholarship. The racialised degree awarding gap can be understood as the difference between rates/likelihood of attaining a good degree along ethnicty lines. Currently this gap stands at around 14 percentage points between White and BME students in UG education in favour of the former (Advance HE, 2018c).

Again, the explanations for this phenomenon have approached the issue from two standpoints. On the one hand, reasons entrenched in the deficit models pointed to the differences between White and BME students based on the type of qualifications (e.g. A-levels vs BTECs), subjects studied, attendance and time spent outside of classroom, including on paid work, or socio-economic background (Connor et al., 2004; Lipsedge et al., 2015; NUS, 2011; Stevenson, 2012; Stuart et al., 2011). However, research showed that when accounting for the entry qualifications, choice of subject, social class, and attainment, (among others), this could not entirely close (or explain) the gap (Broecke and Hamed, 2008; HEFCE, 2015a; Ling, 2015), suggesting there were other factors at play with researchers pointing to institutional racism affecting BME students (McDuff et al., 2018; Pilkington, 2013). This is to say that the way HEIs operate disadvantages BME students. In particular, researchers looked at the influence of the lack of inclusive cultures on campus (Singh, 2009; Stevenson, 2012), non-inclusive curricula and pedagogy (Au, 2008; Haigh, 2002; Holgate, 2015; Jessop and Williams, 2009; Smeding et al., 2013; Smith, 2002), creating false expectations of diversity and recognition (Stevenson, 2012), and the negative role of stereotype threat, understood as students' anxiety and

underperformance caused by educators' perceived or actual expectations of the students' inferiority, stemming from negative societal stereotypes (Beasley and Fischer, 2012; Berry and Loke, 2011; Cousin and Cuerton, 2012; Leathwood et al., 2011; Youdell, 2003), Therefore, researchers suggested a holistic, institutional-culture change approach which concentrated on fixing the institution rather than the student in order to close the 'stubborn' attainment gap (McDuff et al., 2018).

2.5.6. Widening participation in postgraduate education

In this section I highlight the significant paucity in WP literature exploring the issues of access to and success in postgraduate education (O'Donnell et al., 2009). I also argue that this limited WP in PG literature, being in its initial stages, resembles WP in UG literature as it was in its initial stages, by, for example, often being entrenched in the student deficit approach or ignoring BME students.

The majority of the WP policy efforts have concentrated on undergraduate study, with very little focus on PG. There was an (erroneous) assumption that UG education was a transformative experience, sufficient to level out the playing field in access to graduate careers and PG education (Harvey and Andrewartha, 2013). To date WP in PG policy efforts have been mostly limited to introducing a loan scheme for PG students (HM Treasury, 2015, 2014), thus recognising that certain students might have been facing barriers to PG education in economic terms. This bears resemblance to the initial approaches to WP in UG, concentrating on finance, which, as I argued in the sections above, were too narrow to produce a step change in experiences of WP students.

While some research on transition to PG study has argued that it is not an easy process for students (West, 2012), riddled with students' feelings of insecurity about their abilities and academics' assumptions about students' expertise (Tobbell and O'Donnell, 2013), this research paid very little attention to how these issues played out for BME students. Research has also argued that transition required additional support (Evans et al., 2018; Tobbell and O'Donnell, 2013; West, 2012) and that interventions such as additional

sessions explaining assessment processes and standards could smooth the transition process (Spearing, 2014). While this research can identify pedagogical changes, which can help diverse students, they seem to be entrenched in a student deficit approach which proposes additional measures to help cope with the current system rather than embedding good practice in the make-up of the PG field, and therefore changing it.

Other literature on WP in PG tended to focus on the statistical composition of diverse students in PG education, where BME students were either of primary interest (Wakeling, 2009) or just one of many groups (Advance HE, 2018c). However, beyond the statistical picture of BME students in PG education, as presented in the introduction chapter, statistical information as compared to UG, is limited. For example, no nationwide data is readily available on the completion and degree classification for PG students, the way it is for UG students. In other cases, even when data is collected it often is not broken down/presented by ethnicity (Leman, 2015; Morgan and Direito, 2016; Turner, 2015).

WP in PG literature still seems to grapple with issues which have been widely discussed at UG level – such as who the WP student is. At UG level, determining target audience for WP purposes has adopted and/or created widely accepted measures, such as neighbourhood participation (POLAR), socio-economic classification (NS-SEC) or disability (DSA) measures. These statistics have served as tools for determining funding by HEFCE/OFFA/OfS but have also been used by universities to determine which learners to label as students from WP backgrounds (or WP students) and provide special assistance to (e.g. bursaries). Such statistics and labels are arguably meaningless in PG education due to increased heterogeneity of students at that level (Jancey and Burns, 2013; O'Donnell et al., 2009).

Other debates from WP in UG level also seemed to be present in the limited WP in PG literature – such as the discourses of "dumbing down". For example, Marshal and Jones (2002) investigated the difference in performance of radiology students who entered the PG course with standard entry qualifications (first or 2.1. class degree) and those with non-standard (with a lower class

degree) qualification at one of the English HEIs over the course of 8 years and found that there was no difference between either category of students in their course-work assessment marks, thus challenging the discourses of 'dumbing down' standards by accepting WP students.

In this section on WP, I have argued that the issues of access to HE, retention and successful completion at UG level have been thoroughly researched, with the WP literature moving away from student deficit approaches and now pointing more toward institutional/structural faults. At the same time, I argued that WP literature concentrating on PG issues is very limited and still evolving. While the WP literature has gone through a paradigm shift from student deficit discourses to structural analysis and provided rich understanding of WP students' experiences at UG level, the response of WP policies to that literature, at both UG and PG levels, remains yet unclear. Moreover, as the WP scholarship has concentrated mostly on UG education, there is a paucity of research investigating WP in PG education.

Therefore, there is a need to investigate how WPs (1) insistence on the student deficit approach, (2) focus on UG study, (3) the lack of intersectional thinking by focusing on socio-economic factors, and (4) the enactment/operationalisation of WP policies impact access and progression of BME students in PG education. This is done in Chapter 5.

2.6. Conceptualisations of educational success of BME students

Another under-researched area of investigation at the intersections of 'race' and education is the complex way that BME pupils and students negotiate and achieve success in education as a whole, with even less being known about success in PG education. Therefore, I argue that the research so far has not dealt properly with issues of success, due to concentrating mostly on the negative – either by taking on approaches which focus too much on the individual barriers (be it engaging in those discourses or critiquing them) or critiquing institutional/structural barriers (Eunyoung Kim and Hargrove, 2013; Yosso, 2002).

On the other hand, the limited research concentrating on the positives has pointed to such facilitating factors as individual resilience, supportive family and wider community as well as the quality of school (Archer and Francis, 2007; Rhamie, 2012; Rhamie and Hallam, 2002). Therefore, it can be understood as the literature arguing that educational success is a result of a complex matrix of influences, including the importance of social networks/social capital. In turn, access to this facilitating social capital seems to range from more systemic forms, such as community and family, to more individual and serendipitous, i.e. being lucky enough to meet the right teachers at school, suggesting that educational success happens despite, rather than thanks to how education is set up. For example, Chinese school pupils were found to have high aspirations of going to university, regardless of their class positions, which were driven by their family and community expectations (Archer and Francis, 2007). Rhamie and Hallam (2002) found that educational success of African-Caribbean people could be grouped into four areas of success factors: individual agency including, among other, motivation, confidence, and awareness; home factors including parental support and role models; community – also included role models, as well as church or music tuition; school factors – including good teachers, school organisation and ethos. Thus, they proposed a home-school success model – based on parental support combined with attending a school with a high educational achievement ethos, or a home-community model where community would take on the role of the school, in the absence of a good school, for example through church or supplementary schools often run on weekends (Mirza, 1997), where Blackness, as opposed to whiteness was seen as the norm. Similarly, Rollock and her colleagues (2015) noticed that Black children and their parents who could be seen as achieving educational success could count on supportive people at their school, who were not necessarily BME themselves. However, the above research failed to acknowledge that even having systematic (rather than serendipitous) supportive networks may not be enough to achieve success when faced with other barriers. For example, many authors have challenged the widespread racist notions of dysfunctional Black family (Ball et al., 2013; Davis, 1983; Hanson, 2006; Wallace, 2017) pointing to it actually instilling high aspirations and work ethics, and therefore making it similar to characterisations of Asian families (Archer and Francis, 2007;

Bradbury, 2013) yet this is still not enough for Black students to achieve success at a wider scale (despite there being individual exceptions) as is done by Asian students.

Most usefully for this thesis, given its intersectional framework, researchers also looked at the intersections of 'race' and other categories of difference, which seem to suggest, I argue, that success for BME students is in part thanks to navigating a difficult balance between conformist and confrontationist attitudes in the White world (Rollock, 2011). For example, Mirza (1997) looked at 'race' and gender and argued that African-Caribbean girls achieved educational success by accessing and utilising the existing, limited possibilities for social mobility within the current educational system (i.e. by foregrounding their identity as girls who are assumed to be studious and hard working as compared with boys), while African-Caribbean boys were found to view such practices as conformist and opted for more confrontation and engagement in local politics to help them achieve racial equality. On the other hand, Rollock and her colleagues (2011) looked at the intersections of 'race' and social class, arguing that Black middle classes had developed a way to "navigate survival in a society marked by 'race' and class discrimination" (p.1078) which included language, mannerism and credentials recognised by White middle classes, and thus Black middle-classness, although not a straightforward identity, marked by difference from White middle-classness, provided an element of buffering against racism in school and wider society. They also pointed to the navigational technique of adopting the ways of being and acting, traditionally associated with White middle-classes, or by reversal minimalising the ways of being and acting traditionally associated with Black working classes e.g. style of walking with a "swag" typical of working class Black youths (Rollock et al., 2011).

The scholarship on ethnic academic success is still under-researched at PG level. Thus, this PhD project will enrich the small but growing literature on conceptualisations of educational success of BME learners, particularly as it refers to PG study, thus responding to the final research question.

2.7. Conclusions

This review has critically evaluated the state of knowledge about BME students in postgraduate education in England, with a particular attention paid to STEM fields. It noted that there was a paucity in literature, which this thesis aims to help to address. To help understand potential factors impacting students in PG education, the review also looked at the education system as a whole (i.e. including earlier educational stages) and how the literature argued that the education in England was racist, as it resulted in disadvantaged outcomes and more negative experiences for BME learners. This study, therefore, aims to investigate the experiences of BME students in PG STEM (research question 3) and the role of institutions in shaping access to, and experiences of, these students during PG study (research question 2). In the chapter I also analysed discourses in WP policy and scholarship. This was important as WP remains the main governmental mechanism/policy, which universities enact at institutional levels, to improve access to and success in higher education for BME learners (Kettley, 2007; OfS, 2018a). I argued that for the most part the literature has been shifting from student deficit models, to recognising the role of institutions and their set up in disadvantaging certain groups (Gillborn, 2012a). However, as I further argued the WP in PG scholarship is very limited and often still takes the student deficit approach. Stemming from this, the thesis will also investigate the role that WP policies, practices and discourses play for BME students in PG education (research question 1). I also argued that the literature exploring educational success of BME students did not engage sufficiently with conceptualisations of how this success is achieved. Therefore, this thesis will explore in detail how BME students negotiate and achieve success in postgraduate education (research question 4). The next two chapters deal with the theoretical underpinnings and methodology, respectively, that informed the research process.

3. AT THE INTERSECTIONS – THE THEORETICAL FRAMEWORK

3.1. Introduction

In this chapter I present the theoretical framework used to design, analyse and interpret the research in my PhD. Like other scholars, I find intersectionality to be a useful conceptual tool which offers flexibility and fluidity to comprehend specific positions and identities (Rollock et al., 2015) as influenced by societal structures of oppression such as racism, sexism, or classism. Therefore, the concepts of structure and agency, which place an individual (or group) between the positions of privilege and disadvantage form the key themes of not only this framework but the entire thesis. To interrogate the mechanisms of structure and agency further I call on Critical Race Theory and Bourdieusian thinking tools field, habitus and capitals (Bourdieu, 1997; Bourdieu and Passeron, 1990) and their critique of meritocracy which exposes the unwritten rules of the education field to be set in favour of the dominant groups (usually White, cis-gendered, heterosexual, middle/upper class men). Both theories have been widely used in education to analyse the influence of racism and classism (respectively) on the policies, practices and discourses within the educational field and as I argue they can complement each other. Moreover, the use of CRT for the analysis of the field of HE has only become more common in the last decade (Baber, 2016). Therefore, this thesis adds to the limited body of literature, which uses CRT to deconstruct processes and practices in higher education, and in particular postgraduate education. Finally, I draw on the intersections of Bourdieu and CRT as employed by Yosso (2005) in the form of *community* cultural wealth (CCW), which I argue is multifaceted, flexible and provides a good framework for conceptualising agency of people of colour in education. I argue that Yosso's framework of aspirational, familial, linguistic, navigational, resistant, and social capitals can be enriched by a further capital, which I have called *perspective capital*, which affords people of colour an alternative perspective, not easily available to the dominant groups, thus providing them with a sense of legitimacy in HE. I further argue that the perspective capital along with familial and social capitals often contributed to the development of other CCW capitals. Combining CRT and Bourdieusian frameworks not only

strengthens the intersectional analysis but also adds to the limited yet growing body of work employing the two frameworks together (Rollock et al., 2015). I argue that the combined frameworks offer a sound tool for a wide-ranging analysis of the discourses affecting the experiences of students of colour, as well as institutional habitus, policies and practices impacting these experiences.

3.2. Intersectionality

Intersectionality can be understood as an analytical tool which helps to describe the effects of intersecting categories of difference, such as 'race', class, or gender on an individual or a group. The term intersectionality was coined by Kimberlé Crenshaw (1991), one of the leading Critical Race Theorists, to draw attention to the notion that considering discrimination practices through a single axis (e.g. of sexism or racism) would not fully describe the experiences of, or protect those living at the intersections of both (or more) of these axes. For example, it was argued that without an intersectional approach to equality law Black women in a workplace would not be able to demand justice based on anti-sexist discrimination if women (but only White women) were being promoted, nor based on anti-racist discrimination if Black people (but in fact only Black men) were being promoted (Delgado, 2011).

The struggles of Black women have been well documented and therefore the intersectional perspective has been used for a long time (see for example: Davis, 1983; hooks, 1982). However, it was the work of Crenshaw that framed it as a workable analytical tool. She envisioned intersectionality as having three dimensions: structural – how the intersection of 'race' and gender makes experiences different from White women; political - how anti-racist and anti-sexist advances have actually helped to marginalise women of colour; and representational – how popular culture influences negative perceptions of women of colour. For example, research on women of colour in STEM education argued that they had to work against not only gendered but also racialised stereotypes of a 'typical' White male scientist (Ong, 2005; Snyder, 2014) and that they experienced education differently than White women, feeling less welcome in STEM subjects than their White counterparts (Hanson, 2006). Intersectionality also helped to highlight how policies like affirmative

action in the US and institutional initiatives aimed at improving careers of women in higher education, such as for example Athena SWAN, aimed originally at promoting careers of women in STEM, have actually benefited White women more than women of colour (Daniels, 2014; Khan et al., 2019).

Intersectionality can be used as a framework to examine the combined impact of any category of difference (Hancock, 2007) and has indeed become a very popular tool used to investigate experiences at the intersections of 'race', gender, class, disability, and others (Gillborn, 2015, 2012b; Morrison, 2012; Stahl, 2012). However, intersectionality should not be seen as an 'additive model' (Archer et al., 2015a, p. 203) where a set of 'race' related identities and discourses is added onto a set of gender and social-class related ones. But it has to be seen as a set of inseparable compounding factors situating people at the intersections of categories of difference in unique positions, whereby there is no single, essentialised, raced experience without it also being gendered and classed (Archer et al., 2015a; Wijeyesinghe and Jones, 2014). The classical understandings of intersectionality can be seen as the horizontal approach (or axis), which is juxtaposed against the vertical axis that examines variance within different strata of the same intersections, e.g. lower-class Black women versus upper class Black women (Maisuria, 2012).

Intersectionality can and has been employed in several ways in education. Firstly, it can be used as a simple analytical tool for showing more nuanced statistical trends, for example, the high representation of Black Caribbean girls and an under-representation of Black Caribbean boys in post-16 education (Morrison, 2012) or the stark under-representation of Black women in professorial positions (Advance HE, 2018a; Rollock, 2019). Secondly, it could also be used to analyse educational and wider society discourses and practices oppressing groups at specific intersections. In that sense, the intersectional lens is used to reveal the relationship between privilege and power (Wijeyesinghe and Jones, 2014). For example, an analysis of the intersection of 'race' and gender has helped expose discourses which paint Black boys as supposedly having anti-school culture with an aptitude for challenging authority (Youdell, 2003) and Black girls as being over-sexualised, i.e. concerned more with looks and relationships with boys than education and therefore problematic (Archer et

al., 2007). Conversely, intersectionality was used to show how the underachievement of White working class boys was being blamed on the equality and diversity policies and the discourses of political correctness, while at the same time it was helpful in exposing how middle/upper class White people tried to negate the existence of racism due to there being certain ethnic minorities who were more successful than certain White groups (Gillborn, 2012b). And finally, intersectionality has been used to engage in the debates on identity and identity formation. For example, the investigations into intersections of 'race' and class helped expose the assumptions of the authenticity of middle-class (i.e. what it means to be middle class and who, on the one hand is seen as deserving of being placed in that category, and on the other hand who feels entitled to be there) as, in fact, meaning White middle class (Archer, 2012; Rollock et al., 2015). Rollock and her colleagues (2015) used the intersectionality framework to describe in detail the nuances of Black middle class formation. They reported that their respondents created identity through three different processes. First, seeing identity as sameness, i.e. sharing common culture, history and experiences with other Black people. They also positioned themselves by comparison using seemingly objective measures of class, like leisure activities, income, or property size. And finally, they built their identities by contrasting, or boundary creation, i.e. demarcating themselves from what working class and/or White people do or understand. Black middle class consciousness varied, with some respondents developing strong sense of identities through associations with friends and families, while others downplaying their identity, in order to emphasise individuality instead (Rollock et al., 2015). Rollock and her colleagues (2015) also noted that Black middle classes had the authenticity of their identities questioned by other Black people, in part, because of being more present in White spaces, regardless of how comfortable they felt in these spaces. Research participants were mostly reluctant to identify as middle class, suggesting that their social status was different from, and less recognised than that of White middle classes, thus indicating the importance of nuanced analysis stemming from intersectionality (Rollock et al., 2015).

However, intersectionality has been accused of impeding the fight for equality rights, for example by pitting different intersectional groups against one another (Hancock, 2007), arguing for the primacy of one characteristic over another,

e.g. 'race' (see for example: Gillborn, 2015), or actually obstructing anti-racist work by highlighting issues of exclusion within Black communities and therefore feeding racist perceptions, a threat which Crenshaw herself saw even while conceiving the notion (Crenshaw, 1991). Therefore, in this research intersectionality has been called upon to show the uniqueness of one's situation rather than indicate who is more oppressed (Museus and Saelua, 2014).

Both the danger and the advantages of employing intersectionality as an analytical tool lie in maintaining a difficult balance between the ability to represent lived experiences of individuals and generalisability for policy purposes, which is negotiated by the number of intersecting axes (Grant and Zwier, 2012). On the one hand, for intersectionality to be a workable tool for policy/law purposes it needs not to employ too many axes (Delgado, 2011). On the other hand, it has been argued that at least three axes were needed to best represent one's social positions (Grant and Zwier, 2012). In the current research, this balance is driven by the participants. That is to say, that instead of having prescribed (number and types of) categories of difference, I let participants' responses (whether direct or indirect/implicit) inform the focus of intersections. This addresses a common criticism of intersectionality, which is that in practice it has been mostly applied to 'race' and gender, in particular Black women (Delgado, 2011; Meissner and Vertovec, 2015). However, this does not mean that the identities, and by extension structures of oppression (racism, sexism, classism) not mentioned directly by the participants do not have an impact on their lives. All are at play at any time, whether given explicit importance by the person or not (Wijeyesinghe and Jones, 2014).

Therefore, in this project, intersectionality is used as a flexible analytical tool, which allows the examination of particular positionalities of and discourses affecting seemingly ('objectively') successful BME students (studying master's and PhD programmes at elite universities) as situated between privilege (educational, socio-economic class) and disadvantage (racism, sexism, islamophobia, homophobia). While intersectionality is useful in questioning structures of power and privilege at intersections, it often does not stand on its own as a theoretical approach and uses other theoretical underpinnings to interrogate individual oppressive structures, such as feminist theory for

interrogating sexism or Critical Race Theory for interrogating racism. Hence, given the focus of this thesis on 'race' and racism, I now turn my attention to Critical Race Theory, to help better understand nuances of 'race' based oppression.

3.3. Critical Race Theory and whiteness: understanding racist structures

In the last few decades CRT has emerged as one of the principal conceptual frameworks for theorising racism (Delgado, 2011; Maisuria, 2012) and as I argue is useful in this research in exposing the normalising discourses of meritocracy of the PG field and supposed objectivity of the STEM field and WP policy as actually stemming from and perpetuating whiteness and White privilege. It originates from critical legal studies in the USA but has also been adopted in other areas like education and other countries, like the UK (Chadderton, 2012a; Gillborn, 2012a; Preston and Chadderton, 2012). In turn, CRT has several off-shoots, such as Critical Latinx Theory (LatCrit), Critical Asian Theory (AsianCrit), Critical Tribal Theory (TribalCrit) (Solórzano and Yosso, 2015; Yosso, 2005), Quantitative Critical Race Theory (QuantCrit) (Gillborn et al., 2018), and most importantly for this study, although epistemologically different, is often linked with Critical Whiteness Studies (CWS) (Burton, 2009; Chen, 2017). In education, CRT has been defined as the "theoretical and analytical framework that challenges the ways 'race' and racism impact educational structures, practices, and discourses" (Yosso, 2005, p. 74). Critical 'race' theorists have identified several tenets which help systematise the theory and its use (Gillborn, 2008). However, they do not always agree on the exact tenets and allow a level of flexibility in identifying the most important tenets for a particular study (Stefancic and Delgado, 2013). Having this in mind and based on CRT and CWS I have identified several tenets, which I argue are the most pertinent to this study, these are: (1) racism as endemic, (2) the nature of 'race' and connected to it the processes of othering, (3) White privilege and whiteness, (4) critique of meritocracy and colour-blindness, and (5) interest convergence. I discuss them below.

3.3.1. Racism as endemic

CRT asserts that racism is ubiquitous and deeply entrenched, to the point where it is perceived as normal and un-eradicable (Leonardo and Harris, 2013). This tenet of CRT is crucial as it assumes that society is racist and therefore understanding success and failure of groups and individuals has to be seen through a racial lens. As this study looks at experiences of people of colour who can be seen as successful in higher education (doing doctorates mostly in research-intensive universities), these assumptions are crucial for understanding participants' responses.

Furthermore, CRT argues that 'race' can or even should be used as an analytical lens for every situation (Gillborn 2008). Therefore, to keep with the intersectional spirit of the theoretical framework, this thesis argues for intercentricity of 'race' (Solórzano and Yosso, 2015), which can be understood as ascertaining that any analysis always includes 'race' among other categories of difference. This does not mean that 'race' is always the strongest factor impacting people's lives in general, but simply that it should always be considered.

CRT stresses that racism operates not only through crude forms and blatant discriminations, but also through everyday assumptions about what and who is the 'norm', and who holds the power in the society and its institutions, such as schooling (Rollock and Gillborn, 2011). For example, CRT has explored the role of micro-aggressions as forms of racism (Kohli and Solórzano, 2012; Matias, 2012; Sue et al., 2008). Micro-aggressions can be understood as 'small' acts, words, gestures, which signal, in subtle ways, to their recipients that they are seen as 'other'. Micro-aggressions result in people of colour having to "constantly manage and circumnavigate" (Rollock, 2011, p. 4) their relations and presence in public spaces.

Employing a CRT lens to interpret educational policies, practices and discourses has argued that racism is endemic to the education system rather than being an anomaly of a few 'rotten apples' (Gillborn, 2008). For example, setting exams which have been shown to disadvantage people of colour, such as subjective teachers' assessments rather than more objective externally

assessed written tests (Gillborn, 2008), over-entering Black Caribbean pupils into lower tiers of GCSEs despite them having the same previous attainment as White students (CaSE, 2014) and disregarding research which indicates possible solutions for the improvement of education for BME students (Warren, 2007). Thus, in this thesis analysing WP and the field of PG education by looking at their policies, practices and discourses can help understand the endemic nature of racism within them, which has to be interrogated not by intentions of individuals, but by the impact on and outcomes of students of colour.

3.3.2. Othering and the nature of 'race'

Literature on 'othering' is quite rich and has been applied to many contexts theorising the systems of inequalities along racial, class and gender lines, but has been particularly prevalent in post-colonial and gender studies (Schmitt and Witte, 2018; Tope et al., 2014). It can be traced back to Said's (1979) work on the social construction of the Orient.

Thinking about othering through a CRT lens as it pertains to 'race', as I discussed in the Introduction chapter, has to be understood that 'race' is not a biological but rather a sociological concept (Delgado and Stefancic, 2001). This conceptualisation is key for critical 'race' theorists in helping to understand that any form of othering is socially driven with very weak (phenotype) or no biological basis (Gillborn, 2008). Othering then, can be understood as 'them versus us' thinking, which creates and recreates stereotypes along racial lines, thus essentialising 'race' as supposedly having a set of characteristics, giving it false internal sameness and external otherness (Gunaratnam, 2003, p. 29). This process may happen through, for example the employment of 'seemingly positive' statements and discourses of model minorities (Gillborn, 2008). On the face of it these are positive affirmations/stereotypes about groups of people, however, they can lead to negative conclusions. For example, much attention has been paid to othering the bodies of people of colour, such as the hypersexualisation of the bodies of the women of colour (Park, 2009) or the physical prowess of Black men. A seemingly positive stereotype of Black men being good in sports, can imply that they are physically but not intellectually talented, which leaves intellectuality as supposedly the preserve of White people

good and obedient students, which on the one hand aims to create a discourse of them being 'model minorities' who are successful in education, in particular, mathematics and sciences, while simultaneously painting them as supposedly submissive and lacking in creativity (Bradbury, 2013; Gillborn, 2008). Furthermore, model minorities are juxtaposed against the negative stereotypes of other minorities, thus providing additional contrast between them and situating those not seen as model minorities even further on the negative spectrum. At the same time, the use of such discourses may be considered to be attempting to show White people as non-racist, open to existing in a world with ethnic groups other than White as being successful (Bradbury, 2013; Gillborn, 2008). These stereotypes, like any stereotype, are problematic as they prevent people from being seen as individuals and essentialise 'race', thus placing White people and whiteness as the norm against which all other groups are measured, which is discussed in the next section. In this thesis, othering becomes a key lens of analysis of how university staff engage in discourses which create racial difference and how this can have negative impacts on global majority students.

(Gillborn, 2008). Another example can be the stereotype of Asians as being

3.3.3. White privilege and whiteness

Examining the source of privilege of the dominant group is crucial to understanding the source of racism. This is where theorisations of white privilege and whiteness become useful in explaining how White people enjoy unwarranted privilege and thus actively, although not always intentionally, contribute to systemic racism. Whiteness has been described as a system of oppression which benefits people identified as White on an economic, social and ideological level (Bonilla-Silva, 1997; Chadderton and Edmonds, 2014). Therefore, the aim of whiteness as a social structure can be understood as maintaining the status quo of racial inequality in favour of White people.

Critical Whiteness Studies (CWS) concentrate on the role of White people in perpetuating endemic racism. CWS, is often conflated as being an off shoot of CRT (e.g. Delgado and Stefancic, 1997). While the two have developed separately and have different epistemological standpoints – with the former examining whiteness, the latter researching 'race'/ethnicity, they share parallel

discourses and goals of dismantling racism (Burton, 2009; Cabrera et al., 2016). Moreover, CRT has been applied to the study of whiteness (e.g. Cabrera, 2014; Gillborn, 2008), thus blurring the lines between the two (Cabrera et al., 2016). Therefore, the examination of Whiteness and White privilege in this section has to draw on both CRT and CWS as two closely intertwined schools of thought. Whiteness literature has identified several ways in which it operates as an oppressive societal structure. Firstly, whiteness normalises the status quo by making it seem neutral (Castagno, 2014) and normative, i.e. treating whiteness as a reference point for judging everyone and everything against it (Ladson-Billings, 1998). For example, Pilkington (2013) found that the whiteness of senior management at a university he investigated was taken for granted by White staff. This normalisation both creates and is created by specific language and discourses (Ellison and Langhout, 2016). Further, whiteness operates through what Mills (1997) refers to as 'epistemology of ignorance', where most oppressors do not realise that they are being oppressors, which feeds the discourse of White ignorance and 'racism without racists' (Bonilla-Silva, 2006; Ellison and Langhout, 2016), where White ignorance can be understood as not only individual but also a collective and systemic lack of knowledge of most White people about issues of racial equality, stemming for example from the curriculum design. This lack of understanding can have profound consequences, such as people misinterpreting equality efforts as supposedly reverse racism (Cabrera, 2014), which can inform public policy on affirmative action. Whiteness also has been argued to dictate how space is used and enjoyed, by whom, and on whose rules, including, who gets to be included and excluded (Ellison and Langhout, 2016; Rollock, 2011). For example, placing Black youth in separate classes for pupils with learning difficulties or excluding them from mainstream education at a higher rate than White pupils has been linked to whiteness (Gillborn, 2012a; Rollock et al., 2015). It has also been argued that whiteness has allowed White people to define oppression by intentions rather than outcomes (Gillborn, 2008; Warren, 2007). For example, in education it has been argued that White educators, while thinking of themselves as 'nice' well-meaning individuals, can still reproduce more negative outcomes and unpleasant experiences for people of colour (Castagno, 2014).

To be unaware of one's role in oppression can be understood as a sign of privilege. One of the seminal works on White privilege was Peggy McIntosh's (McIntosh, 2003) article where she listed multiple privileges White people enjoy, yet are mostly unaware of. For example, White people can be sure that they will be well represented in media, popular culture, and managerial positions; they can be sure that dressing down will not be linked to their 'race'; when meeting other White people, they will not be accused of segregating themselves racially (McIntosh, 2003). Exposing whiteness and White privilege undermines the notion of meritocracy. If a society is structured to subtly/implicitly advantage one (racial) group at the expense of another then meritocracy must be a myth which is not neutral and objective but rather a consequence of historical events or social norms (Gillborn, 2008).

Because the status quo is in White people's favour they are often oblivious to the struggles of 'others' and object to their privileges being taken away from them, engaging in discourses of being supposedly unfairly disadvantaged. For example, in Cabrera's (2014) research White university students saw themselves as victims of multiculturalism and viewed positive action (e.g. scholarships for particular ethnic groups) as signs of 'reverse-racism'.

Affirmative action is illegal in the UK and rules which are thought to be colourblind guide most policies and laws. However, it could be argued that these rules serve the interest of White people in that they preserve the status quo (see next section on colour-blindness for more details).

Whiteness has been argued to be one of the foundations of the education system in the UK (Gillborn, 2012a, 2008). This involves pedagogy (how things are taught) and curriculum (what is taught) recognising, centring and affirming experiences of White people and limiting most of the references to BME historical figures to the contexts of slavery and/or colonisation. One of the ways in which whiteness manifests itself in education is in situations in which educational success of people of colour is being questioned by both White and non-White people (Ball et al., 2013; Moore, 2008). For example, while White people often express a sentiment of surprise at Black person's dispositions and characteristics, like being well spoken (which suggests they are middle-class), other Black people may accuse them of 'acting White' (Fordham and Ogbu,

1986). This is highly problematic as it not only equates being Black with being working class, it also assumes, in a rather simplistic way, that there is only one 'correct' way of being a minority, and often equates White people with intelligence and superiority. However, CWS have not been widely used to analyse the field of higher education (Cabrera, 2014) with the majority of work on whiteness in education in the UK concentrating on pre-university schooling (Gillborn, 2008; Rollock et al., 2015) or in some cases undergraduate education (Pilkington, 2013). This thesis builds on this body of literature by examining how whiteness forms foundations of and manifests itself in the postgraduate field.

Ideas of whiteness and White privilege have been criticised for their vagueness and essentialising assumptions of White people, by for example, disregarding that they too experience racism, e.g. against Poles in the UK and other forms of oppression like class disadvantage (Cole, 2012a, 2012b). To say this, however, fails to recognise that CRT understands 'race' to be a sociological rather than a biological construct, and the fact that having White skin and even potentially identifying as White does not necessarily mean that the people will be included within the power structure of whiteness. The example of discourses pertaining to Polish people within the Brexit referendum debate can serve as an example, with Poles being othered from the White British population and blamed for supposedly putting strain on the welfare system (Rzepnikowska, 2019). Furthermore, the notions of White privilege and whiteness have been accused of a lack of versatility of use in certain situations, such as issues of refugees who come from various backgrounds, including White (Chadderton and Edmonds, 2014). However, the fact that White privilege is not enjoyed equally by White people does not mean that it is not enjoyed by all in one way or another. This is where intersectionality becomes useful, by breaking down White experiences and privilege by, for example, class position. White working classes are, on the one hand, described by those in positions of power (e.g. White, middle/upper class owned media) as the racist, xenophobic part of the UK society, which can be seen as aiming to exonerate the White middle and upper class of racist charges, and on the other hand, White working class existence and failure in education and labour market is used as an argument to support the idea that racism is non-existent because (certain) minority ethnic populations can do better than (parts of) White populations (Gillborn, 2012b).

Both processes, seemingly mutually exclusive – on the one hand denying racism and on the other blaming it on White working classes – work to divert attention away from the processes (economic, sociological and psychological) that perpetuate racism and maintain power within White privileged classes, i.e. whiteness as a structure, and instead they try to focus the attention on the neoliberal idea of individual responsibility through identity politics.

In this study the notions of whiteness and White privilege are useful in examining how, on the one hand, racist essentialising discourses are operationalised by university staff to maintain whiteness and White privilege, and on the other hand, how BME students understand their agency and success as constructed and deconstructed through the discourses of whiteness, neoliberal individual responsibility and meritocracy, with the latter being discussed next. Whiteness and White privilege are not treated as a monolith but rather are approached in an intersectional manner, paying attention to influences of class and gender.

3.3.4. Critique of meritocracy and colour-blindness

CRT exposes narratives of meritocracy and colour-blind policies as racist. The everyday use of the term meritocracy can be understood as a merit-based system of recognition of achievements. However, as I argue throughout this thesis meritocracy is merely a discourse employed to preserve whiteness and other forms of privilege. The first accusation of CRT against meritocracy, is that by employing a colour-blind approach to the recognition of merit, it fails to account for the historically created inequalities. The result of this is that, owing to their privilege White people are more likely to achieve the required merits (Gillborn, 2012b). The second criticism of meritocracy is that it is portrayed as neutral and universal, while CRT exposes it as influenced by and privileging whiteness (Gillborn, 2008; Gillborn and Ladson-Billings, 2009)

Meritocracy is heavily based in neo-liberal discourses of individual responsibility and the self-made person (self-made men - sic!), whereby success or failure should be attributed to an individual rather than societal processes and systemic power imbalances. In the neo-liberal image of the education system a learner is seen as, and expected to, be a fully informed and rational decision

maker who is flexible, resilient, and autonomous (Chadderton, 2018). Their inability to succeed is often dressed in a discourse of supposed laziness, lack of aspirations or bad decisions, i.e. individualised, personal deficits, which supports the narrative of the education being purely meritocratic. These discourses mask the influence of social structures of 'race' (but also gender and class), portraying education as seemingly post-racial (Chadderton, 2018). Post-racial discourses then further normalise whiteness as the standard to aspire to (e.g. beauty standards, knowledges or leisure activities often associated with White Europeans), while arguing that the equality has been achieved to such an extent that 'race' does not and should not play any part in policy considerations (Zamudio et al., 2011).

Furthermore, CRT argues that such discourses and policies, based on the principle of formal equality, fail to recognise the extent to which historical events have disadvantaged and continue to disadvantage ethnic minorities, thus not allowing them to achieve substantive equality (Gillborn, 2008; Rawls, 2001). In other words, colour-blindness fails to address the status quo of historical racial inequalities (Zamudio et al., 2011). Therefore, CRT calls for a greater recognition of historical context when considering such policies. Gillborn (2012a, 2008) goes as far as to say that the current educational policies are deliberately (not-accidentally) racist. This is because the outcomes of the current policies are known to disadvantage BME students and yet are still in place (Warren, 2007).

In this research this tenet of CRT is important for analysing the barriers to access to postgraduate education through admissions policies, discourses and practices. The critique of meritocracy is also central to the work of Bourdieu, where, as I argue later on in this chapter it overlaps significantly with CRT.

3.3.5. Interest convergence

Interest convergence theory postulates that any progress in equalising White and minority ethnic status is achieved only as a last resort and when this is convenient for the White majority (Gillborn, 2008; Rollock and Gillborn, 2011). That is to say that any progress is dictated by White interests rather than moral awakening over racial oppression and suffering (Bell, 1980; Driver, 2011). For

example, according to interest convergence theory, the civil rights movement of the 1960s was successful because the USA needed to be seen as a democratic and liberal country in the eyes of the international community, as opposed to the communist and oppressive USSR, with which the US was in conflict (Bell, 1980; Gillborn, 2008). Similarly, interest convergence theory has been employed to explain the increase in the university matriculation of African-American athlete-students who dominate many US college sports teams, as a way for the universities to bring huge revenue on their books (Donnor, 2005) rather than to widen participation to HE for African-Americans. The interestconvergence principle has also been applied in the UK. For example, Alice Bradbury (2013) talked about interest convergence in how the construction of Asian 'model minorities' in education was useful in fending off accusations of racism, following the logic that if there are successful minorities then the education system is supposedly free from racism. Furthermore, a concept of interest-divergence (Gillborn, 2013) has also been proposed, whereby the creation of educational policy can be seen as purposefully not serving the interests of certain groups, i.e. ensuring that minority groups do not achieve as well as dominant groups. For example, the academisation of state-funded schools and the introduction of English Baccalaureate¹ have been argued to worsen the educational opportunities for Black students (Gillborn, 2013). In the current research the interest convergence tenet of CRT is used to analyse WP policy as well as wider discourses of meritocracy in admissions as they relate to fee income generated by increased numbers of international students versus numbers of home BME students.

3.3.6. CRT, the possibility of change and the under-theorisation of agency

In this section I argue that despite the accusations of CRT as being too deterministic, it has demonstrated its usefulness to challenge the status quo and make changes in the educational system. However, as I argue further, CRT

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¹ English Baccalaureate is a group of traditional subjects taken at GCSE level (examination at the end of high school, usually at age 16) which are often seen as facilitating access to prestigious universities and used by the government in creating school league tables.

has not adequately engaged with the conceptualisations of agency of students acting against the racist structures, precisely because of its focus on structures.

In the simplest terms, the structure versus agency debate can be described as the issue of determining whether an individual acts freely or as directed by social structures (Archer, 1995). In other words, to what extent structure and to what extent agency determines choices and opportunities. In the current study structure can be understood as a pattern of social arrangements normalising whiteness and disadvantaging people of colour in education, while agency can be understood as the degree to which students are able to act with or against the racist educational structures and achieve educational success (Archer, 1995; Cintron, 2010; Gillborn, 2008). Given the structural character of CRT, it is perhaps unsurprising that it has concentrated on theorising structures and the possibility of changing them, rather than agency of individuals.

Critical Race Theory, as the name suggests is critical of the current status quo. However, it has been argued to be overly pessimistic (Cole, 2012a; Driver, 2011) – given its emphasis on structural, deeply ingrained nature of racism which is said to be impossible to eradicate and giving little agency to people of colour (Gillborn, 2008; Leonardo and Harris, 2013). Some CRT scholars are extremely doubtful about racism ever becoming a thing of the past, claiming that "Black people will never gain full equality" (Bell, 1992, p. 373) and all the efforts to eliminate racism will only be partial and temporary victories. For example, Delgado (2011) says that one of the biggest issues nowadays is that Black people are supportive of the status quo, because they were co-opted into the racist system by being given mid-management positions by White people. Using interest convergence, one of the CRT's analytical tools discussed above, this can be explained as White elites 'sacrificing' some of the White middle-class people for the (limited) benefit of Black people, so that the latter do not rebel (perhaps even violently) against the entire system and overthrow White elites. According to Delgado, Black people are being used here to speak the 'master's voice' (p. 1276). I argue that to say that Black people were given jobs by White people, as opposed to them taking the jobs fails to recognise their agency, activism, intellect, knowledge and skills.

The response of CRT to the accusations of being overly deterministic is that through the critical analysis of the oppressive structures of racism it does not only describe the world but challenges its assumptions and therefore disrupts the status quo (Rollock and Gillborn, 2011; Yosso, 2005). This happens by, for example, re-telling narratives from the perspectives of people of colour, thus giving them voice (Zamudio et al., 2011). As Stovall (2013) argues such counter-narratives acts "as a conduit by which to communicate issues and concerns, [it] encourages us to engage practical means by which to address issues brought forward by racism." (p.564). Another way in which the status quo gets disrupted is by applying analytical tools such as interest convergence to understand the motivations shaping education, other social institutions and the society at large (Bell, 1980; Delgado, 2011). However, having the sheer knowledge of how racism operates (i.e. CRT informed analysis) does not equal taking action in order to ameliorate the situation of people of colour, and as Gloria Ladson-Billings (1999) argues people of colour cannot afford CRT being limited to theoretical contemplations if these do not translate into practice. Therefore, CRT scholarship, which by its nature is committed to social justice, necessitates moving beyond the rhetoric and developing models of praxis (Stovall, 2013). This mostly happen via two avenues (1) activism and (2) Critical Race Pedagogy (CRP).

Critical 'race' theorists argue that CRT's language and tools to deconstruct everyday assumptions as racist rather than neutral give voice to activists (Yosso, 2005) which can then lead to changes in educational policies, practice or even law. Indeed, it has been argued that CRT was the driving force for activism in higher education in 1980s in the US which led to boycotts, changes to academic recruitment practices and creation of courses based on CRT (Baber, 2016). CRT has also been argued to be crucial for community activists bringing attention to racialised issues in educational policy and praxis, by for example, working towards setting up schools which resist post-racial discourses and neo-liberal colour-blind policies (Stovall, 2013, 2005).

Critical 'Race' Pedagogy (CRP), stemming from CRT, is seen as focusing on empowering students. It has been argued to be crucial in challenging the inequalities in American schooling (Jennings and Lynn, 2005). CRP argues that

there are power dynamics in every situation, including power of students, albeit limited, to influence what and how they are taught and thus challenge the status quo (Lynn et al., 2013). CRP then postulates that teaching should be socially engaged, rather than presenting 'cold', dispassionate facts and that reflexivity, i.e. knowing one's positionality, can help challenge the status quo (Lynn et al., 2013). As Solórzano and Yosso (2000) further argue university experiences of students of colour as being on the margins can be a source of strength.

However, the above employment of CRT to help change educational policy and practice seems to be mostly limited to and dependent on people educated in CRP and/or activists. While the ultimate goal of these (theoretical and practical) efforts to change the educational system is for students of colour to be able to achieve educational success on a systemic level, I argue that such concentration of efforts under-theorises the agency of students of colour within the current system, especially those who are not CRT/CRP trained. In other words, tenets and tools of CRT have shown faults within the education system and how these could be addressed, however, they failed to sufficiently theorise how students of colour already achieve educational success in the current system. Thus, more nuanced mechanisms of agency have to be explored to supplement these theorisations. As I argue later in the chapter these can stem from combining CRT with the Bourdieusian framework, such as the CCW framework and perspective capital. For this reason, Bourdieusian thinking tools, which also engage in the structure versus agency debate, are discussed next, after which a fuller conceptualisation of agency, as understood for the purposes of this thesis, will be outlined.

In summary, the tenets of Critical 'Race' Theory help examine how lived experiences of students, staff and policy makers are being influenced by endemic racism and White privilege, as well as how educational policies and practices are being shaped by processes of interest convergence and divergence and the discourses of meritocracy which maintain whiteness. To help find sources and mechanisms of agency, as well as to supplement the theorisation of the reproduction of privilege through the discourses of meritocracy I now turn to Bourdieusian thinking tools.

3.4. Bourdieu: structure and agency

In this section I argue that the Bourdieusian thinking tools provide a sound understanding of how the structures of privilege of dominant (racial and class) groups are being re/produced through education and thus supplement CRT in its critique of meritocracy. I further argue that the versatility of the framework, as indicated by its multiple theorisations and applications begins to indicate sources of agency of BME students navigating the educational field.

A variety of aspects of the structure versus agency debate have been thoroughly explored in literature (Archer, 1988; Giddens, 1991; Goffman, 2012; Hall, 2000). However, as I argue below, Bourdieu's clear theorisation of the role of education in mediating the relations between structure and agency, while not without its drawbacks, seems most useful in this research. For Bourdieu education is key to the reproduction of privilege and disadvantage (Bourdieu, 1973). To describe how exactly this reproduction happens he introduced the concepts of *habitus*, *capitals* and *field* (Bourdieu, 1997, 1977).

Field can be understood as the element of structure, a social context, with specific, yet unwritten, rules (Archer et al., 2015b; Bourdieu, 1984). It is these rules, implicitly determined by the dominant groups, that will decide which particular forms of capital and habitus are recognised and valued (or not) in a given field (Burke, 2017). The boundaries of a field are often difficult to determine, as they can simultaneously act as sub-fields of a larger field or as separate fields which are hierarchical to one another in a larger field of power, with these fields being very different from one another, thus recognising different capitals (Colley et al., 2014).

Habitus, then, can be described as norms and values that an individual (or a group) uses to guide their actions (Reay et al., 2001). It is a matrix of enduring dispositions which informs one's interactions with the world (Archer et al., 2014; Bourdieu, 1977).

And finally, capitals can be understood as a set of resources that can be invested and exchanged in the hope (but no guarantee) of the betterment of life

(Archer et al., 2014; Bourdieu, 1997). Capitals then, can act as the agentic factors, if they are recognised in a given field, helping to navigate it. Thus, for Bourdieu, agency stemming from capitals can sometime mean colluding with structures. Bourdieu (1997) distinguished the following basic forms of capital:

- Economic capital these are economic resources, like money, income, wealth.
- Cultural capital which is a set of cultural practices and competences, such
 as attitudes or knowledges, which can be used to play the educational,
 labour, and other fields. It can be embodied (a person's internalised ethos,
 attitude, knowledges, culture), objectified (cultural goods like books or art
 pieces) and institutionalised (e.g. educational qualifications)
- Social capital is a network of acquaintances which can be mobilised in order to gain advantage
- Symbolic capital is a combination of the particular forms of cultural, social and economic capitals which in a given context are given worth.

Education and in particular schooling, including higher education, can be interpreted using the above Bourdieusian conceptual tools, whereby higher education/schooling is a field into which students, academics and others (i.e. agents or players in the field) come with different habitus and capitals, which they derive from family, prior education, and the surrounding environment, like, peers and popular culture (Bourdieu, 1977). Bourdieu, leaves very little room for individuals under the same circumstances to develop different habitus and capitals, which limits the development of agency among them, while at the same time he is doubtful that fields, like the field of education, are likely to change their rules and systems of rewards, which would start recognising diverse habitus and capitals. Therefore, only the 'right' types of capitals are recognised in a given field and it takes an exceptional individual to succeed in the system against the odds.

Bourdieu (1976) also maintained that schools, by treating everyone equally, in the spirit of meritocracy, reproduce (dis)advantage. This happens because the implicit rules in the field of education, which recognise and reward only particular forms of capitals and habitus, are set by and for the dominant groups. Therefore, as the dominant groups come into the schooling system with what is

seen as the 'right' habitus and capitals, nurtured in family and their environment, pass the examination (of formal and informal/hidden curriculum) with a lot more ease. Thus, meritocracy can be seen as a smoke screen, a tool to conceal structural inequalities and frame them as personal responsibilities (Bourdieu and Passeron, 1979; Reay, 1998). Abrahams (2016) investigated attitudes towards meritocracy among working and middle class students and found that working-class students displayed a commitment to using only their institutionalised cultural capital (their degrees/qualifications) to secure a position on the labour market ladder, which she argued stemmed from their workingclass habitus and the desire to prove themselves in the middle-class field of professional employment. Thus, they seemed to adhere to meritocracy (or believe in it) in its literal sense of a merit-based system of recognition of achievement (rather than see through it as merely a discourse of such recognition rather than an actual practice). At the same time, middle-class students in Abrahams's study were more likely to express willingness to utilise other networks/social capital (e.g. engage in nepotism) to gain advantage. The strength of discourses of meritocracy and how these discourses are applied differently on White and BME people and what capitals BME students use to achieve advantage form a crucial part of my research and are explored throughout the thesis.

3.4.1. Developing Bourdieusian tools further

Bourdieu has been widely theorised and applied in education, as well as higher education in particular (see for example Heath et al., 2010; Naidoo, 2015; Reay et al., 2001). For example, at an institutional level, Diane Reay (2001) conceptualised *institutional habitus* of universities as a set of norms and values underpinning institutional cultures, which can be friendly or hostile to students depending on their individual habitus. Colley and her colleagues (2014) applied field analysis to the HE sector, arguing that individual universities can be seen not only as separate fields but also as subfields, playing in the wider field of HE to secure the best possible position within the hierarchy of the field. Thus, research-intensive universities, such as the Russell Group institutions, have been categorised as being positioned, as well as actively seeking to position themselves as higher in the hierarchy of fields (Colley et al., 2014).

At the level of communities, Archer and her colleagues (2012a), highlighted the influence of *family habitus*, i.e. the "ways and settings in which family operates" (p. 886) to shape interests and aspirations in a particular field, which could differ by ethnic groups. For example, family habitus of Chinese families has been categorised as often emphasising family honour, which has been argued to translate itself into good educational results (Archer and Francis, 2007).

Most usefully for this study, the concept of science capital was developed to describe a combination of specific forms of cultural (knowledge, interest in science, positive view of self in science), social (parents and others who have science background), and economic capitals (money spent on scientific kit, school and extra-curricular trips, etc.) in science (Archer et al., 2015b, 2014, 2012). Archer and her colleagues (2014) argued "that "science capital" is not a separate "type" of capital but rather a conceptual device for collating various types of economic, social and cultural capital that specifically relate to science" (p.5). In other words, science capital comprises of science literacy, science dispositions and preferences, scientific behaviours and practices, and a science identity (Archer et al., 2015b). Science capital, then, is argued to help understand the development of scientific aspirations and differing patterns of science participation (Archer et al., 2014). For example, using a country representative sample Louise Archer and her colleagues (2015b) showed that BME students between school years 6 and 9 displayed higher science aspirations than White students, which was highly related to their science capital.

3.4.2. Bourdieusian theory and 'race'

While Bourdieu wrote on issues of 'race' and coloniality in his earlier works (Bourdieu, 1958), these concentrated more on the power relations of colonial states with their colonies and the subjugating role of 'race' or caste in these relations. Subsequently, he has been criticised for generally not engaging with issues of 'race' in his work on capitals, habitus and field (Burke, 2017). However, other scholars applied his thinking tools in an intersectional manner, looking at the junctures of class and 'race'/ethnicity to indicate how BME students achieve success.

Moore (2008) conceived of *Black habitus* as a 'cultural reservoir' (p. 496) of middle-class African-Americans, which determines the performance of racial and class identities and rejects current racial order, nurtures positive representations of Black communities and presents respectability as its key characteristic. In this sense Moore's understanding of Black habitus is rather subversive, as the mainstream White society may not usually view Black habitus as positive and/or successful dispositions.

Wallace (2017) conceptualised *Black cultural capital* as simultaneously operationalising 'race' and class to "recognise and *resist* the mainstream" education (p.913, emphasis in the original). This was done, he argued, for example, by using a middle class language of respect towards teachers ("yes sir" instead of a simple "yes") and contributing facts about Black British experiences to historical debates (Wallace, 2017).

Another example is ethnic capital (Modood, 2004; Moran, 2016; Shah et al., 2010). Shah and colleagues (2010) found that despite coming from lower classes South Asian families were able to instil high aspirations for achievement in their offspring through a closely knit community network, thus emphasising the role of ethnic capital as a specific form of social capital available to South Asian families.

Rollock and her colleagues (2015) talked about *moral capital*, which they argued was a preserve of Black working classes which puts emphasis on respectability, integrity, honesty, selflessness and good will. And finally, *Islamic capital*, stemming from the teachings of Koran, was argued to be used by South Asian families in the UK to exercise control over children, legitimise family roles, and inform family system of values which included emphasis on education (Franceschelli and O'Brien, 2014).

In all the cases, the above mentioned capitals and habitus have been argued to contribute to educational success of BME students, with some even being labelled as 'model minorities', i.e. doing better/achieving better educational results than the White majority (Bradbury, 2013; Gillborn, 2008). However, the success of ethnic minority students linked to the above capitals and habitus,

has also been questioned as in-authentic or supposedly achieved in a 'wrong way', whereby it stemmed more from family values and expectations than from students' intrinsic motivations which are supposedly the preserve of White students (Archer and Francis, 2007; Bradbury, 2013). Such interpretation of success as supposedly achieved in different ways creates and marks racial differences whereby White students are not only set as the point of reference for how success should be 'authentically' achieved (i.e. centring whiteness), but also falsely designated as the ultimate independent, self-made learner (playing into neo-liberal discourses) whose success was supposedly entirely thanks to themselves and not the conditions in which they were socialised in, which equipped them with the right capitals and habitus (Bradbury, 2013). Thus, issues of racism and whiteness, yet again, seem to be pertinent in every interaction within the educational field.

Bourdieu's thinking tools provide a clear outline of the mechanisms of structure and agency, particularly as it pertains to the reproduction of privilege. Additionally, further theorisations of his work at the intersections of class and 'race' begin to indicate the sources of agency of people of colour. However, they seem to be narrow in their scope; their focus is usually limited to one particular aspect or community, such as ethnic capital being the preserve of South Asian families, or the Black cultural capital, as the name suggests, being the preserve of the people of African descent. This is why Yosso's (2005) concept of community cultural wealth, which incorporates multiple capitals and therefore is multi-faceted and versatile, gains attractiveness. It is discussed next.

3.5. Community cultural wealth

In this section I argue that community cultural wealth (Yosso, 2005) provides a flexible framework for conceptualising the agency of BME students in this study tying to navigate the PG field. I also content that, while still being well suited for this research, the framework can be improved. In particular I argue for the fine-tuning the notions of linguistic capital and social capital, and the addition of what I theorised and refer to as *perspective capital*.

Combining the work of Bourdieu and Critical 'Race' theorists, Yosso (2005) conceived of community cultural wealth (CCW) that incorporates at least six forms of capitals, which people of colour can use in different contexts to "survive and resist macro- and micro-forms of oppression" (p. 77) and gain advantage. By analogy to income (earned money) being only one of the multiple components of wealth (sum of all assets, such as properties, bonds or investments) Yosso's capitals amount to cultural wealth, which provide communities of colour with a multi-faceted richness. Thus, unlike Bourdieu, who has been often criticised for a narrow definition of symbolic capital as actually being White middle-class capitals (Burke, 2017) Yosso argues that a wider range of capitals which are at the disposition of students of colour can be recognised in the field of education. In education then, Yosso's capitals have been argued to equip students of colour to not only expose the assumptions of schooling/educational systems as stemming from White privilege/whiteness, but also to resist and successfully navigate the education field. The six capitals identified by Yosso (2005) are:

- Familial capital can be described as the "cultural knowledges natured among familia (kin)" (p.79), whereby family is understood in a broader sense of not only nuclear family but also the extended family (aunties, cousins, etc.), as well as family friends or family members who passed away. For example, familial capital can equip students with work ethics recognised and valued in the field of education.
- Aspirational capital is "the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers" (p.77). In the field of education, it can relate to high aspirations for a university degree, which can be observed, among others, in Black African pupils in the UK.
- Linguistic capital can be understood as the cognitive and communicative skills derived from using more than one language or different styles of language or expression, including artistic expression. While Yosso referred to this capital mostly in the context of the bilingualism of Latinx pupils, in the UK the picture is much more intricate with a whole array of languages (Hindi, Yoruba, Patois) and English registers (from pigeon English to

received pronunciation) and different degrees of fluency in them. Therefore, I would argue that linguistic capital may manifest itself very differently in the UK and can be seen as closely linked to social class. Thus, linguistic capital stresses the links between 'race' and class (how the two are intersecting and mitigating each other), which I argue, is something that Yosso failed to highlight in her initial work.

- Social capital is a network of acquaintances, which can be utilised by people of colour, for example, to identify scholarships, help with the preparation of applications, providing reassurance or actually obtaining education and work. While not necessarily contradicting Bourdieu's understanding of social capital as having a more individualistic character, i.e. people who one simply gets to meet through family, school or work and bond with due to similar habitus, Yosso's understanding adds an element of a community spirit/habitus, in which the bonds which mobilise this capital stem from community. Such social capital is argued to provide not only material but also emotional support. Social capital has been widely theorised, which highlighted several functions that it serves (Putman, 2005; Tonkaboni et al., 2013). Most usefully for this study, social capital can be a source of aspiration which provides visible role models making success seem like an achievable goal; this often stems from the community (Archer and Francis, 2007; Rhamie, 2012). Secondly, social capital may be useful in facilitating the development of skills and abilities (Coleman, 1990). And finally, social capital may provide direct access to opportunities for employment or education (Tonkaboni et al., 2013).
- Navigational capital refers to the people of colour's ability to manoeuvre
 and achieve success within institutions which were built on racist
 assumptions, for example, by highlighting aspects of knowledge which have
 the most propensity to be valued by the dominant groups and downplaying
 those which may not be seen favourably.
- Resistant capital can be understood as the knowledges and skills used to resist subordination by countering negative societal messages and valuing

oneself despite/against them, for example by celebrating achievements and contributions of people of colour within science or literature.

CCW has been gaining popularity as a framework for the analysis of the experiences of minority students within the education system. It has been employed in different contexts, within different countries like the US and the UK and different communities such as African-American, Black-British, Latinx, and Asian (DeNicolo et al., 2015; Kolano, 2016; Samuelson and Litzler, 2016; Wright et al., 2010). For example, Wright and her colleagues (2010) used Yosso's framework to investigate how young Black people initially excluded from mainstream education in England resisted oppression and navigated to success, skilfully indicating how the different forms of capitals interact. They found that Black families were crucial in supporting their children and equipping them in self-esteem. Thus, they argue, the combination of oppression from the schooling system (in a form of exclusion) and the support from family and community resulted in a creation of a particular habitus, characterised by perceptions, thoughts and behaviours, which made them proactive in resisting the oppression. For example, the excluded students displayed resistant capital by proactively seeking help from external organisations to appeal against the schools' decisions of exclusion. They also showed aspirational capital by maintaining faith in the power of social mobility through education (Wright et al., 2010). However, there is still little research using CCW as an analytical tool within higher education, and in particular at PG level, which this thesis will help address.

3.5.1. Perspective capital

When conceptualising the framework, Yosso noted that people of colour may have more capitals at their disposal than those described by her (2005). Therefore, I propose another form of capital, which was missing in her framework and I refer to as *perspective capital*. This is based on the argument that being a part of a non-dominant group, situated outside of the White (and often middle class) 'norm' and thus being othered allows an alternative view, not afforded to the majority in a given context (Rollock, 2012). Following DuBois, Moore (2008) emphasised that the 'double-consciousness' of the unjust racial order has been a crucial part of the socialisation of people of colour, which

allowed them to turn that perspective into resistance (p. 497). Thus, I argue that perspective capital can be seen as a resource that allows people of colour to perceive of structural oppressions and their positionality within them, in order to leverage a perspective not easily observable by the dominant groups. Possessing an alternative perspective can be an asset in understanding not only the positionality of oneself and one's community but also other marginalised communities. As I will argue in later chapters, such perspective capital allows people who are othered to be an asset in an otherwise homogenous-perspective environment, and thus gives them an element of agency, which is not included in the theorisations of the other forms of capital.

For Yosso, community cultural wealth capitals are not seen as separate but rather as closely linked, intertwined and impacting one another. However, in her work she did not specify exactly how the different capitals intersect and impact each other. This thesis furthers the understanding of these interactions. First of all, CCW capitals are not separate from Bourdieu's cultural and social capitals but can be seen as more specific types of these, i.e. social and familial capital in the CCW framework are forms of Bourdieusian social capital, while aspirational, resistant, navigational, linguistic and perspective capitals can be understood as specific forms of embodied cultural capital. Furthermore, I argue that the perspective capital, family capital and social capital often act as capitals which build up or contribute to the development of other capitals. Table 3.1. shows the most common interrelations among different forms of capitals, with the first column indicating the source capitals and the other columns indicating the capitals (at least partly) built up by the source capitals.

Table 3.1 Community cultural wealth - main interrelations of capitals

| Building | Built-up capitals | | | | | |
|-------------|-------------------|-----------|--------------|------------|--|--|
| capitals | Aspirational | Resistant | Navigational | Linguistic | | |
| Social | x | | x | | | |
| Familial | х | х | Х | Х | | |
| Perspective | | x | X | | | |

For example, linguistic, resistant and aspirational capitals are often derived from family upbringing, i.e. this can be understood as derived from familial capital, whereby it is the family teaching the individual their language(s), how to resist

mainstream racist discourses or to aspire to success. Similarly, the notion of resistance has to be preceded by the realisation of being othered and the development of a perspective different from the dominant group, i.e. perspective capital. In Chapter 7 I argue in detail how the different capitals impact each other.

3.5.2. CCW and agency

I argue that Yosso's notion of Community Cultural Wealth with its numerous capitals offers a multi-faceted framework for conceptualising agency of students of colour, which can be successfully employed in a variety of contexts (different countries and different communities of colour) (Rodriguez, 2013; Wright et al., 2010). This addressed the shortcomings of some of the other concepts building on Bourdieu's work, which as mentioned in the previous section were often employed in very specific contexts. Additionally, the flexibility of the framework means that it can keep on evolving, incorporating new forms of capitals, like perspective capital.

I argue that agency, as understood through the CCW lens, means employing and mobilising a range of capitals in order to successfully navigate the higher education field (Samuelson and Litzler, 2016; Yosso, 2005). For example, stemming from their familial, social and perspective capitals students are able to employ their navigational, linguistic, and resistant capitals to manoeuvre around the HE field to achieve success. However, agency as I theorise it based on CCW should not be seen as purely individual as it must not be forgotten that the production and the acquisition of these capitals is inextricably linked to processes of socialisation through family, school, community and beyond (Bourdieu, 1997; Bourdieu and Passeron, 1990). So, while students still operate within the structures of whiteness (and other oppressive forms), using the CCW capitals allows them to achieve something that the educational field was not designed for, i.e. success of minority students, which, I argue, can be seen as agency.

3.6. Conclusions: the framework coming together

In this chapter I have laid out the conceptual framework guiding my research. I employ intersectionality to help situate participants in unique positions between privilege and disadvantage, highlighting the differential power relations (Wijeyesinghe and Jones, 2014). In helping understand the structures in which research participants are situated and the mechanisms operating within these structures I called on the work of Bourdieu and Critical Race Theory.

Seemingly, the two deal with different issues, as Bourdieu's work has concentrated on social class, whereas CRT emphasises 'race'. However, the two frameworks overlap in certain aspects. In particular, I have highlighted Bourdieu's (1976) work on the reproduction of (dis)advantage in schools through meritocracy, and CRT's critique of colour-blindness which upholds White privilege by disregarding the power relations and structural, historically derived inequalities inbuilt into the system of the recognition of merit (Gillborn, 2008).

As I argued, this reproduction of (dis)advantage happens, using the languages of both CRT and Bourdieu, because the dominant group (White middle/upper class) has the privilege of implicitly dictating the rules of the field (in this case intersecting racial and class fields) without acknowledging their agency (whiteness and middle-class capitals) and instead masking it in the discourse of 'norm' (meritocracy). In education then, both CRT and Bourdieu acknowledge that the educational structures, practices and discourses have been constructed in a way that continues to oppress and marginalise non-dominant groups, while simultaneously, and somewhat self-contradictory, providing a potential for emancipation and empowerment of selected few from these groups (Bourdieu and Passeron, 1990; Lynn et al., 2013; Yosso, 2005). This, I argued, can be seen as the agency of students of colour against the raced, classed and gendered structures of Whiteness within higher education, where the agency is operationalised by employing multiple economic, cultural and social capitals as conceptualised in the CCW framework.

Therefore, I have argued that employing intersectionality, CRT and Bourdieusian analytical tools can be used together to explain (better than on

their own) the mechanisms of the reproduction of (dis)advantage at both institutional (universities playing to secure high-status position within the hierarchy of the HE field) and individual level (BME students playing their capitals to navigate the field of HE). I further argued that combined in the framework of Community Cultural Wealth (CCW) they can begin to indicate some of the sources and mechanisms of agency of BME students in a flexible and multi-faceted way. My other contributions to knowledge in this chapter include emphasising social class interactions with the CCW framework (i.e. within linguistic capital), the introduction of perspective capital to the framework and further conceptualisations of how the multiple capitals intersect and impact each other. Thus, the framework is the lens through which the data in this research is interpreted and along with the next chapter, which explains in detail how the data was collected and analysed, these two chapters provide an understanding of the methodological and theoretical approaches in the project.

4. METHODOLOGY

4.1. Introduction

The previous chapter laid out the theoretical assumptions informing this thesis, arguing that the combination of CRT and Bourdieusian thinking tools, particularly as conceptualised by Yosso's CCW provided a robust intersectional framework for analysing racist structures within higher education and the agency of BME students to navigate through the field of PG education. It is now time to turn to the analysis of data collected in this research. In this chapter I explain the approaches, methods and tools used to conduct the inquiry. Together with the theoretical framework chapter this section provides an understanding of how the data was collected and analysed. In this chapter I will argue for the appropriateness of the use of the CRT-informed methodology in this research project, which (1) emphasises the intercentricity of 'race' in the research process, i.e. intersectional analysis which always includes 'race', (2) foregrounds the experiential knowledge of students of colour while (3) playing particular attention to reflexivity and its connotations with knowledge production, (4) as well as the critical character of the research being dedicated to social justice. I will further argue that this approach addresses the shortcomings of CRT scholarship as identified by Baber (2016), i.e. disconnect between theory and analysis, lack of interdisciplinarity, and lack of diverse sources of data.

The study explores the experiences of British Black and Asian students in postgraduate (PG) education, in particular in STEM courses, and the institutional factors that impact their journey to and through PG education, including the role of Widening Participation. As they are underrepresented in postgraduate education, particularly in postgraduate research (PGR) degrees, the students making it to that stage can be viewed as successful and exceptional (Bourdieu and Passeron, 1990). As the study is framed through the lenses of intersectionality, Critical Race Theory and Bourdieusian concepts of field, capitals and habitus this success is seen as achieved against the backdrop of everyday ubiquitous racism, where minority ethnic students navigate the world of dominant groups. Thus, the methods used to explore this topic have to be appropriate to explore complex processes and personal

situations as well as the intersecting macro-structures of racism, sexism and classism, which is possible by employing a variety of methods (Baber, 2016; Smith, 1995). The chapter starts by outlining the overall approach to the research process as informed by critical 'race' methodology. I follow with a brief history of the project, which provides the context for the choice of research sites and eligibility criteria for interviewees and the split of the research into what I call phase one and two of data collection. I provide a critique of phase one's methodological assumptions and practicalities of the field work and argue that these have been addressed in phase two. I then provide descriptions of participants and university sites under investigation, along with the rational for these choices linked to under-representation of students from certain BME backgrounds in the postgraduate field. I also outline the specific methodological instruments in more detail (interviews, surveys and document analysis) before moving onto the description of the analysis process. To conclude the chapter, I deal with the issues of reflexivity and positionality, where I argue that 'race' research is complex and complicated by a variety of factors, not least by my identity as a White researcher.

4.2. CRT-informed critical approach

In this section, I explain how and why critical approach has shaped this research project. Critical research goes beyond the constructivist interpretivist approaches as it is linked to power relations and aims to "critique and challenge, to transform and empower" (Merriam and Tisdell, 2015 p. 10). Engaging in critical research means more than just explaining the world but instead it involves challenging its assumptions, questioning how power is negotiated and what societal structures reinforce power relations (Merriam and Tisdell, 2015). In particular the critical approach adopted in this project draws on critical 'race' methodology, which has been argued to disrupt racist power structures in order to promote social change within higher education (Solórzano and Yosso, 2015).

Critical 'race' methodology has been defined as an approach to research that (1) stresses the need for intercentricity of 'race' throughout the research process (2) challenges traditional research approaches by focusing on

experiential knowledge such as counter-narratives of people of colour and reflexivity, which draws attention to the role of the researcher in the investigative process, and (3) is dedicated to social justice by improving the understanding of lived experiences of people of colour and the oppressive structures of racism, sexism and classism impacting their lives (McCoy and Rodricks, 2015; Solórzano and Yosso, 2015).

As I argued in the literature review chapter, research concentrating on BME students in PG education in the UK has been very limited. Apart from research on BME students in initial teaching training courses (Bhopal and Rhamie, 2014; Butt et al., 2010; Hoodless, 2004) the majority of these existing investigations took a quantitative approach, examining the numerical make-up of the student population or gathering information for recruitment purposes, like the likelihood of their return to study (d'Aguiar and Harrison, 2015; ECU, 2015; Wakeling, 2009). However, statistics cannot give full insight into the lived experiences of students. Moreover, the use of quantitative data has been argued to often replicate mainstream assumptions about the nature of social processes, which are categorised by a shallow understanding of racism (Gillborn, 2010). That is to say, quantitative data is just as socially constructed as qualitative data, through the assumptions made, for example, on the categorisations of groups and which groups to include in data sets, which variables to include for analysis and how to manipulate the data (Gillborn et al., 2018). Therefore, following critical research approach and critical 'race' methodology, both of which rely heavily on qualitative data (Merriam and Tisdell, 2015; Solórzano and Yosso, 2015), I felt that an approach, which foregrounds qualitative data was needed in the project, in order to provide an in-depth analysis of how intersecting structures of racism, sexism and classism impact educational experience of students of colour in PG education.

Indeed, as long as 20 years ago there were voices in higher education which claimed that the lack of rich qualitative data on BME experiences could be symptomatic of racism within the industry (Wallace, 1999) and yet not much progress has been made in terms of providing more qualitative data which could help tackle racism in the HE field. This starts to paint the picture of the conditions in which BME students must operate and negotiate their success.

Therefore, in this project the qualitative data from interviews and document analysis were used to respond to all four research questions:

- 1. What is the role of WP policy in improving BME access to and success in PG education?
- 2. What is the role of institutions in shaping the experiences of 'home' BME students in PG education, with a particular attention to STEM fields?
- 3. What are the experiences of 'home' BME students in PG education, with a particular attention to STEM fields?
- 4. How do BME students negotiate their presence and success in the PG field?

However, quantitative data can also by useful. Solórzano and Yosso (2015) assert that while critical 'race' methodology has traditionally been qualitativefocused, "incorporating quantitative methodologies presents an additional method for scholars to extend their critical race praxis and their efforts for transformative scholarship, and to create socially just educational environment" (p.52). Moreover, as Gillborn and his colleagues (2018) assert, quantitative data with a caveat of being critically scrutinised, can indeed be helpful to support experiential knowledge (qualitative data). To this end, the quantitative data (survey responses), helped address mainly research questions 3 and 4. However, the aim of the survey was not to achieve statistically significant results that can be generalisable for the entire country. Not only would this require a much more statistically rigorous sampling, but to do that would be to disregard the widely acknowledged drawbacks of this method, namely, that the relatively short time and small effort put by participants into surveys can hardly fully represent their lived experiences and perceptions (Robson and McCartan, 2015). Therefore, the survey data has been used as a triangulation tool (Robson and McCartan, 2015; Solórzano and Yosso, 2015) to test whether themes observed among BME students in STEM are also observable (or not) among non-STEM and/or non-BME students.

The research questions, therefore, were on the one hand driven by the paucity of data in literature on experiences of BME students in postgraduate education

and how these can be improved, while on the other hand, along with the critical 'race' methodology they drove the methods to be used in the study.

In accordance with the critical 'race' methodology the research also sought to amplify the voices of people of colour and centre them as the "legitimate," appropriate and critical to understanding... racial subordination" (Solórzano and Yosso, 2015, p. 133). And although the data also includes voices of White university staff – these are interpreted having in mind that most White people are not aware of the CRT debates and are socialised to view the world through the majority lenses, informed by discourses of whiteness. While BME students are more likely to provide a non-majoritarian perspective on the majorityconstructed world of education, and therefore more likely to expose the deeply ingrained racism within, they cannot be assumed to be fully immune to the dangers of speaking the "master's voice" (Delgado, 2011) and therefore none of the interview data is or can be taken at face value (Gunaratnam, 2003) and the analysis of all the interviews is an interpretation informed by the theoretical lens, rather than a statement of reality/truth. This raises questions of the ethics of a White researcher exercising power over interviewees of colour. Following critical 'race' methodology, while recognising that it may be impossible to disrupt all racial power relations, these are dealt with by engaging in reflexivity, which is discussed towards the end of this chapter. The data generated by this research project (from multiple sources, details below) is used not only to describe the current situation but also to try to challenge and improve it by offering recommendations for universities to change their institutional cultures and processes, particularly by answering research questions about the utility of widening participation work in that process. Through the analysis of the use of capitals to navigate the PG field this project also seeks to empower students of colour to exercise their agency. Such stance situates this methodology in the critical research realm.

4.3. From one university to another – the background story

The development of methodology, the choice of research sites, the specification of the sample, and other aspects of doing research are never easy tasks and require a lot of preparatory work. And even once these are agreed upon, real-

life research often looks very different from the original plans (Robson and McCartan, 2015; Silverman, 1997). Human factors – such as gate keepers (i.e. people through whom access to a research site or to participants is negotiated), participants, supervisors and fellow researchers as well as situational factors – context, political climate or current affairs can have significant impact on the research process. Therefore, in this section I explain the reasons behind splitting the research into two phases.

At the time of writing this chapter I am enrolled as a PhD student at the University of East London (UEL). However, the story of this research initially started at a different institution, where I was recruited as a fully funded PhD student and research assistant to work on an international research project investigating experiences of BME students in postgraduate STEM education. Thus, some data used in the current PhD come from this initial project (detailed later on) which I refer to as phase one of data collection. When I joined, the project in January 2014 (with the project itself starting in September 2013) it already had a pre-defined methodology (I provide a critique of this later on in the chapter). What I refer to as the original sites i.e. the University of Confidence, University of Merit, University of Labour, and University of Books (fictional names) had also already been chosen, with the University of Benefit added by the Principal Investigator (PI) after I joined the project. The criteria for choosing staff and students to participate had also been agreed upon before my arrival to the project. While I had little say in terms of what and how the data was collected, in return for my work on the project I was allowed to use the data for my PhD. However, after 13 months the project was prematurely terminated due to withdrawal of funding by the overseas university, leaving me with a choice to continue my PhD at the same institution without funding or to seek funding at another university – which is how I found myself at UEL.

The first phase of my PhD, as I argue later on, had certain methodological design flaws, which nonetheless produced rich data that deserved to be shared with the research community. The richness of this data and the novelty of the area of investigation (BME students in PG education in England) was the reason I decided to continue with the topic and having autonomy at UEL gave me the freedom to rectify initial methodological issues.

Given the above, the following sections are split into two: first, a brief description of methodology, assumptions and choices from what I call phase one of the project – during my time at another university, which was largely decided before my joining the project, and secondly – the methodological assumptions and decisions made by me during my time at UEL.

4.4. Phase one of data collection

In this section I provide the details and critique of the research conducted during phase one. Data were collected by a team of researchers involved in the international project (American Principal Investigator, American PhD student and me) and included semi-structured interviews with BME students in postgraduate STEM courses and semi-structured interviews with university professionals at the chosen university sites. The project also aimed to conduct follow up focus groups with the students a year after the initial interviews and obtain institutional statistical data to document enrolments and completion rates of BME students in PG STEM courses. However, the project was terminated before this happened.

The below extract from the project's brief defines its aims as:

This proposal represents a three-year exploratory comparative study of the participation of minority students in STEM disciplines in the United States and England in order to comprehend salient factors contributing to successful entrance, matriculation, and completion of STEM graduate degrees.

The "salient factors" were further described as "sociocultural, academic, and policy dynamics that help explain the phenomena contributing to the different outcomes". In detail, the objectives of the study were to:

- Document the enrollment, matriculation and graduation rates of graduate STEM programs in select American and English universities.
- 2. Identify and compare factors impacting the participation in graduate STEM education of African American and Mexican/Hispanic American students in the United States to those affecting African English, Caribbean English, and Pakistani English students in England.
- 3. Analyze how written and voiced university policies in the two nations may affect the entrance and degree completions of diverse populations in STEM fields.

- 4. Examine the interaction of the above-mentioned policies with various dimensions of student diversity such as class, gender, and race.
- 5. Articulate the potential opportunities for urban/metropolitan universities in both countries to contribute more effectively to recruit, retain, educate, and graduate future minority STEM professionals.
- 6. Present a critical examination of cross-national lessons regarding "minority students" that can be learned by comparative analyses between the two nations in order to enhance successful programs and operations in the United States that have not been undertaken in recent years.

Data was collected from May to December 2014.

4.4.1. Research sites

This sub-section provides information about the choice of the research sites. English university sites were chosen by the PI of the international project (with the agreement of the co-PIs) based on her assumptions about the institutions' ethnic diversity of students (taken from the university websites), location in urban agglomerations of more than 500,000 people and the institutions' research profiles.

Initial sites were (fictional names):

- University of Confidence
- University of Merit
- University of Labour
- University of Books
- University of Benefit (added in July 2014)

Further details about the universities, i.e. their pen portraits, are in the' final data' section of this chapter.

Access to the research sites was initially negotiated by the PI/co-PI and reconfirmed by me upon meeting with the relevant contacts who then became the gate keepers i.e. people who would be key in helping obtain data and volunteers for the research (Merriam and Tisdell, 2015): the head of graduate school (University of Confidence), pro-vice-chancellor (University of Merit), head of STEM faculty (University of Labour and Books). Access to the University of Benefit was dealt with by the PI directly. The aim of the meetings was to clarify the focus of the research ('home' BME students in PG STEM), what would be required from each university and to ascertain access to data (people).

Due to low numbers of student volunteers the PI took a decision to add another institution. Based on the number of eligible BME students and the proximity of the institution to her base in London the University of Benefit was added in July 2014.

4.4.2. Interview participants

This sub-section details the recruitment and eligibility of both staff and student interview participants. Eligible participants were recruited through convenience sampling (Merriam and Tisdell, 2015) as to cause as little disruption to universities as possible. This meant allowing a level of flexibility as to how the institutions recruited participants, which was done either by university staff centrally sending emails and newsletters to all students (University of Confidence and University of Labour) or by e-mailing staff within STEM departments who then e-mailed their students (University of Merit, University of Books and University of Benefit). Neither of the approaches (direct/central e-mail or staff e-mail) seemed to be more effective than the other as the final numbers of interviewed students depended on the critical mass (actual number rather than the proportion) of BME students who met eligibility criteria at each institution, with higher overall numbers of BME students at an HEI resulting in higher numbers of volunteers.

Staff at all universities were recruited via convenience and snowballing sampling (Merriam and Tisdell, 2015), i.e. gatekeepers personally contacted key members of staff who they thought met the eligibility criteria (below) and in turn these staff members indicated other potentially important informants during our interviews.

Students' eligibility criteria were as follows:

- Studying a STEM subject excluding medicine and dentistry
- Enrolled in a postgraduate course preferably doctoral/PhD as the research was to involve follow up interviews so the assumption was that participants had to be students the following year
- Coming from particular BME backgrounds
- UK domiciled

The easiest way to determine what STEM (Science, Technology, Engineering and Mathematics) subject actually meant was to use HESA JACS 3.0 Principal subject codes classification.

(https://www.hesa.ac.uk/support/documentation/jacs/jacs3-principal).

These included:

- 1: Medicine and dentistry
- 2: Subjects aligned to medicine
- 3: Biological sciences
- 4: Veterinary science
- 5: Agriculture and related subjects
- 6: Physical sciences
- 7: Mathematical sciences
- 8: Computer Sciences
- 9: Engineering and technology
- A: Architecture, building and planning

However, medicine and dentistry were excluded due to their unique entry and progression pathways and different statuses between two countries in the project, whereby medicine and dentistry are undergraduate courses in the UK but postgraduate in the US.

The experiences and issues of Black and certain Asian communities in the UK are fairly well researched at earlier educational stages (UG and pre-university) (Bhatti, 2011; Richardson, 2009; Warikoo and Fuhr, 2014). These, along with the ECU statistical report (ECU, 2014) of the under-represented groups in PG determined the ethnicity criteria to be limited to:

- Black or Black British Caribbean
- Black or Black British African
- Asian or Asian British Bangladeshi
- Asian or Asian British Pakistani

Due to low numbers of participants volunteering this eligibility criterion was expanded to include any mixed heritage of the above and other ethnic backgrounds. The other two main Asian groups – Asian or Asian British-Indian and Chinese were excluded as they are over-represented (Advance HE, 2018c; ECU, 2014) and perform reasonably well in their UG programmes (HEFCE,

2015). However, a caveat must be made that even if these are often referred to as 'model minorities' (Gillborn, 2008) it would be wrong to assume that their experiences are unproblematic, just like it would be wrong to homogenise experiences of students who participated in the research just because they identify with a particular ethnic group (Gunaratnam, 2003).

UK domicile status was chosen as it is impossible to account for international students' backgrounds, diversity of educational systems or different societal context in relation to racism. This has been later narrowed in phase two of the project (see below).

Overall 17 students were interviewed who met the criteria out of the target of 40. An example of recruitment letter sent to students is in Appendix 1.

University staff, both academic and non-academic (support/professional) were eligible if they had impact on the admissions of PG students in STEM areas – either directly making decisions (e.g. admissions officers, admissions tutors) or at policy level (deans, senior management team), or impact on student experience.

Overall 33 staff members were interviewed, however I participated in only 18 of these.

4.4.3. Investigative tools

This sub-section outlines the tools of data collection.

Data design included:

- Interviews with students
- Interviews with university staff
- Follow up focus groups with students (never collected due to premature project termination)
- Analysis of university policies and data on enrolment and completion of BME students in STEM (never collected due to premature project termination)

Semi-structured interviews with students explored their family unit (parental occupation and education and other proxies for class like books at home and use of computer), school environment (perception of school ethnic makeup, ethos, experiences at school, attainment), and experiences of higher education (feeling of belonging/exclusion, relations with peers/academics/supervisors). A detailed interview schedule is in appendix 4

The semi-structured interviews with HE staff explored the admissions policies and processes, as well as factors, which could increase participation of BME students in PG STEM courses.

A detailed interview schedules is in appendix 5

4.4.4. Critique of phase one and changes for phase two

Looking back at the phase one of the project (i.e. the research done as part of the international comparative project) there were several points of criticism that could be made, which I attempted to address in phase two. These were to do with the choice of analytical frameworks, choice of methodology and investigative tools, practicalities of data collection and my agency in deciding the above.

First of all, having joined an already existing project I had almost no say in the design of the project. This was a major drawback, not so much of the funded project, but in relation to my PhD. I rectified this in phase two by choosing the framework and designing the methodological instruments with full autonomy. For example, one of the issues, was the fact that there was no comparison between BME and White students. While CRT as a methodology foregrounds the voices of people of colour, the idea behind adding an element of direct comparison between White and BME students within the survey (quantitative data) was to strengthen the findings, especially when presenting them to the actors of the PG field who have the power to enact change—be it institutional level policy makers or wider. In that sense my aim was to fulfil the requirements of critical methodology as not only describing the existing educational context but also challenging it (Merriam and Tisdell, 2015).

While the longitudinal design of research is often praised (Gunaratnam, 2003; Merriam and Tisdell, 2015), the original form/design of it as focus groups was not workable. Given how difficult it is to organise such focus groups, and the fact that initial interviews concentrated heavily on pre-university experiences, I decided to conduct follow up interviews instead, in order to concentrate on postgraduate experiences which could potentially be sensitive. In these situations individual semi-structured interviews are seen as a better method over focus groups, which may not be conducive to discussing potentially sensitive and highly personal issues among multiple strangers (Merriam and Tisdell, 2015).

One of the original project's objectives was to document enrolments and completions of BME students in participating institutions, for which the project aimed to obtain institutional data. However, due to the early termination of the international project, access to university wide student data became impossible as the institutions were not prepared to provide these data anymore. Instead, I opted for the analysis of easily accessible documents – such as prospectuses, annual equality reports and national policy documents (more details further on in the chapter).

The original project also used a back-stage/front-stage framework, which was meant to compare official *de jure* documents/policies (obtained from universities) with *de facto* practices (obtained through interviews). Front-stage/back-stage framework was also abandoned, as I felt that CRT and Bourdieusian thinking tools were sufficient frameworks to explain the often hidden mechanism of the reproduction of the status quo (Rollock et al., 2015).

The choice of universities by the PI was also problematic – in that it was based on information provided on respective institutional websites, which was not accurate. For example, while the University of Labour said on its website that 48% of its postgraduate students were BME, it did not make it clear that the number also included international students, and as it later transpired only 5% of the PG STEM cohort were home BME students. This meant that the recruitment of students from that university was very difficult and in the end no students were recruited from the University of Labour to participate in

interviews. This was rectified in phase two when contacting new universities to participate in the survey, where the institutions were chosen on the basis of their actual numbers of BME home students in PG STEM education.

The international project had inbuilt yearly check-up points, for which initial analysis of data was conducted. This analysis, which I conducted, convinced me that the data was presenting rich and valuable perspectives of staff and students, which deserved to be shared with the wider research community, but needed fortifying by further study, which I conducted in phase two.

4.5. Phase two of data collection

In this section I provide details of empirical research undertaken during phase two. Phase two was conducted after I transferred to UEL and therefore I had full autonomy over the choice of methods and eligibility. And so, this phase included:

- Follow up interviews with BME students interviewed originally,
- Survey of PG students
- Document analysis (national and institutional policy and marketing materials).

Data was collected from June to September 2016.

4.5.1. Follow up interviews

The eligibility criteria for the follow up interview were the same as outlined in phase one and limited to the already interviewed students, but UK domiciled status was further restricted to having completed at least secondary school in this country. This meant that out of the 17 students who were interviewed only 15 were eligible as 2 only came to the UK to do their undergraduate degree. This was done because students who come to the UK to do their degree here are registered as international students paying international fees and are likely to come from very different socio-economic and national backgrounds. Additionally, they grew up in different realities to students who grew up in the UK – so their experiences and interpretations of these may vary significantly to 'home' students.

Out of the 15 students who participated in initial interviews 11 responded to the e-mail request for a follow up interview and 10 were interviewed, while one student who initially expressed interest in the interview became unresponsive during the period of data collection.

Semi-structured interviews were chosen as a tool for the follow up phase as these are well suited for exploring complex and personal issues (Smith, 1995). They allow the flexibility to focus both on issues important for the researcher and for the participants. The questions concentrated on students' current educational experiences. This allowed me to explore students' perspective on their experiences having additional two years in postgraduate education. Interviews as a tool have been accused of being set in a masculine paradigm which builds a hierarchical barrier between the researcher and the researched (Oakley, 1981). To counteract this Oakley (1981) proposed that the researcher should be invested through their identity in the process. This is why the interviews included an element of self-disclosure about my identities (more on this in the positionality subsection) as well as, where it felt appropriate, sharing my perspectives, and often frustrations, at the current, inherently racist, state of the world and education, as informed by CRT or my experiences of discrimination as a Polish person.

A detailed interview schedules is in Appendix 6

4.5.2. Student survey

This sub-section explains the considerations in choosing the sites and student eligibility to participate in the survey. The aim of the survey in phase two was to test if the experiences, issues and patterns of success identified in the interviews with BME students in STEM were also observable (or not) among White and other ethnic groups as well as students from non-STEM subjects. The idea was to address the drawbacks of the initial methodology which only included BME students in STEM and while amplifying the voices of these students is key, it would have been difficult, without including other students, to know if the experiences of BME STEM students were unique or observable more broadly.

The survey explored the themes identified through initial analysis of the first set of student interviews, for example, the importance of family influences, experiences of information, advice and guidance (IAG), reasons for interest within the given discipline area, influence of previous education and childhood neighbourhood and schooling.

A detailed interview schedules is in Appendix 7

To be included in the survey students had to meet the following criteria:

- Be enrolled in a PG course including PgDip, PgCert, master's or doctoral studies (PhD or other professional doctorates)
- UK domiciled and have lived in the UK since at least 16 years of age
- Any subject area and any ethnicity was eligible
- Be enrolled in one of the survey institutions (see below)

Similarly to interviews, for purposes of consistency, only home/UK domiciled students who have lived in the UK since at least 16 years of age were eligible due to the same reasons as above and for comparability purposes.

Using data received from the University of Merit's planning office about the numbers of BME students in PGT and PGR education in 2012/13 in England I contacted (via email) ten universities with significant BME numbers in PGR. Five were original sites and five new ones. Contacts (from public websites of the universities) with people responsible for WP or PG policy or PG recruitment were made, such as Heads of Widening Participation, Heads of PG recruitment, or Registrars. Out of the five original sites three agreed to take part – University of Merit, University of Labour and University of Benefit. Example letters inviting institutions to participate in phase two are in appendix 2 (new universities) and 3 (continuing universities). However, during the course of the summer 2016 (data collection period) University of Benefit indicated issues around "survey fatigue" i.e. over-burdening students with too many surveys and in the end became unresponsive and did not run the survey. Out of the five new sites approached three agreed to participate. These were (fictional names):

- University of Education

- University of Knowledge
- University of Warrant

More detailed descriptions of the universities are presented in the following sections. Participating universities were tasked with promoting the survey to their students and did it by emailing it directly to the students and including the information about the survey in their student newsletters. Although the promotional/recruitment text for all the universities was the same it resulted in very different success rates, with the University of Warrant only producing 6 respondents. Because the promotion was left to the universities it is difficult to determine what exactly went wrong or right at each institution. On reflection, I would have liked to have more control over the recruitment process, however, that did not seem like a feasible option at the time, as the survey was not a priority for the participating institutions and so I had to rely on gatekeepers and processes internal to each university, which seems to be a common struggle for researchers (Gunaratnam, 2003).

4.5.3. Institutional and national documents

This sub-section outlines which documents, and why, where collected for this research. Three types of documents (statistics, policy documents and prospectuses) from two different types of sources (national and institutional) were chosen. Firstly, statistical data in the form of national statistical reports (Advance HE, 2018c; ECU, 2015) and annual equality reports, which institutions have to publish under the provision of Equality Act 2010 were used to provide a better understanding of the numerical composition of the student (and staff) body in respective HEIs. Secondly, documents about WP policy were chosen from (1) quasi/governmental agencies such as Office for Fair Access and Higher Education Funding Council for England, now both integrated into Office for Students and (2) institutional WP policy documents in the forms of Access Agreements and Access and Participation Plans. These were chosen as the basis for the analysis of WP policy and for comparison with WP practice (as derived from staff interviews), which helps answer the final research question about the role of WP in improving access and participation of BME students in PG education. Thirdly, postgraduate prospectuses from five original phase one sites (University of Confidence, University of Merit, University of

Labour, University of Books and University of Benefit) were chosen to help understand the institutional habitus (Reay et al., 2001) of the HEIs, which can help respond to the research question about the impact of institutions on student experiences. Furthermore, prospectuses have been argued to be very influential in prospective students' decision making process about PG education as they include information about admissions and other policies which students utilised in the process (Mellors-Bourne et al., 2014; Mowjee, 2013).

4.5.4. Critique of phase two

While phase two has addressed many shortcomings of phase one, I argue, by affording me full autonomy over the project, resulting in a more coherent design of research questions, theoretical framework and methodology, it was not without its issues. The biggest critique of phase two has to do with the quantitative data element. Firstly, not all the universities engaged with it in the same way, with University of Warrant producing only 6 responses, and University of Benefit not administering the survey at all despite initial agreement. In the future I would approach more universities to have a bigger pool of respondents.

This meant that the number of BME respondents was too small to disaggregate it by individual ethnicities and they had to be analysed as one group. In the future a more targeted approach to recruiting BME respondents should be applied.

The final question on the survey asked about students' perception of disadvantage in education. Unfortunately, it was formatted with binary answers, as opposed to the majority of other questions which were on a 5-point Likert scale from 'strongly agree' to 'strongly disagree' which made comparing them with the final question impossible.

And finally, on the point of the survey, not using a standard methodology of parental professional classification (NS-SEC) to determine students' socio-economic class can be seen as a drawback. This, however, was directed by two factors. Firstly, it is a time consuming and often arbitrary process to classify a profession as for example an engineer can be someone with pre-university

qualifications as well as someone with a postgraduate degree. Secondly, and perhaps more importantly, NS-SEC classification. i.e. a classification used in government and Office of National Statistics reports based on classification of occupations, while useful to determine aspects of economic class positions does little to explain actual socio-cultural capitals and social class positions, which can be quite a complex phenomenon to determine (Connelly et al., 2016; Rollock et al., 2015). Other proxies have been shown to be linked with social class positions: home ownership (Burrows, 2003), book ownership (Ludvigsen, 2014), parental education (Connor et al., 2001), and professional status of one's occupation (Connelly et al., 2016). They encompass not only economic capitals but also wealth and cultural capitals (objectified and institutionalised). While not ideal they can provide a fuller picture than just NS-SEC, therefore, the survey asked about these four components as proxies for social class.

As far as the analysis of documents is concerned, the lack of access to internal institutional documents meant that only data publicly available, such as equality reports or access agreements could be used. The drawback of this was that due to a degree of freedom in how these documents can be presented, not all the data was available or comparable between institutions.

Other issues stemming from researcher's identities versus those of participants, particularly 'race' have had an impact on data generation. These are discussed in the positionality section, later on in this chapter.

In summary, phase two complemented and enhanced phase one. Triangulation of different sources provided a robust data set for analysis (Robson and McCartan, 2015; Solórzano and Yosso, 2015). This was appropriate to answer research questions about student experiences, institutional influences on these experiences, including the role of widening participation policy, and how BME students negotiate success.

4.6. Ethics

The research had ethical approvals from both the previous institution where collection of data in phase one took place as well as from the Research Ethics

committee at UEL for phase two (see Appendix 8). The approval also includes the issues of intellectual property resulting from the transfer, which were dealt with by the two universities prior to the approval. This meant that only data from phase one interviews where I participated was allowed to be used in the final PhD thesis. This limited the number of staff interviews to 18 with the number of student interviews, given additional eligibility criteria falling to 15.

Furthermore, the research followed ethical guidelines of the British Educational Research Association (2011)². Participants were briefed in on the scope of the research and its possible applications and publications. They signed informed consent forms which allowed them to withdraw at any time (see appendix 9). The anonymity of the respondents was guaranteed by assigning them pseudonyms (chosen by participants themselves), changing names of degrees and departments into closely matching but more generic names, assigning fictitious names of universities (chosen by the researcher). Also, all the references to other names and geographic places were removed. The ethics of conducting 'race' research by a White researcher are dealt with in the positionality section of this chapter.

4.7. Final data

This section presents the final data that was used in the PhD research. I argue, following others, that employing multiple data sources allows for a triangulation which makes the data more robust (Robson and McCartan, 2015; Solórzano and Yosso, 2015). Table 4.1. breaks down what type of data was collected and how many respondents were interviewed or surveyed at each site. Where documents were collected for that university these included:

- Postgraduate prospectus 2016-17
- Annual equality report 2016
- Access agreement 2014-2015
- Access and participation plan 2019-2020

 2 Although newer ethical guidelines from BERA exist, these were only published in 2018, which was after data collection.

Table 4.1 Type and number of data units collected

| Institution | Type of engagement (what data was collected) | Number of interview respondents (staff) | Number of interview respondents (students) | Number of survey respondents (students) |
|--------------------------|--|---|--|---|
| University of Confidence | Interviews Follow up interviews Documents | 6 | 9 + 7 follow up | NA |
| University of Merit | Interviews Follow up interviews Survey Documents | 6 | 4 + 1 follow up | 69 |
| University of Labour | Interviews Survey Documents | 3 | 0 | 51 |
| University of Books | Interviews Follow up interviews Documents | 3 | 1 + 1 follow up | NA |
| University of Benefit | Interviews Follow up interviews Documents | 0 | 1 + 1 follow up | NA |
| University of Education | Survey | NA | NA | 39 |
| University of Knowledge | Survey | NA | NA | 79 |
| University of Warrant | Survey | NA | NA | 6 |
| Total | | 18 | 15 + 10 follow up | 244 (+2 unknown institution) |

4.7.1. University sites

The following information has been taken from the university websites' "about us" section (accessed 15 May 2017), their Equality and diversity annual reports for 2016, also published on university external websites, the Higher Education Statistical Agency (HESA, 2017) Table 1 - HE students by HE provider, level of study, mode of study and domicile 2015/16. The data on the proportion of eligible BME students in STEM subjects comes from the data provided by the

University of Merit's planning office and is for 2012/13. Although it is dated, it was the most accurate in terms of the breakdown of the location of eligible students. Each university had a drop in 'home' BME numbers going from UG to PG and in particular PGR study.

Universities were divided arbitrarily into the following size categories:

- small student population under 10,000,
- mid-size 10,000-20,000 students
- large with a population above 20,0000.

University of Confidence - Is a large research-intensive university in London, part of the Russell Group with a high position in national and international league tables. According to its website in 2015-16 more than half (52%) of its students were at postgraduate level and 36% were from a BME background. It describes itself as a university created to open up education to people on equal terms.

University of Merit – is a mid-size research-intensive university in London, part of the Russell Group, with 28% of its students being at postgraduate level in 2015/2016 of which 40% were non-White. The proportion of BME students meeting eligibility criteria for the interviews was 15%. The university prides itself on research excellence and public community engagement.

University of Labour – is a mid-size research-intensive university based in the Midlands. It describes itself as open to all based on talent, not privilege. Over 35% of its students were postgraduate in 2015/2016 (HESA) and according to its website in 2014/15 as much as 48% of PG students were BME. However, this number includes a largely international population and the actual proportion of BME students meeting eligibility criteria (i.e. in STEM and UK domiciled) was significantly lower at only 5% (HESA).

University of Books – is a large research-intensive university in the South West of England with over 24% of its students at postgraduate level in 2015/2016. The overall proportion of BME students, including UG, PG as well as international was 21%. The University concentrates on research, student

experiences (understood, according to its website, as leading to global career outcomes) and sustainability.

University of Benefit – is a mid-size research and teaching-intensive university in London with 33% (HESA) of its students in postgraduate education. The University prides itself on its founding principles of access for all.

University of Education – is a mid-size teaching-intensive, modern university in London with a diverse student population and 24% of its students at PG level.

University of Knowledge – is a large teaching-intensive, modern institution in London with no single ethnic majority, the biggest minority group being White at 46% in 2016/2017 (university website) and 22% (HESA 2015/2016) of all its students being in postgraduate education.

University of Warrant – is a large teaching-intensive, modern university in the South West of England; 15% of it undergraduate students were BME (university website, 2015/2016) and 24% (HESA 2015/2016) were postgraduates. It has a civic element written in its mission for the betterment of cities and lives.

Table 4.2. summarises the information from the description above

Table 4.2 Description of universities

| Institution | Type (research or teaching intensive) | Size (small <10k, mid- size 10k- 20k; large >20k students) | Postgraduate population as proportion of all students (2015/2016 data from HESA) | BME proportion where known (source: institutional websites, and equality reports 2016; data may not be comparable) | Selected BME in PG as proportion of total PG (2012/13 data from University of Merit's Planning Office) |
|-----------------------------|--|---|--|--|--|
| University of Confidence | Research | Large | 52% | 36% | 6% |
| University of Merit | Research | Mid-size | 28% | 40% | 15% |
| University of Labour | Research | Mid-size | 35% | 48% (includes international) | 5% |

| University of | Research | Large | 24% | 21% (includes | 2% |
|---------------|----------|----------|-----|---------------|-----|
| Books | | | | international | |
| | | | | and UG) | |
| University of | Research | Mid-size | 33% | No | 12% |
| Benefit | and | | | information | |
| | teaching | | | | |
| University of | Teaching | Mid-size | 24% | No | 20% |
| Education | | | | information | |
| University of | Teaching | Large | 22% | 54% | 17% |
| Knowledge | | | | | |
| University of | Teaching | Large | 24% | 15% | 3% |
| Warrant | | | | (UG only) | |

4.7.2. Interviews - students

The table 4.3. below shows the breakdown of students with some basic information about them, including the university they were studying, the course and subject area as well as the ethnic background and gender. This information was acquired from students via e-mail as they were volunteering their participation in the project. Students' ethnicity was ascertained by asking students if they fitted into one of the ethnic group categories as per HESA (Black or Black British – Caribbean, Black or Black British – African, Asian or Asian British – Bangladeshi, Asian or Asian British - Pakistani) a mix of the any of them or another, self-identified ethnicity.

Table 4.3 Interviewed students

| Pseudonym | Institution | Ethnicity | Course and STEM area | Gender | Follow up interview |
|-------------|---------------------|-----------------------------|-----------------------|--------|---------------------|
| Adele | University of Books | Black or Black British - | PhD Climate change | Woman | Yes |
| | | Caribbean | | | |
| Sebastian | University | Asian or Asian | MSc | Man | Yes |
| | of Benefit | British - | Mathematics | | |
| | | Bangladeshi | | | |
| Buzz | University | Asian or Asian | MSc | Woman | Yes |
| | of Merit | British - | Forensic Science | | |
| | | Pakistani | | | |
| Elena | University | Asian or Asian | PhD | Woman | |
| | of Merit | British - | Nanotechnology | | |
| | | Pakistani | | | |
| Halle Berry | University | Black or Black | PhD | Woman | |
| | of Merit | British - African | Medical | | |
| | | | Engineering | | |

| Rachel | University of Merit | Mixed - White PhD V and Black Physics African | | Woman | |
|------------------|---------------------------------------|---|----------------------------------|-------|-----|
| Annabelle | University of Confidence | Black or Black British - African | PhD Computer Science | Woman | Yes |
| Christiana | University of Confidence | Black or Black British - Caribbean | PhD Physics | Woman | Yes |
| John McIntyre | University of Confidence | Black or Black British - African | PhD Financial Mathematics | Man | Yes |
| Lola | UCL University of Confidence | Black or Black British - African | PhD Epidemiology | Woman | Yes |
| Marian | University of Confidence | Asian or Asian British - Pakistani | PhD Biomedical Imaging | Woman | Yes |
| Nana | University of Confidence | Black or Black British - African | PhD Mechanical Engineering | Woman | Yes |
| Vincent | University of Confidence | Black or Black British - African | PhD Biomedicine | Man | Yes |
| Tom | University of Confidence | Asian or Asian British - Bangladeshi | PhD Biophysics | Man | |
| Hannah | University of Confidence | Black or Black British - African | PhD Cell Biology | Woman | |

Overall the table shows that there were 15 student interviewees with four men and 11 women who participated in the first round of interviews and of these three men and seven women in the follow up interviews. There were two Black or Black British – Caribbean participants, seven Black or Black British – African, two Asian or Asian British Bangladeshi, three Asian or Asian British Pakistani and one Mixed – White and Black African.

4.7.3. Interviews - staff

I was present in 18 out of the 33 staff interviews conducted in phase one (as part of the international research project) therefore to adhere to the intellectual property rights and the conditions of use of data negotiated with the university where I started my PhD I was only able to include the interviews in which I

participated. The below table (4.4) gives a summary of staff participants including their department and position.

Table 4.4 Interviewed staff

| Pseudonym | Gender | Institution | Department | Role |
|-----------|--------|-----------------------------|---|--|
| Dolly | Woman | University of Books | Education | Senior Lecturer (Science Education) |
| Fred | Man | University of Books | Computer Science | Graduate Dean and Head of Graduate School |
| Sam Brown | Man | University of Books | Mathematics | Graduate Dean |
| Lupe | Man | University of Labour | Mathematics | Head of Department |
| Robert | Man | University of Labour | Computer Science | Head of Department |
| Scott | Man | University of Labour | Chemistry | Postgraduate Tutor |
| Barbara | Woman | University of Merit | Human Resources | Equality and Diversity Officer |
| Bob | Man | University of Merit | Chemistry | Assistant Dean |
| Catherine | Woman | University of Merit | Biomedicine | Lecturer |
| James | Man | University of Merit | Electrical Engineering and Computer Science | Director of Graduate Studies |
| Kathleen | Woman | University of Merit | Marketing and Communication | Head of Widening Participation |
| Manhattan | Woman | University of Merit | Senior Management Team | Deputy Vice- chancellor |
| John | Man | University of Confidence | Computer Science | Graduate Tutor |
| Lizzy | Woman | University of Confidence | Admissions | Head of Graduate Admissions |
| Mark | Man | University of Confidence | Mathematics | Graduate Admissions Tutor |
| Peter | Man | University of Confidence | Statistics | Head of Department |

| Raul | Man | University of | Graduate | Head of |
|-------|-------|---------------|---------------|---------------|
| | | Confidence | School | Department |
| Susan | Woman | University of | Student Union | Sabbatical |
| | | Confidence | Student Onion | Officer (BME) |

The names of departments and positions reported in the table above are not exact names but rather their closest, generic equivalents, given in order to ensure anonymity of the participants.

Overall seven women and 11 men were interviewed. Their ethnicity data was not collected but only one woman (Susan, sabbatical officer) could be racialised as Black. Additionally, five other staff were foreign born and raised (as reported in their interviews) but could be racialised as White.

4.7.4. Survey – respondent characteristics

The survey was started by 421 people however 23 of these were empty answers and after excluding those who came to the country after turning 16 years of age (n=139) or did not provide a response about their age of arrival (n=13) that number fell to 246, however, two further people did not state which universities they were studying at.

Among the respondents 158 (65%) identified as cis-gendered women, 83 (34%) as cis-gendered men and 3 (1%) as trans or gender non-conforming.

Respondents had a slightly different age profile with White students being more likely to be older, with 30% of White students aged 40 and above and only 18% of BME respondents from that age range (see Appendix 14 figure 4).

There were 188, or 77% of White respondents. This included White, White-Scottish, and White-Other. BME students made up 23% of respondents (57 people) and included all other ethnicities. Of this 31, or 13% of all respondents were from the selected BME backgrounds under the investigation, i.e. Black-British Caribbean, Black-British African, British-Asian Pakistani, British-Asian Bangladeshi (however, there were none among the respondents), Mixed-White-Black African, and Mixed-White and Black Caribbean. Due to low numbers of BME student respondents most statistical analyses have been conducted on

the broad category of BME and "selected BME" (i.e. a subsection of all BME whose ethnicity met interview eligibility criteria) grouped together rather than the individual breakdown of ethnic identities. Mixed White and Asian background BME students were included in the overall BME category (rather than 'selected BME') as it was impossible to determine whether they were Indian, Chinese, Pakistani or Bangladeshi mix. See Appendix 14 figure 1 for details.

Overall there was a higher proportion of White respondents who were undertaking doctoral studies, and only 5 respondents from the selected BME backgrounds studying at this level. For the purposes of the analysis PGT students are those studying for a master's degree or other PGT qualification, and PGR students are those in a PhD or other professional doctorate programme (For details see Appendix 14 figure 2)

Compared with the national picture (ECU, 2017) 'All BME' respondents at PGT level were overrepresented in this study (25% respondents vs 21% nationally), while 'all BME' respondents in PGR courses were underrepresented (13% respondents vs 17% nationally). It has to be noted that the survey was not meant to be representative of the wider HE population and its results are limited to this study only.

The proportions of BME and White students were similar at both types of institutions (modern: University of Knowledge, Education and Warrant versus research-intensive: University of Merit and Labour) for both PGT and PGR courses, with more respondents undertaking PGT courses in modern universities and more PGR respondents being from research-intensive universities (see Appendix 14 figure 3).

In terms of the discipline split, there was no difference between BME and White respondents with roughly 44% of all doing a STEM related course and 56% doing a non-STEM course (see Appendix 14 table 1)

Ascertaining one's socio-economic class is a difficult task. There is no agreement among sociologists as to what exactly constitutes and determines it – ranging from economic aspects such as income or wealth to cultural tastes,

behaviours, and capitals or a combination of all of the above (Wakeling, 2016). For the purposes of this research it was done by a series of proxies for economic and cultural capitals. Self-reported home ownership status of participants' parents and their professional job status were used as proxies to indicate economic capital. To measure cultural capital proxies in the form of parental education and number of books at home were used.

The survey data reveals that both White and BME respondents had similar levels of (1) parental education (see appendix 14 figure 5) oscillating at about 50% of parents with a university degree and (2) perceived numbers of books at home (see appendix 14 table 2). This can be interpreted as both groups having similar social class profiles. On the other hand, White students seemed to have a higher proportion of parents in professional employment, i.e. requiring a university degree with 58% of White students and 39% of 'selected BME' students who answered this question saying at least one of their parent had a professional job (see Appendix 14 figure 6). White students were also more likely to live during their childhood in a property owned by their parents (see Appendix 14 table 2). This can be interpreted as White students having a slightly higher level of economic capital.

4.7.5. Institutional and national documents

Institutional documents, which are widely available on the internet were collected for the five original interview sites where staff and student interviews took place: University of Benefit, University of Books, University of Confidence, University of Labour, and University of Merit. Prospectuses were collected in September 2016 for academic year 2016/17. Only the prospectus of the University of Benefit was in a paper version, the other prospectuses were in electronic (.pdf) versions. Apart from University of Labour which had separate prospectuses for PGT and PGR that year, all others combined their PGT and PGR offer into one PG prospectus. Other documents included: annual equality and diversity reports for 2016, access agreement for 2014-2015 and access and participation plans for 2019-2020 for the five research-intensive universities.

National documents included the Office for Students' guidance for the 2019-20 and 2020-21 Access and Participation Plans (OfS, 2019, 2018a) which spell out the latest policy direction of WP, as well as the WP monitoring spending report from the Office for Fair Access (OFFA, 2016)

4.8. Analysis

In this section I outline how the different sources of data were analysed. While the section is organised by investigative tools/type of data collected, the actual analysis within the findings chapters is organised in a way which closely connects and intertwines the qualitative with the quantitative data, thus, arguably demonstrating the strength and utility of employing the various sources of data in this project. The quantitative data provides additional methods of analysis to the qualitative data driven study in order to extend critical 'race' praxis (Solórzano and Yosso, 2015) and address its critique of not exploring diverse sources of data and not linking enough the analysis with the theoretical framework (Baber, 2016).

4.8.1. Linking discourse analysis and critical 'race' methodology

In this thesis the analyses of interviews, answers to the open-ended survey question and institutional and national documents look at discourses. Therefore, it is crucial to define what is meant by discourse and how it fits within the CRT-informed critical approach. Discourse has been described as patterns of language which are socially organised (Archer and Francis, 2007). For Foucault "discourse is not simply that which translates struggles or systems of domination, but is the thing for which and by which there is struggle, discourse is the power that is to be seized" (1981, pp. 52–53). Therefore, discourse is not only a language but also a social practice, with both being simultaneously constructed by and constructing the world (Dunne et al., 2018; Hickling-Hudson et al., 2004). Thus, following constructivist approach, discourses construct not one but multiple realities (Archer and Francis, 2007). Discourse analysis, then, can help realise and deconstruct discourses, which reveals the meaning making of language, which is used to present a particular view of the world (Foucault, 1972, p. 139). Therefore, discourses serve to highlight how power structures

are being normalised as supposedly neutral and natural (Archer and Francis, 2007). For example, discourses of educational failure of White working class boys aim to normalise neo-liberal White middle-class values (of self-determination/individual responsibility), to side-line issues of BME students, and to put boys/men in the centre of attention (forgetting about girls/women) (Gillborn, 2012b).

Due to the nature of this project, and it being informed by critical 'race' methodology, discourse analysis stresses the intercentricity of 'race' and racism as a hegemonic power structure within the field of HE. Consequently, the actors in the HE field in this study can be understood as producing and reproducing racialised discourses available to them, as well as navigating these discourses by engaging in, with and against them (Chadderton, 2012b). Therefore, in this thesis I analyse how university staff engage in discourses which reproduce and maintain whiteness and White privilege within the PG field and WP policy. I also analyse how staff use the discourses of meritocracy and colour-blindness while simultaneously employing the discourses of othering, such as racialised discourses of motivations and aspirations, which reproduce and maintain the hierarchy within the HE field. Furthermore, I analyse how students engage with and against the discourses which normalise whiteness and other them.

4.8.2. Interviews

All interviews were audio-recorded, transcribed and coded using hand coding and NVivo. Coding was informed by, and closely mapped onto, the conceptual framework. During interviews I was making notes which aided me with forming follow up questions and with a recollection of key points for the later analysis stage. This actually formed the basis of initial analysis, as Merriam and Tisdell (2015) explain analysis starts already during the interviewing process. The process of coding was a multistage one. The coding happened by reading and re-reading the interviews. Some ideas for codes already developed before interviews and were directed by the theoretical framework as well as the questions, for example codes for 'science capital', 'supervisors' or 'widening participation'. Other codes emerged when reading field notes. This allowed for what I call first level coding. However, after reading the actual transcripts it transpired that the first level codes were very generic and created big

categories, which were not manageable for analysis. Therefore, the second and third level of more nuanced coding was introduced in the process of re-reading the transcripts. It was an iterative process with codes being re-evaluated and renamed as more transcripts were read in order to bring it closer to the theoretical framework. It was also a 'messy' process, by which I mean that a single quote/paragraph could have several codes attached to it, and at the same time the same code could come up in very different parts of the interview, thus creating a complex matrix. Detailed coding schema is presented in Appendix 10 (student interviews) and 11 (staff interviews).

Once the coding was completed the codes were grouped into themes. Just as the codes, the themes were hugely informed by the theoretical lenses and concentrated on whiteness, meritocracy and different forms of capitals, thus mapping closely onto the theoretical framework. The mapping of codes onto themes is presented in Appendix 13.

The close mapping of interview themes against the theoretical framework was particularly crucial in this project, on the one hand in mitigating against the dangers of re-centring White dominance of the White researcher in the research process (Chadderton, 2012b), and on the other hand to avoid the common critiques of a disconnect between the theory and analysis in CRT-informed research (Baber, 2016).

4.8.3. Survey

Quantitative data from the survey allowed for testing if the issues expressed by the interviewed BME students in STEM can be observed in wider PG populations, for example White students or non-STEM students. However, its purpose was not to provide statistically rigorous data, which can be representative of the whole PG student population in England, but rather to start to indicate any big differences between different populations and/or confirm/triangulate qualitative data. The analysis was limited to descriptive statistics as tests for statistical significance were not possible to conduct due to the sample not being randomised or nationally representative. The final question, relating to a sense of disadvantage, which was a free text question and was analysed and coded in a similar process to the coding of the

interviews, mentioned above. Appendix 12 demonstrates the first and second level codes.

Therefore, the survey collected both quantitative and qualitative data, which helps to address the common critique of the CRT scholarship that it has not employed diverse sources of data (Baber, 2016).

4.8.4. Institutional and national documents

The analysis of the documents included textual analysis (for all documents) and visual analysis (for prospectuses only). For textual analysis, the documents were read and coded with attention given to relations of power and privilege and how these were reproduced by discourses of historical, sociological and political contexts. In particular the analysis concentrated on how 'race' was being portrayed, whether it was made visible or hidden and how whiteness manifested itself. Therefore, assumption of the analysis, following CRT, was that every interaction, or in this case every discourse was shaped by 'race' and power relations connected to 'race', which in turn normalised and privileged the dominant (White) groups (Gillborn, 2012a; Rollock and Gillborn, 2011).

In terms of visual analysis, the prospectuses were eye-scanned for photographs with people, where the number of such photographs and number of people were counted. Photographs, visualisations and drawings/paining of inanimate objects (e.g. molecules, buildings) were excluded for ease of analysis. Where there were too many people to count in a picture and the image was not clear enough to distinguish people these were marked as "multiple" and "indistinguishable" respectively and were not counted. Repeated photographs (this applied mostly in the case of the two separate PGT and PGR prospectuses of University of Labour) were counted only once. Numeric data (the number of photos with BME people and the number of BME people in the photos) were compared with data from institutional equality and diversity reports for 2016, which under the provision of the Equality Act 2010 are available on external websites of each university. While marketing teams may be using photos of their staff and students or purchased stock photos, the aim of the analysis was not to attempt to describe the 'truths' presented in the prospectuses (or whether they were 'truths' in the first place), but rather to analyse the discourses

reproduced by these photos. Therefore, the CRT informed analysis concentrated on the reproduction of discourses which marked racialised differences by on the one hand normalising and centring whiteness and on the other hand exoticising difference (Gillborn, 2012a; Osei-Kofi et al., 2013; Rollock and Gillborn, 2011). Discourses of norm, power and privilege were drawn by analysing (1) where in the prospectus photos of people of colour were concentrated, for example, whether they were represented more in sections on alumni or international students' sections and (2) in what contexts they were portrayed within the photos, for example, as knowledge producers or knowledge receivers.

In summary, data analysis in this project was closely linked to, influenced by, and was influencing the theoretical framework, which addresses one of the common critiques of the CRT scholarship, i.e. the disconnect between the theory and the analysis (Baber, 2016). This iterative process of coding and recoding as well as creating new knowledge makes for a particular strength of the study.

4.9. Positionality and knowledge production

In this section I argue that reflexivity is an important aspect of knowledge production and, in accordance with critical 'race' methodology, that the racialised identities (but not only) and power relations impacted the generation of data in this research. I further argue that the interpretations of the impact of identities of both the researcher and the interviewees and the power structures are not straightforward but rather complicated, multiple and contested. Although qualitative research is designed to foreground the voices and experiences of participants, and following CRT especially the voices of people of colour, the role of the researcher in the process has to be also recognised, particularly that of a White man. However, it has to be understood that the aim of this section is not to re-centre whiteness by focusing on the White researcher, but on the contrary, by explicating the relationship between the researcher and the researched and the potential impact it has on generating data, the goal of reflexivity is to disrupt whiteness (Solórzano and Yosso, 2015). To help position myself within the research, I bring in the voices of the interviewees on the

aspects of the research process, which are not included in the findings chapters.

The scholarship on the impact of one's positionality in the research process has rich history, particularly within feminist writing (Foote and Gau Bartell, 2011; Harrell, 2015) and concentrated on such aspects as being privy to certain data due to insider-outsider status, ability to see or comprehend certain phenomena, and the hierarchical power relations between the researcher and the researched (Gunaratnam, 2003; Harrell, 2015; hooks, 1984; Pezalla et al., 2012). Thus, the researcher deciding the questions and methods, collecting and analysing data and finally writing up and publishing the findings is said to have a form of dominant power over participants and how they are represented (Kiernan, 1999; Vanner, 2015). In the context of this research project, with me as a White researcher, having this form of power, despite my anti-racist stance, poses a risk of unwittingly re-centring whiteness and White dominance (Chadderton, 2012b). Therefore, the position stemming from the identities of the researcher and the researched has to be recognised as influencing knowledge production (Merriam and Tisdell, 2015), which in turn has to be recognised as happening in a specific racialised context. According to constructivist epistemologies, a researcher does not simply collect data but is actually generating data as a result of the interactions between the researcher and the researched, institutions, and the social context (Rasera et al., 2016). Keeping up with the critical character of the research, by questioning my own impact on what and how the data is being generated I wish to challenge the assumptions of neutrality and objectivity and place them in the context of power relations, with a particular attention paid to the intercentricity of 'race' and racialised structures (Gunaratnam, 2003; Pillow, 2003; Solórzano and Yosso, 2015).

Researcher identities have been argued to have influence on what the participants say or do not say to the researcher, i.e. they impact knowledge production (Willemse, 2014). This was also the case in this research. The importance of close matching, be it through ethnicity, gender, or otherwise, between the researcher and the researched as a way of gaining insider's view has been both recognised and questioned within the research literature (Merriam et al., 2001; Merriam and Tisdell, 2015; Milner, 2007). Intersectionality

dictates that insider status is not always a given, and simple ethnic matching is not enough to elicit meaningful responses (Merriam et al., 2001).

Therefore, my identities came to fore with different strengths with different participants. The most obvious one was the fact that I am identified as White. As such, despite my anti-racist stance I was most likely seen by the participants, be it explicitly or implicitly, as benefiting from White privilege (Chadderton, 2012b). While meeting for a follow up interview with Christiana we stood next to each other by the university gate for a few seconds as if waiting for different people, before I approached her and asked if it was her. She admitted she was guite shocked that I was the researcher as she seemed to have remembered a tall man with an Afro. Despite the initial interview being conducted in the presence of me and two African American researchers – that description did not fit either of them (one short female and one short man with short cropped hair) nor did it fit me (tall White man with short straight hair). This was quite telling in that her expectations to be interviewed by a Black researcher and suddenly being confronted with a White man may have had an impact on what she was going to share with me. Therefore, I decided to ask her about it explicitly in the interview, to which she responded:

Yeah, I think so. Uncomfortable and I think once again it's a perception thing of will you really understand me. Should I really say this to you? Is that really appropriate? So maybe I will try and reword something or talk slightly differently about some situations, and possibly either reserve some things that maybe in my mind because of that.

(Christiana, completed PhD, British-Caribbean)

Christiana's words can be understood as her constantly assessing the situation and adjusting her behaviour (and words) in the presence of a White person (Rollock, 2011) and thus our interactions influencing what data was generated.

However, my whiteness was further complicated by my nationality – both my assumed and actual nationality. Early on during the follow up interviews I decided to make my identities explicit by starting the interviews with self-disclosure. Although I was aware that such mechanism did not guarantee building rapport on its own (Pezalla et al., 2012), I hoped that it would eradicate any ambiguities. Self-disclosure is often linked to the idea of reciprocity.

However, it is also problematic as Gunaratnam (2003) explains the balance of sharing and expecting the same in return is difficult to ascertain, and in the context of power imbalances can easily be used as a tool to elicit responses which in turn can be seen as an exploitation of the participants and thus in this project risks re-establishing White dominance of the White researcher over interviewees of colour (Chadderton, 2012b). So the power relations, whether explicitly or implicitly perceived, correctly or incorrectly assumed were complicated by the intersectionality of our identities (of both the researcher and interviewees) (Merriam et al., 2001).

Several participants expressed a surprise at the fact that I was Polish as they had thought I was American. Their assumptions may have come from my accent which seems to have an American twang or from the fact that the initial interviews were conducted in a team of American researchers. Either way, I have noted the impact of my perceived versus real national identity. It was very strong particularly when speaking with Nana. During the initial interview in the summer of 2014 she said that often she was oblivious to 'race' and that her gender had a more significant impact on her life and in particular studies. However, during the follow up interview she revealed that she had been active in the UK branch of the Black Lives Matter movement already at the time of the first interview, thus indicating that she was in fact quite 'race' aware. Therefore, a possible explanation of this difference is that Nana did not feel comfortable initially to talk about 'race' with me (a White man). Conversely, this can be seen as her exercising a form of agency by deciding which and how to answer the questions posed by the researcher (Jackson, 2003).

Christiana, was even more explicit about why my nationality mattered:

It helped when you said you were Polish. I guess that's also because the stuff that's going on right now and I know that you guys know what the deal is and what it's like. That's the thing, I don't feel like most White people know what it's like to be a minority, as in White British. To be looked down upon or treated differently.

(Christiana, completed PhD, British-Caribbean)

It seems that for Christiana my nationality meant that I was different from the White British majority and therefore I could potentially have more of an

understanding or empathy for her situation, especially in the light of the developments ("stuff that's going on right now") taking place around the time of the interviews, i.e. just after the June 2016 Brexit referendum, whereby Polish had arguably become the scapegoats in the campaign for leaving the European Union and faced a lot of hate crime in the weeks following the referendum (Rzepnikowska, 2019). This can be an example of how power relations are perceived and can be changing and affected by current affairs.

Lola made a direct comparison between her African sounding surname and Polish surnames both of which can be difficult to pronounce for a White English-speaker:

But then when you're Black or a person of colour in that situation, the things that they use to take you down always have appeared to be around your race or ethnicity or sexuality or gender. I read something quite recently, which you reminded me of because you said you were Polish, and it was some Polish academic complaining that in documents they never use his last name. It's difficult to explain. I knew instantly, when I read it what he was talking about. It's just like little digs. I'm always just [Lola]. You're a caricature, you're not a human being, you're not a real person to these people; you're a caricature.

(Lola, PhD student, British-African)

Lola's pointing out of similar micro-aggressions directed at both Africans and Poles can suggest a level of assumed empathy and common understanding. Although both Lola and Christiana mentioned other barriers and I cannot assume that my Polishness mitigated against all obstacles, it was clear to me that the perceived power relations had an impact on what the interviewees said. Perhaps, for my respondents, my assumed White American identity implicitly linked me to the dominant group of a society with a well-documented historical and current racism, thus positioning me as the oppressor, while my Polishness, particularly in the light of post-Brexit-vote's violent attacks on my compatriots, might have opened a path to seeing me as more empathetic to understanding racial discrimination. Therefore, although I cannot assume a lack of my complicity in the structures of whiteness and White supremacy, by starting interviews with self-disclosure of my nationality I hoped to not only name but also to disrupt the racialised social context (Chadderton, 2012b), where

knowledge production can be seen as depending not only on the identities of the researcher and the researched, but also on the context (Rasera et al., 2016)

However, in certain ways my nationality could have been perceived as a barrier. For example, some participants phrased their responses to me in a way which suggested that they were explaining the realities of life in England to a foreigner with assumed little knowledge of the country. However, as Song and Parker (1995) found out in their study of Chinese takeaway shop owners the researcher being perceived as different (Korean) but with a degree of similarity (Asian, non-White) actually helped elicit more open responses, without the fear of being heavily scrutinised by another Chinese. Additionally, Merriam and her colleagues (2001) point out to the fact that an outsider may ask questions that an insider would not ask due to assumed shared knowledge. Gaining meaningful responses to these questions, however, remains another issue. Therefore, the exact impact of my foreigner-outsider status cannot be easily placed as either only positive or only negative.

Such elements of my persona, as age (I was 31 and 33 during the interviews) or height (I am 6'2"/188cm) also seemed to play a role in the power dynamics. For example, Christiana mentioned on a few occasions in our follow-up interview that being a short Black woman she felt intimidated by tall White men. I was also aware that I was slightly older than most of my student respondents – them being in their 20s and me being in my early 30s. However, Lola was in her 40s and already had an established career as a researcher and came across as very confident talking to me (not necessarily confident about her position in her institution or career prospects, which she was quite aware were closely linked to her minoritised status – more on this in the findings chapters) and, for example, was happy to come out to me as a lesbian. Similarly, Anabelle, who was doing her PhD part time and was in her early 30s, with a relatively senior position and several years of experience in her industry, exuded confidence.

Additionally, my status as a PhD student seemed to play an important role. Again, self-disclosure helped take out ambiguities, as some interviewed students (and staff) assumed I was an already established researcher. The differences in perceived status seemed clearer with participants who

themselves were doing a master's degree rather than a PhD – such as Sebastian and Buzz. Buzz, in particular, eluded to PhD being very competitive and her seeing herself as an average student she self-selected herself not to apply for a PhD.

This leads onto another aspect of reflexivity – namely that it is not only the participants who make assumptions about me, the researcher, but I also was making assumptions about them. My assumption at the start of the project was that I was talking with successful students who climbed the top of educational ladder (i.e. studying a postgraduate/doctoral degree at some of the top English universities). However, from the first interview it became apparent that this was not how they saw themselves, but rather saw success as limited by time (how recent it was) and in the context of achievements of their network (family/friends). Therefore, success emerged as a very comparative and relative phenomenon, further nuanced by students' raced, gendered and classed identities. Similarly, Hoskins (2015) in her study of female professors found that her unquestioning location of respondents as successful due to externally objective status was misguided and required her to change her perspective from a structural to a post-structural one. She calls on Foucault (1981) to argue that power is in every single interaction and that interviews are a place in which power flows in both directions and changes before, during and after an interview. Similarly, I felt the power to flow in both directions. Although, ultimately, I am the researcher with the power to ask questions, interpret the answers and represent the participants through various publications (Vanner, 2015), thus, risking re-establishing White dominance, I also felt that my being a foreigner, non-native English speaker, gay, my class position and novice researcher status impacted my confidence and the flow of power. Thus, I felt that my multi-layered intersectional identities complicated that flow of power beyond 'race' relations. For example, while a majority of respondents (both students and staff) came from, what I assumed based on what they had shared about their upbringing, middle class backgrounds, Nana came from an elite Sudanese family, with enough wealth for her mother to never work and her still having her PhD tuition fees paid without getting external funding. For me, who grew up in relative poverty, listening about her class position was quite intimidating, even though I tried to hide it. Due to my sexuality and heteronormative systemic violence and micro-aggressions I have become accustomed to throughout my life I also felt I was much more open and able to share my experiences, and therefore able to build better rapport with women and people who exposed less religious attitudes (e.g. did not mention the importance of their faith). This, of course, does not mean that my assumptions of the link between their religion and attitudes to sexuality were necessarily accurate.

I was also guilty of making initial assumptions that as highly educated people of colour my respondents would be hyper aware of and ready to talk about the racial relations impacting their lives. Perhaps in that aspect I was guilty of essentialising my participants. Having two years between initial and follow up interviews allowed me to correct that stance. There were certain individuals who seemed very aware of racial relations and even used CRT language to describe their situations, others less so. I initially felt frustrated at myself for not being able to elicit fuller responses from the students, blaming both my researcher skills and the state of racialised relations in the wider society as influencing the context of the interviews and thus not allowing me to build full rapport with the respondents. However, listening to Alice Bradbury (2017) talking about her experiences of supervising BME doctoral students who study 'race' and racism I realised that her supervisees had the social science training to have the language and feel empowered to reflect on self and the world. The same training is not expected of (nor given to) students in STEM fields which are based in positivist, assumed objective, methodological approaches (Collins, 2015). Therefore, there is a possibility that my respondents, unless they went out of their way to educate themselves, were not always equipped in conceptual tools to fully reflect on the impact of their identities on their situations (at university). Additionally, for them to consider their positionality would go against the grain of objectivity, meritocracy, and positivist assumptions which their disciplines profess to be built on (whether they actually are such or not). Thus, their responses to direct questions about racism were at most limited to referring to direct, visible, interpersonal instances of discrimination. While evidence of more intangible aspects of racism, like, micro-aggressions, stereotypes, or institutional racism had to be "extracted" from responses to other questions and from the interpretation of the discourses they engaged in and with. This raises the questions of how ethical it is for a White researcher to

re-interpret the words of people of colour. I attempted to mitigate against recentring whiteness and re-establishing White dominance in the research process by adhering closely to the critical 'race' methodology. The words of the students of colour could not be assumed to be unaffected by oppressive structures of racism, sexism and classism (Chadderton, 2012b; Delgado, 2011), and rather than taken at 'face value' had to be interpreted, using the theoretical lenses, as discourses produced by, through and against these structures (Gunaratnam, 2003). Therefore, while I cannot claim to be uninfluenced by whiteness, I paid particular attention for my interpretation and analysis to map closely onto the theoretical framework, precisely in order to help mitigate against the dangers of unwittingly re-centring my White perspective. Thus, my reading of the students' racialised lived experiences was complicated by the social context of whiteness in which the interviews were conducted and analysed, the identities of both the researcher (me) and the research participants, and different knowledges, such as, for example, students' disciplinary training.

There is also much to be said about the dynamics of multiple interviewers in the first phase of the project. Interviews were usually conducted in the presence of the PI (older, African-American female researcher), another American (mixed European-Jamaican heritage male) PhD student of similar age to mine, and me - another foreigner, White, often incorrectly assumed American. In the follow up interviews (which I conducted on my own) Lola commented how to her the entire situation of the initial interviews felt strange:

It was so weird because she did ask quite a few questions like that [about basic facts of English education system]. I did wonder why she hadn't let you lead the interview. In fact, it was a really bizarre setup for the interviewee to be outnumbered by interviewers in qualitative research. I've never heard of anything like it before. It's bizarre... Maybe at some point that will be reflected in some of the results that you've got. (Lola, PhD student, British-African)

Lola seemed to have been cognisant of the impact of the presence of multiple researchers had on her and potentially the entire research project. The presence of multiple researchers interviewing a single participant may be very intimidating. A researcher already has dominant power over the researched

(Kiernan, 1999; Vanner, 2015), adding the power-in-numbers aspect to it may have made it even worse. That impact was felt particularly by contrasting these interviews with the initial interviews I conducted on my own. When I interviewed Rachael on my own I felt that the interview went really well, and we built rapport. I felt relaxed and I hoped that this "rubbed off" on her. For me, this interview was successful, because being a White researcher, without the "backup" or "validation" of a researcher from a minority background (which might have been comforting for the interviewee) I thought that I still managed to create, what felt like, a good rapport which produced insightful data. This is why I was particularly looking forward to re-interviewing Rachael. When we failed to meet again (as Rachael e-mailed me to say that her life was very hectic at the time and wanted to meet later, but then never responded to my follow up e-mails) I questioned myself if my initial interpretation of the rapport was accurate.

Knowledge production does not only happen at the time of interview, but also at the time of analysis, which impacts what ends up in the final thesis (Vanner, 2015). For example, as religion does not play a big part in my life, initially not only did I not ask any questions about religious aspects, but also in my analysis I did not pay attention to it. This changed after re-reading Rhamie's (2012) work on achievement and underachievement of Black students which argued for the importance of community and church in the success models. This meant that I had to re-read and re-code the interviews with greater attention paid to religion.

In summary, reflexivity allowed me not only to understand impacts of such factors as identities and wider social contexts on knowledge production, but that awareness also allowed me to improve the process of generating data. Thus, the research was not a static methodological endeavour but a shifting one, responding to interactions, power relations, current affairs and new knowledges. Having the ultimate say in how the interviews are interpreted and which data are published gives researcher power. In the context of the current study with White researcher interviewing and interpreting the words of students of colour, this poses a risk of re-centring whiteness (Chadderton, 2012b). By aligning the analysis closely to the theoretical framework and following the critical 'race' methodology approach, which stresses the transformative response against the

structures of racism, sexism and classism, I sought as much as possible to mitigate against this risk.

4.10. Conclusions

In this chapter I laid out the methodological approaches used in this study. I provided a description of the research process, divided into phase one and two of data collection. I provided critique of phase one and how this was improved in phase two, which together produced rich data. While the design of certain investigative tools (i.e. survey) in phase two also could be improved, together the different sources of data – interviews, survey and various documents provided a robust triangulation which strengthened the findings. I argued that together with the conceptual framework, the methodological approach in this thesis addresses Baber's (2016) critique of CRT scholarship in higher education: (1) disconnect between CRT theoretical tenets and the actual analysis of findings not employing these tenets is addressed in the findings chapter being closely mapped onto CRT tenets, (2) lack of interdisciplinarity is addressed by the theoretical framework which combines CRT with Bourdieusian thinking tools, and (3) the lack of diverse sources of data, in particular quantitative data is addressed by the use of survey questionnaire which works in synergy with the qualitative data. Having outlined the theoretical framework in the previous chapter and the methodological approach in the current chapter allows for the analysis of data, which I present in the following three chapters.

5. WHITENESS OF WP POLICIES

5.1. Introduction

In this chapter, I argue that Widening Participation policy and how it is enacted at the researched universities is entrenched in whiteness. This is innovative because there has been little attention paid to the role of 'race' and whiteness in WP. I will pay particular attention to specific policies designed to improve access and participation of diverse students in higher education, with a focus on the capacity of these policies to improve access and experiences of BME students in postgraduate education. Therefore, this contributes to answering the first research question of this thesis, namely: what is the role of WP policy in improving BME access to and success in PG education.

The policy landscape has significantly changed since the interviews with university professionals were conducted in the summer of 2014. As I outlined in the literature review (Chapter 2) there have been three phases of WP since 1997, however, overall the efforts have had little effect, particularly for BME students' outcomes. While the governments attempted to create these three distinctive phases (Widening Participation, Widening Access, and Access and Participation) I use the term WP as a collective term for all three phases. This, I contend, is because the way in which the different polices have been enacted at institutional level does not warrant the distinction. Efforts to widen participation have been a feature of higher education for a long time, dating back to at least post-World War II period (Kettley, 2007) and I argue that the current policies sit comfortably within this wider umbrella term. For example, four out of the five research intensive universities in the project still have "Widening Participation" teams, and only the University of Benefit has changed its WP team name into "Access and Engagement" team which resembles the latest iteration of the WP policy (namely Access and Participation).

In this chapter, I analyse staff interviews and policy documents such as White Papers, guidance documents and institutional plans (for details see methodology chapter 4) to argue how the WP policy has failed BME students in PG. In particular, I argue that WP policy has not been conceptualised with enough attention paid to intersectionality, but rather focused so much on the

issues of socio-economic class, that it has side-lined issues of 'race', which can have negative outcomes for BME students. It has also concentrated mostly on access to UG study, rather than PG. Moreover, I argue that it has been entrenched in student deficit thinking rather than looking at institutional change. The above – directing focus away from 'race' and individualising problems – can be interpreted as examples of how whiteness operates in the field of HE (Ellison and Langhout, 2016). I also argue that the latest WP policies to improve access and participation, while paying more attention to the outcomes of BME students and institutional shortcomings than previously, do not offer comprehensive solutions for WP at PG level. I also argue that the way the WP policies have been enacted at national, institutional and individual (staff) levels can be often characterised as reluctant, which can be seen as an example of the efforts to protect White privilege. Therefore, I argue that both the *de jure* WP policies as well as the *de facto* operationalisation of these policies have to change in order to be beneficial for BME students in PG education.

5.2. Lack of intersectional thinking as an example of whiteness

In this section I argue that WP policy has not sufficiently considered the intersections of class and 'race' which can have negative outcomes for BME students. I use an intersectional lens to interrogate the interactions of class and 'race' at institutional and policy level and argue that whether they converge (class and 'race') or diverge (class versus 'race') they can have negative outcomes for BME students and thus perpetuate whiteness. Firstly, I argue that Widening Participation policy has foregrounded issues of socio-economic class and that by doing so it side-lined questions of 'race'. In support of my argument I provide evidence on the levels of WP expenditure on financial aid which indicate the focus of support. Secondly, I argue that the actual links between 'race' and social class can mean that inadequate financial support can have more adverse results for BME students. I use the case of the abolition of grants and NHS bursaries to support my arguments. The above, I argue, can serve as examples of how not considering intersectionality in the process of conceptualisation of WP policy can have negative effects on different groups of students.

5.2.1. Class versus 'race'

In this subsection I argue that the WP policy has given primacy to socioeconomic issues against questions of 'racial' equality, thus side-lining the latter. This is particularly important as addressing economic issues does not address all the issues that BME students may face (Bhopal, 2018) in HE and can be seen as an example of a lack of intersectional thinking in the conceptualisation of WP policy.

When discussing WP policy, interviewees talked mainly about students with financial difficulties and providing financial support. Kathleen, the head of widening participation at the University of Merit was clear in how WP was being operationalised with such students in mind:

We have a high percentage of students from low income backgrounds, so we assessed that what we do well is getting students in, so as a result of that a lot of our 8 million odd [pounds] is spent on financial support for those students, so by far the biggest chunk and I haven't got figures on me, but could let you have them, by far the biggest chunk goes on students bursaries...

(Kathleen, head of WP, University of Merit)

Kathleen's explanation of the policy direction as concentrating on providing financial support for students from lower socio-economic classes can be seen as the enactment of the then governmental WP policy. Since 2012 universities have committed most of WP expenditure, through Access Agreements, to financial support in a form of bursaries (money paid directly to students), despite very weak evidence of this being an effective form of support in the first place (OFFA, 2016; Thomas, 2011). The focus of WP expenditure on financial support can be interpreted, I argue, as the policy concentrating on the issues of people from lower socio-economic classes, rather than the questions of 'race' and racism, which following CRT can be interpreted as attempts to make 'race' invisible (Gillborn, 2008). This is particularly problematic especially since discussions of working class people in British education often presume that they are actually White working class (Ball et al., 2013; Rollock et al., 2015a). Although, efforts to eradicate injustices along the socio-economic class lines have the potential to partially help BME students as class and ethnicity intersect, I argue that on their own they are not enough to address all the

barriers that BME students face which go beyond financial constraints and include such issues as the whiteness and systemic racism in HE (Bhopal, 2018), which I argue in more detail in chapter 6.

Since the interview with Kathleen, the government introduced two pieces of legislation that gave more focus to efforts of equalising educational opportunities for students of colour. First, in 2016 it introduced a White Paper, 'Success as Knowledge Economy', which set a target to increase the proportion of students from minority ethnic backgrounds in HE by 2020 by 20% (BIS, 2016). However, that target can be seen, using CRT, as an example of interest convergence with dubious ethical motivations and effects. This can be argued in at least two ways. Firstly, it has been proposed that workforce shortages, particularly in STEM areas, in the developed economies can be addressed by educating more ethnic minority groups as they are the fastest growing populations in the western world and indeed in pre-university education in England (DfE, 2017; Leggon, 2010). That is to say, that the expansion of higher education provision to ethnic minority groups is a good idea if it eventually profits the economy of the Global North, where mostly White people, particularly White men, hold systemic power (e.g. through being CEOs, board members, shareholders, and/or wealth holders). Secondly, the governmental target to increase the proportion of BME students, without a target for closing the racialised degree awarding gap can be beneficial mostly to universities (financially and representationally) rather than the majority of BME student themselves. By focusing on the access, i.e. increased enrolments of BME students, English universities can secure more income from student fees to survive in the conditions of difficult recruitment resulting from the overall decreasing number of 18-19 year olds, which are not forecast to start increasing until 2020, juxtaposed against the growing BME population (Bekhradnia and Beech, 2018; ONS, 2017). At the same time, not having a target to close the racialised degree awarding gap, i.e. not concentrating on outcomes, can allow universities to continue business (racism) as usual and to offer experiences steeped in whiteness and outcomes which are at best transformational only for a fraction of the BME population (when compared with the White student population) (McDuff et al., 2018). In turn, universities admitting increased numbers of BME students can portray themselves as open, welcoming and

diverse environments, and the failure of BME students to achieve the same quality of results as White students (i.e. the racialised degree awarding gap) can feed into the neo-liberal narrative of individual responsibility of an independent learner (Chadderton, 2018). This then appears like a case of interest convergence, which is theorised as allowing any progress toward racial equality to be only achieved if it is beneficial to the dominant (White) groups and the progress being partial and temporary for the dominated (BME) population (Bell, 1980; Driver, 2011).

A second piece of legislation, the Higher Education and Research Act 2017, created the Office for Students (OfS) which currently has the responsibility for WP policy. The OfS operationalises the policy through Access and Participation Plans (APPs), which claim to put "an increased focus on outcomes" and "a stronger focus on reducing gaps in success and progression" whereby these gaps are identified as the retention and degree attainment gaps for BME and disabled students in particular (OfS, 2018a, p. 11). Therefore, the new policy claims to have more focus on BME students than on socio-economic class of students and to address the above laid criticism of the 2016 white paper. Having this in mind, I argue that one should expect universities to be moving away from providing direct financial support (e.g. bursaries) which concentrate on the economic aspects and directing their WP expenditure into student success and progression work, which should aim to close the racialised degree awarding gap. This can be done by examining the documents detailing WP expenditure. Table 5.1 provides a comparison of the available data, between expenditure from 2014-15 Access Agreements, when staff interviews were conducted and 2019-20 Access and Participation Plans (APPs), the latest documents available under the new direction of the OfS for the five researchintensive universities in the research project. Although the OfS (2019) has issued a new guidance for 2020-21 APPs which, not only continues the 2019-20 APPs policy direction but puts even stronger emphasis on the target of closing the attainment gap and gives more freedom to universities as to how they wish to enact the policy to reach that target, the APPs for 2020-21 are not yet available and the analysis has to come from the 2019-20 APPs.

Table 5.1 WP expenditure by category of spend in 2014-15 Access Agreements (AA) and 2019-20 Access and Participation Plans (APP) for the five research-intensive universities

| Institution | Document | | Type of spend | | | |
|--|-----------------|------------|---------------|-------------|-------------------|---------|
| | Source: | Access | Success | Progression | Financial support | Total |
| University | AA 2014-15 | £0.4M | £0.2M | No data | £3.4M | £4.0M |
| of Benefit | APP 2019- 20 | £0.6M | £1.4M | £0.2M | £1.4M | £3.6M |
| University | AA 2014-15 | £2.2M | | £0.6M* | £10.0M | £12.9M |
| of Books | APP 2019- 20 | £3.6M | | £2.2M* | £9.2M | £15.0M |
| University | AA 2014-15 | | £2.0M** | No data | £8.5M | £10.5M |
| of Confidence | APP 2019- 20 | £4.0M | £1.1M | £0.1M | £7.9M | £13.1M |
| University | AA 2014-15 | £1.5M | £1.2M | No data | No data | No data |
| of Labour | APP 2019- 20 | £2.6M | £1.6M | £1.0M | £3.9M | £9.0M |
| University of Merit | AA 2014-15 | No data | No data | No data | No data | £8.1M |
| | APP 2019- 20 | £1.0M | £1.0M | £0.3M | £8.8M | £10.9M |
| * combined success and progression figures, ** combined access and success figures | | | | | | |

Table 5.1 indicates that the declared expenditure on financial support has decreased between 2014-15 and 2019-20. From the available data it can be calculated that it dropped from 80% to 62% of the overall WP spent at the five research-intensive universities. This, however, means that the majority of support is still directed toward financial assistance rather than student success, which in the five APPs for 2019-20 constitutes only 14% of the overall WP expenditure. Therefore, the *de facto* enactment of the government's WP policy can be understood, I argue, as still firmly directed towards students from lower socio-economic backgrounds with the work on success of BME students lagging behind.

5.2.2. Class and 'race'

In this subsection I argue that the inadequate financial support has more detrimental outcomes for BME students than for White students, yet again highlighting the possible negative consequences of the lack of intersectional considerations in the policy decision making processes. One of the main discourses used by consecutive governments in respect to social justice and

WP is that by providing financial support in the form of grants and loans they removed barriers to HE participation. While this is indeed important, this discourse falls short of recognising that access and participation is about much more than financial barriers (Harrison and Baxter, 2007; Hatt et al., 2005; Usher et al., 2010). And while in the previous section I argued that concentrating on providing financial support can only partly help poorer BME students, here I argue that not providing good financial support can impact them more adversely. In the 2016-17 academic year the government changed the undergraduate student finance by abolishing maintenance grants, meaning that those with the most need have to rely more on loans and thus will incur higher debts for their studies. As people from minority backgrounds in the UK are twice as likely to live in poverty than White people (EHRC, 2016; Kenway and Palmer, 2007), this policy will potentially affect them more.

Additionally, changes to the NHS bursary will also disproportionally affect BME students, who will be forced to take on debt through the student loan system, where previously they would have been given a bursary covering tuition fees and some extra costs (DHSC, 2017). This is because subjects aligned to medicine, which are no longer being funded by the NHS, have been some of the most popular among BME students with 16% of all BME students studying these subject areas (Advance HE, 2018c).

Thus, I argue, the economic aspects of WP policies perpetuate whiteness of the HE field. On the one hand limiting financial support risks having more adverse outcomes for BME students, and on the other hand, focusing too much on providing only financial support does not address all the issues that BME students may face in access to and participation in HE. The majority of the financial support has concentrated on UG programmes and it was not until 2016-17 that students could apply for a postgraduate loan. Therefore, the next section looks at how concentrating WP policy on UG education adversely affects BME students in PG programmes.

5.3. Undergraduate focus as a diversion

In this section I argue that the emphasis of WP policies on undergraduate provision acts as a distraction from examining equality issues in postgraduate

education allowing whiteness of the PG field, for which I argue in the following chapter, to continue unchallenged. I argue that there is a misguided discourse among university professionals that WP issues either have been or should be sorted before students get to PG programmes.

Governmental funding for WP has concentrated on UG study, which coincided with a development of a rich WP literature in this area, covering such topics as impact of finance (Harrison and Baxter, 2007; Hatt et al., 2005; Usher et al., 2010), connection between aspiration, attainment and progression (Archer et al., 2007; Gorard et al., 2012, 2006), and effectiveness and impact of certain interventions (Moore and Dunworth, 2011; Thomas, 2011). However, very little attention has hitherto been paid to issues of WP at PG level.

5.3.1. Ignorance of data as a sign of White privilege

I argue that by not investigating WP metrics for PG programmes university staff can be seen as perpetuating the whiteness of the institutions, protecting White privilege, and maintaining the hierarchy of universities within the HE/PG field (Colley et al., 2014). I explore these below.

Lizzy, postgraduate admissions manager at the University of Confidence, admitted that she knew very little about the demographics of the PG population:

I don't really have a feel for what the background is on that breakdown since it's not something that we do look in.

(Lizzy, PG admissions manager, University of Confidence)

Lizzy was answering a question about the breakdown of specific ethnic groups of BME students in postgraduate admissions and education. That breakdown is very well known for undergraduate education through national reports and WP reporting frameworks, like the access agreement monitoring returns (Advance HE, 2018c; ECU, 2015; OFFA, 2016). However, at PG level the investigations of these statistics seem to be left to individual institutions. Therefore, there seems to be a lack of policy mechanisms to incentivise, or even necessitate, universities to explore these data and issues. This may be because there is no benefit for HEIs to exploring such issues (i.e. no interest convergence), and in

fact there may be penalties, as Raul, head of graduate school at the University of Confidence seems to suggest below. When asked about data on BME students' access to and success through PGR education and onto early career researcher level, Raul, was very candid in expressing concerns that his institution may have in looking into these questions:

... departments are not always willing to delve into the data because of the rather unpleasant things that they might find. (Raul, head of graduate school, University of Confidence)

His words can be interpreted as exposing the discomfort at acknowledging White privilege (McIntosh, 2003). Having the data which indicate inequalities along racial lines would draw attention to White privilege and necessitate addressing the issues, which may threaten that White privilege and the high-status position occupied by research-intensive institutions within the PG field, thus destabilising the established hierarchy of institutions with the HE field (Colley et al., 2014).

5.3.2. Discourses of WP as supposedly fully addressed at UG level

Staff also seemed to engage in the discourses of WP and equality issues at PG level having been supposedly addressed through WP work at UG level. This can be interpreted as staff using equality and diversity discourses to help maintain the status quo and protect whiteness. I asked Lizzy if the university had any intentions to monitor equality statistics in PG programmes:

Not that I'm aware of. We are an institution who pride ourselves on diversity. I mean that is pretty much the first thing anyone learns about [University of Confidence]. If you are going to the website, [we take] great pride in [our record on admitting women] and people regardless of religion, etcetera. And we have an [equality award], which, you know, [is] on all HR [documents], on all adverts - as standard... we have that admissions policy freely available on the internet, it is published, which states that we consider people without any interest in race or disability or anything else.

(Lizzy, PG admissions manager, University of Confidence)

Lizzy used the existence of admissions policies (freely available for download), as well as logos of equality awards on official HR documents as a supposed

sign that there were no issues of underrepresentation or adverse experiences of BME students (including intersections with other categories of difference) at PG level. In other words, this can be interpreted as an example of her (a White woman) using WP and equality and diversity frameworks to celebrate a supposed achievement of equality while maintaining the status quo. Given that all the policies and discourses she mentioned apply to both undergraduate and postgraduate level, it makes little sense why she would perceive of these issues at UG level but not PG, and therefore, her denial of the existence of racial (and wider equality) issues can be interpreted as stemming from whiteness protecting White privilege (Ellison and Langhout, 2016) in the PG field.

James, director of graduate studies at the University of Merit, also engaged in the discourses of widening participation as having been addressed at earlier educational stages:

Interviewer: Do you think there might be some ways that we can improve the intake of BMEs into the graduate school?

James: I don't know, I think at the PhD level if people have got to the level of achieving very well in their undergraduate, then I don't see any kind of barriers of ethnicity or race or whatever because it's so international in the research world, everyone in the lab comes from different backgrounds, there's no kind of majority. If you look at our PhD students [department of electronic engineering], you look for the biggest ethnic groups and we have a large number of Chinese students, for example.

(James, director of graduate studies, University of Merit)

In this paragraph James's discourse seems to suggest that there are no issues of racial inequality at PG level because of his department being diverse. However, in the case of his department, that diversity was driven by international students, which conflates 'home' and overseas BME students as one and falls short of recognising how the UK education system can be systemically failing 'home' BME students. I explore this argument in more detail in the Whiteness of the PG field chapter. James's discourse may also be an example of how whiteness operates in the PG field, in that it simplifies issues of racial equality to a simple question of numerical representation (Ellison and Langhout, 2016).

5.3.3. Passing on the responsibility for WP and equality to UG education

The discourse of passing on the responsibility for tackling inequalities through WP at earlier educational stages was quite common among interviewed staff and can be understood as an example of the attempts of whiteness deflecting issues in order to maintain the status quo in PG education. When asked about WP activities at PG level, John, a graduate tutor in the engineering department at the University of Confidence referred to activities at UG level:

Probably you know more than me and I mean it's something at the undergraduate level that is something that's debated and debated and maybe I didn't follow it so much... we do have special initiatives, we have links with schools, close links particularly in areas where the poorer areas of London as you may know there are some poor areas in London. So, we have special links with certain schools and there is a lot of cross over in terms of staff going there and their staff coming here to try to improve the number of students coming through at the undergraduate level.

(John, graduate tutor, University of Confidence)

Peter, head of the mathematics department at the University of Confidence also engaged in a similar discourse, placing the initial underrepresentation of BME students at the UG level as the reason for PG underrepresentation:

Interviewer: And do you know the reasons why they [BME students] might be disappearing from postgraduate study then?

Peter: I think it just the, there are so few in, I mean the, I don't know what proportion go onto postgrad, but if you start with almost zero, then you wouldn't really expect to see very many, I think the problem is not in the transition, the problem is before we get them

(Peter, head of department, University of Confidence)

However, Peter's assertion makes little sense as the UG population of the University of Confidence is ethnically diverse and there is a visible drop in numbers of 'home' BME students reaching PGR studies³. Similarly, Fred, head of the graduate school at the University of Books directed his response to my question about WP in PG activities to what was being done pre-university:

³ see the section on University sites in chapter 4 Table 4.2

Interviewer: Yes, so going back to the aspects of why there may not be so many BME students in postgraduate programmes you mentioned the cultural aspects which are on the side of the student, do you think there might be something on the side of the university, that the university might be doing more or changing to attract more BME students?

Fred: If they [the university] are and I think they are, I'm not involved with it, so for example we do have outreach programmes and events for children from primary and secondary school, but I don't know the details... because I'm mostly dealing with graduate stuff.

Interviewer: That would be through widening participation?

Fred: Widening participation and outreach programmes.

(Fred, head of graduate school, University of Books)

In the Whiteness of the PG field chapter I quote Fred as trying to explain the underrepresentation of BME students at PG level as due to their family pressures to go into family businesses (i.e. student deficit model). Later on in the interview, I attempted to approach the topic again, now asking about institutional issues (quoted above) and even after my explicit reference to the institutional efforts at PG level, Fred chose to concentrate on a different explanation. In the quotes above from John, Peter and Fred whiteness can be traced at individual as well as policy levels. Whiteness and White privilege, allow White people to not think of the issues of 'race' equality as their concerns. Moreover, Fred's lack of knowledge of WP outreach programmes due to being involved in PG education can be seen as an example of the compartmentalisation of HE into different segments, i.e. UG and PG fields, with the latter not recognising WP as valid or important discourses and allowing whiteness to continue unquestioned. Therefore, I argue that the fact that WP policy has traditionally focused more on access to university (i.e. to undergraduate studies) may provide the PG field and its actors (university staff) with an excuse for the deflection of responsibility and may appear to them as a legitimate and sufficient engagement with questions of equality.

Thus, concentrating WP policy on issues of undergraduate access can not only deflect attention from PG issues, but also provide an avenue for staff to use this as an excuse for not tackling questions of racial inequalities at PG level and potentially having negative impacts on BME students in PG field. I interrogate

this in more detail looking at the PG field practices and discourses at the researched institutions in the next chapter.

5.4. Student deficit approach

In this section I argue that WP has been employing and continues to employ a student deficit approach which fails to recognise institutional racism and therefore allows the whiteness of the HE field to continue unchallenged. Student deficit approaches (or models) means that students from nontraditional/underrepresented backgrounds are seen as "worse" than (i.e. preforming below the standard of) 'traditional' students and blamed for their failure (McKay and Devlin, 2016). It constantly compares and contrasts students' classed, gendered and raced capitals and habitus without questioning the rules and assumptions of the HE field, nor who created them, whom they benefit and what their consequences are (Burke, 2017). The approach is already observable in WP work pre-university, where the work has concentrated on raising the attainment and aspirations of WP learners (Doyle and Griffin, 2012). WP interventions are often targeted, i.e. singling out students and labelling them as needing help, through for example, targeted summer schools (Doyle and Griffin, 2012). Instead of working on changing the education system/field that fails students along class, gender and 'race' lines, WP is working on changing students to assimilate them to the White, middle/upper class idea of an ideal student or problematising them if they do not.

Once the students arrive at a university the deficit approach continues.

Kathleen, head of WP at the University of Merit, explained how the money on 'student success' is being spent:

...if you think about what 2% of 8 million is still quite a lot of money, that's on outreach. We spent another percentage and again I haven't got [figures] in hand, but we spent another percentage on what they call student success, so that is work supporting students once they're in, not just financial support, but looking at giving any academic support they need, any tutoring, any mentoring, tutoring sort of that, the sort of help students need to stop them dropping out, which of course we do for all the students, but students from non-traditional backgrounds often need that support, not always, but often do need that support more intensely. So, we spend a lot on bursaries and we spend quite a lot on, although

proportionally doesn't look like an awful lot, but in terms of real monetary expenditure we spent a lot on the kind of work my team does.

(Kathleen, head of WP, University of Merit)

Kathleen's explanation of the institutional approach to 'student success' work and expenditure can be interpreted as deeply entrenched in the student deficit approach. It is concentrated on upskilling the student to meet the requirements of the institution, without looking into what is potentially disadvantaging the student from within the institution. At national policy level Access and Participation Plan guidance does not stipulate how work on 'student success' should look (OfS, 2018a), therefore Kathleen and her university are entirely within their liberty to enact their student success work within the student deficit paradigm.

Other ways in which student deficit discourses manifest themselves can be observed through WP funding allocations and Access Agreement money being given to universities to deal with the 'additional costs' of recruiting and teaching non-traditional students (BIS, 2011). Wider research has noted that underrepresented students were blamed for putting more stress on student services, by allegedly not being able to be critical, independent learners, or not engaging with a university in the way the traditional students do (Bartram, 2009; McInnis et al., 2000). This approach fails to recognise and value the diversity of backgrounds, i.e. different cultural capitals that these students bring. And similarly to what I will argue in the Whiteness of the PG field chapter stems from the WP policies and practices regarding 'non-traditional' students, including BME students, as the problem rather than the way the PG field has been structured, compelling them to seek support rather than changing the HE system. Therefore, employing discourses which position students as problematic, troublesome or disengaged puts the emphasis on the individuals to conform rather than universities to reflect on their practices of whiteness or change their institutional habitus.

5.5. Protecting Whiteness through ineffective WP policies and practices

As I argued in the literature review chapter, WP policies have been largely ineffective in improving access of BME students to high status universities and improving their outcomes. In this section I argue that the way that the WP policies have been enacted can be described as reluctant, superficial and inefficient, both at nationwide level and at the investigated universities and that this can be seen as an example of protecting the whiteness of the HE field. This subsection cuts across the questions mentioned above in the chapter - of concentrating on UG education and student deficit. At institutional level, I argue, this reluctance to enact change manifested itself in university staff seeing WP work as a burden and an add-on to regular activities, pertinent to issues of access to UG education and engaging in it with minimum effort at PG level. At the national level it manifested itself by the lack of follow through in evaluation and consequences for failing to meet targets. Following CRT, this can be explained by the intersection of interest convergence and whiteness. Interest convergence stipulates that progress towards racial equality happens due to there being vested interests for the dominant groups, rather than their moral awakening and that such progress is only partial and temporary (Bell, 1980). The latter stems from whiteness, which by definition aims to maintain itself, therefore, any actions to dismantle it will be undertaken reluctantly, at best (Gillborn, 2008). Thus, having WP policies can provide an element of interest convergence. It can allow more non-traditional students, including students of colour into the field of HE, which, as I argued earlier provides additional fees income and looks good from a diversity standpoint. However, the limited scope of the policies, i.e. concentrating on students rather than institutions and the ineffective way that these policies are enacted results in upholding whiteness.

Academic staff engaged in discourses that can be described as resentful toward WP work, which I argue can be an example of WP being seen as an add-on rather than an integral part of the PG field. When I was talking about contextual admissions with Peter, head of the statistics department at the University of Confidence, he revealed that WP was seen as a burden:

Peter: The real problem for the [university] is that there are targets on students from deprived backgrounds, students from state schools and that sort of thing. And that pressure..., it's put on the [university] by government and comes down to departments and... it is quite difficult to see what to do, so we're encouraged, for example to do outreach to go out to talk, give talks in schools in deprived areas and try to encourage students.

Interviewer: And you do that, a lot of that?

Peter: No, it's staff time, it's the constraint, everybody is very busy.

(Peter, head of department, University of Confidence)

John, a graduate tutor at the University of Confidence, engaged in a similar discourse in the following quote:

I know that [University of Confidence] has put a lot of thinking into this [WP] and we have this problem of faculty going out and its very labour intensive.

(John, graduate tutor, University of Confidence)

Both Peter and John seem to be framing WP in the discourse of burden ("the real problem" and "labour intensive" outreach). In Peter's understanding the WP imperative is driven from the government and is operated all the way down to the level of institutional departments. However, he does not feel supported enough to know how to meet the targets stemming from Access Agreements, and more importantly, he indicates that WP activities are not a priority as they are not taken up due to time constraints, with teaching and research given more significance. This, I argue, may be interpreted as WP activities and ethos being seen as additional features, an add-on, rather than embedded within the institutional habitus and everyday university undertakings, structures and policies. That is to say, that the WP habitus and the habitus of the HE field do not align and support each other.

In the interview with Fred, head of graduate school at the University of Books, following on from the discussion on WP outreach (quoted earlier in the chapter) I asked him about the importance of issues of equality and diversity:

Interviewer: How high on the agenda is equality and diversity?

Fred: Very high, all the time.

Interviewer: And how does that operate, how does that show itself?

Fred: Well, for example, every time you make any decisions in any meetings, at the end of the meeting, you consider whether it has any implications in terms of equality and diversity. So, you consider that and if there are any issue you discuss it and if there aren't that's it.

Interviewer: Could you give us an example of that ... what might be an illustration of that?

Fred: There is rarely anything that comes up, because it's got an implication that would mean that is biasing one group against another, so if it did then you would discuss how to avoid it, but I can't remember a time when it happened, but it will be an item on the agenda.

(Fred, head of graduate school, Univesity of Books)

Fred's words can be interpreted as a sign of the University of Books approaching issues of equality and diversity in a very instrumental manner rather than offering an in-depth engagement. Having equality and diversity consideration on the agenda as standard, while not actually considering it allows presumably majority White academic staff members to protect their White privilege and shield their White fragility – understood as the discomfort at discussing issues of 'race' (DiAngelo, 2018). In turn, this preserves the status quo while paying lip-service to the equality and diversity and WP considerations.

Lizzy, PG admissions manager at the University of Confidence, displayed what can be interpreted as a very limited understanding of issues of equality at PG level.

Interviewer: So, basically, we want to know what the universities are doing, what is working for those underrepresented students and what is not working.

Lizzy: There is – I don't know if anyone talked to you about the Postgraduate Support Scheme.

Interviewer: Yes.

Lizzy: Yeah so you know that new bursaries are coming, you know about that as well.

Interviewer: But you could tell us more about it.

Lizzy: I probably cannot. If you know about, it is probably as much as we do.

(Lizzy, PG admissions manager, University of Confidence)

When asked about what the institution was doing to support underrepresented students at PG level, Lizzy referred to simple solutions of financial support in the form of the Postgraduate Support Scheme (PSS) – which was a HEFCE funded project which provided financial assistance to PG students for a year, as a way to investigate the need for postgraduate loans system (Morgan and Direito, 2016). This, as I argued in the sections above does not provide a comprehensive solution to the issues that students of colour may be facing in PG education, as well as aims to exonerate the institution from the responsibility to change its policies, practices and habitus (thus engaging in the student deficit model). Moreover, Lizzy seemed to display very limited will to talk about the PSS justifying it with limited knowledge of the programme. I argue that together – the simplistic solutions as well as the lack of will to engage with them – can be seen as an example of reluctance to enact any significant change to dismantle whiteness.

In the following quote, Kathleen, head of WP at the University of Merit, can be seen as revealing another aspect of the lack of dedication to enact change:

I think one of our weaknesses and I probably said this to you before is, we do a lot, but we haven't had the time and the space to evaluate work as well as we'd like to

(Kathleen, head of WP, University of Merit)

As Kathleen discussed earlier, most of the work of her team is to do with preuniversity outreach and financial support for students on-course. Here, Kathleen admitted that her team does not evaluate their activities. Kathleen's team is not an exception as most WP teams in England have been found to have poor impact evaluation schemes prompting calls for improvements in the area (BIS, 2014; Doyle and Griffin, 2012; OFFA, 2016). Therefore, I argue that without robust evaluation WP teams cannot fully understand the impact of their work and thus cannot improve their activities to enact meaningful changes. And therefore, regardless of their intentions, they allow whiteness to be perpetuated through inefficient WP policies and their reluctant enactments. This apathy to enact real change can also be seen at a national level, particularly at research-intensive universities. Access Agreements which have been obligating universities to meet WP targets for over 10 years have been consistently unmet by Russell Group institutions (Byrom, 2009; OFFA, 2016). At the same time, none of the universities have had their Access Agreements unapproved and as a result did not have the ability to charge higher fees withdrawn. Therefore, I argue that the punishment for poor widening participation outcomes has been merely formal and that the lack of real consequences can be interpreted as the reluctance to dismantle whiteness. The new legal framework of the OfS and APPs promises to change that with strict evaluations and targets on outcomes (OfS, 2019), however, the actual implementation and enactment of the policies remain yet to be seen and assessed.

5.6. Conclusions

This chapter took a critical look at widening participation policies and practices. In particular, linking nationwide policies with how they were enacted at institutional level allowed me to deconstruct the WP discourses shaping experiences of BME students. I argued that within the intersections of socioeconomic class and 'race' the WP policies were disproportionally and negatively affecting BME students. This, I argued was due to side-lining the issues of 'race' to provide more socio-economic focused solutions, mainly in the form of financial support, which on its own was not enough to address the issues that BME students may face in HE. This is because students of colour do not only face financial barriers to participation, but also systemic racism and whiteness (Bhopal, 2018). On the other hand, I argued that the reverse policy, i.e. stripping away financial support, had potentially more negative impact on BME students because of their high numbers in medicine aligned areas where the support was diminishing. I also argued that concentrating WP policies and discourses on (access to) undergraduate education was not only diverting attention from issues at PG level, but also provided an excuse for staff not to engage with the issues at that level, which can be interpreted as protecting whiteness and White privilege. I further deconstructed student deficit discourses as attempting to shift the blame for underperformance of BME students away

from the institutions and onto students themselves. To provide a real change universities should move away from the student deficit model and instead look at changing institutional cultures (McDuff et al., 2018) with WP being an integral part of that transformation of the PG and wider HE field, rather than as is now, with WP working as an add-on operating within the constraints of the system. As the data in the final section of the chapter suggested, the way in which WP has been enacted could be characterised as, at best, reluctant at institutional and nationwide levels, which can be seen as an example of whiteness attempting to preserve itself. And while WP practitioners may be well-meaning people, i.e. good White people (Castagno, 2014; DiAngelo, 2018), CRT explains that the intentions of people are irrelevant when the results are unequal. Thus, WP remains a highly needed yet inefficient policy which needs to be reconceptualised to provide a real benefit to students of colour, particularly at PG level. The next chapter deals with institutional examples of how practices and discourses within the PG field influenced the lived experiences of the BME students in this study.

6. THE WHITENESS OF THE PG FIELD – RACIALISED EXPERIENCES OF BME STUDENTS IN PG EDUCATION.

6.1. Introduction

In the previous chapter I analysed how the national policy of widening participation to higher education was enacted at the researched institutions and how that might have had negative impacts on BME students in PG education. In this chapter I will argue that the field of postgraduate (PG) education at the researched sites was entrenched in whiteness, which permeated its foundations, structures, processes, practices and everyday interactions among actors in the field, and that it had profound and negative consequences on students of colour. I understand whiteness as an oppressive structure recognising, validating and centring White cultures, bodies and experiences at the expense of those of people of colour (Ellison and Langhout, 2016; Gillborn, 2008; Ladson-Billings, 1998). Using student and staff interviews, survey data as well as the analysis of prospectuses, I will argue in the 'meritocracy as whiteness' section (6.2) that the discourses of meritocracy were being operationalised in the PG field in a way which helped maintain the status quo of racial inequality and were applied as and when it aligned with the interest of the dominant groups. I do this by using the CRT tool of interest convergence. In the 'othering as a tool of whiteness' section (6.3) I will argue that the actors of the PG field who were in a position to set the rules of the field engaged in discourses marking racial difference and acted as gatekeepers, facilitators and/or inhibitors of access and success of students of colour. I will further argue that BME students' experiences in postgraduate education were impacted by the whiteness of the institutional habitus (Reay et al., 2001) of the universities where they studied. Thus, their experiences were racialised, and while intersecting with other categories of difference (like gender, sexuality, class and religion), were more negative than those of White students. In following section (6.4) I will highlight how the above discourses of meritocracy and othering played out together in the case of admissions of international students to disadvantage 'home' BME students. Finally, in the 'whiteness of organisational structures' section (6.5) I will argue that the PG field has been constructed primarily with White, young, economically independent, male students in mind

and thus positioned students of colour and anyone who does not fit into this narrow model as "other" and by doing so centred whiteness and alienated otherness.

6.2. Meritocracy as whiteness

Meritocracy can be understood as a system of recognition of one's abilities, knowledges and qualifications based purely on these merits, where such factors as gender, 'race' or class are presumed irrelevant in making a decision as to who should obtain a position as long as they meet the meritocratic criteria. However, the idea of meritocracy has long been argued as utopian and unrealistic on the one hand and as preserving the status quo of the hegemony of dominant groups (White, middle/upper classes) on the other (Zamudio et al., 2011). In fact, the term itself was coined as a satire on the tripartite system of education in post-World War II England, which would produce the "haves and the have-nots" based on divisions (streams) in education at the age of 7 or earlier (Young, 1994). Meritocracy is a highly problematic idea, even more so due to its links with university admissions – i.e. the professed claims of admissions to be based on merit, transparency and fairness (DfES, 2005). In this subsection I focus on the application of the discourses of meritocracy by university staff who have admissions responsibilities and what it means for BME students within research-intensive universities. I do this by looking at routes into postgraduate education, including the importance of previous institution as well as the funding regime and the extent to which raced, classed and gendered factors can disturb the idea of merit-based admissions. Therefore, I argue, that meritocracy as whiteness is in fact merely a discourse, rather than an actual state of recognition of merit. As such, I argue further, it is operationalised to preserve whiteness by reaffirming the hierarchies in the PG field, with majority White universities being on top.

6.2.1. Meritocracy as a tool to hierarchise PG field

All the university staff interviewed in the study explicitly professed that, on the whole, a meritocratic admissions system was operating at their university, that it was fair and fit for purpose. However, on further probing their explanations painted a different picture, which I argue was an example of the reproduction of

privilege in the field of HE through the hierarchising discourses of difference between universities (Colley et al., 2014).

Scott, a postgraduate chemistry tutor at the University of Labour, engaged in a discourse of fairness being based on meritocracy:

Being fair ... is the key point when you're recruiting, when you were recruiting them [students] on grounds of capability and achievement and all the academic things that you expect.

(Scott, postgraduate tutor, University of Labour)

Scott's discourse can be interpreted as exposing an assumption of there being a common understanding of what is expected from prospective students and it supposedly being fair. However, his quotes later on in the chapter suggest less than fair or transparent practices.

Raul, the head of Graduate School at the University of Confidence seemed to engage in a discourse of meritocracy of admissions at his institution:

I think [at] some of the universities there is [bias] but yeah, I mean, I know some people will have some bias but I think we're generally pretty good on meritocracy here and if there's a good student it doesn't really matter where they come from. And I say that not because I've got specifics but when I look around and you hear. . . People are quite proud of the fact they've got people from a wide range of universities...

Western England [sic] and Kingston and all these other places.

(Raul, head of graduate school, University of Confidence)

Raul initially claims to be aware of bias, which can be understood as non-meritocratic behaviours, only at different institutions but his discourse seems to deny the possibility of bias occurring at the University of Confidence. This denial, I argue, serves to validate the processes at the University of Confidence and therefore limit the questioning of status quo. However, Raul does not provide any convincing reasons as to why the University of Confidence should be different from other institutions. His justification for meritocracy at the institution is that PhD students come to the university from a variety of institutional backgrounds. By saying this he acknowledges that there are differences among institutions, their quality and reputation. Following Bourdieusian analysis, this can be understood as Raul understanding different

universities to be seen as fields, within the larger field of higher education, which are hierarchical to one other, which, as separate fields, will recognise and value different capitals of students (Colley et al., 2014). Research intensive universities in the UK, especially those in the Russell Group, like the University of Confidence, are seen as positioned, as well as actively seek to position themselves as higher in the hierarchy of fields than modern universities. As some of the less renowned institutions Raul mentions Kingston University and "Western England" – by which he means the University of the West of England (UWE). The inability to properly recall the name of the university is quite telling in that it suggests his possible disdain for such institutions or at least its peripheral character to the core of University of Confidence's work, and whether it is intentional or not it can be seen as a sign of making of and marking the different position in the hierarchy of universities (fields). This is further confirmed in his other responses where he categorises universities as "serious" while talking about international collaboration:

There are 5,000 odd universities in Europe. And there's probably only 800-1,000 serious universities in Europe.

(Raul, head of graduate school, University of Confidence)

During the interview he contradicted himself admitting that the University of Confidence recruited postgraduate students mainly from Russell Group institutions, which was further confirmed by Mark, a graduate mathematics tutor at the University of Confidence talking about sources of student recruitment in his department:

Cambridge, Oxford, Warwick, Imperial and our own students and to be honest [for] most British educated undergraduates we are not taking that many from outside those universities.

(Mark, graduate tutor, University of Confidence)

Therefore, Mark and Raul imply and due to their position within the university also arguably contribute to a process of reproduction in education on an institutional level, whereby universities with a particular institutional habitus are more likely to recognise capitals and habitus of students coming from institutions of a similar kind (Bourdieu and Passeron, 1990; Reay et al., 2001).

Upon further probing Raul, shared his somewhat more nuanced perspective on the reproduction of privilege in the field of HE:

But I couldn't say that there wasn't some in-built bias, and not because of the way they [students] speak. But because of the [academic] background that they've had and the preparation they've had in their programmes. So, if they'd been to a more research-intensive university they will have had more research experience, they will have had more thought around those terms, and we certainly know that there is in-built bias getting into those programmes. Not bias, but the demographic is clearly there. So, it's a sort of cascade, but the entry to doctoral programmes would almost to... a person [would] resist the idea of taking that [race] into account because they'd say the numbers are so small. It's all about research quality.

(Raul, head of graduate school, University of Confidence)

While Raul uses the discourse of bias his words can be interpreted as yet again demonstrating the reproduction of (White) privilege in the field of higher education whereby the universities (fields) occupying similar positions in the HE hierarchy recognise and privilege capitals of students (and staff) coming from similar status fields. While he (and other staff interviewees) mentions that research experience was important for PhD admissions, he was making assumptions that students from modern universities would not be exposed to such opportunities, i.e. he did not seem to be recognising the capitals that students obtained in fields which were perceived as lower in the hierarchy, thus taking a student deficit approach. Raul also used a discourse of "demographic" differences in admissions to undergraduate programmes, thus trying to push the problem of PG admissions of BME students onto earlier stages of education. This is in line with Warikoo's (2016) research that found that locating the cause of racial inequalities in admissions in pre-university education and wider society was common in UK HE. This also assumes that universities will provide the same experiences, quality of knowledge and outcomes (student knowledge and skills) to all students. Therefore, on the one hand, this further entrenches the false notion that students from certain universities (which do not recruit a lot of BME students) are worthier of being admitted to a PhD programme, and on the other hand denies the individuality of raced, gendered and classed university experiences of different groups of students. Additionally, Raul's justification of "small numbers" attempts to individualise the issue of admissions, i.e. make what he refers to as "bias" seem like a decision of an individual. Unless the

individual is a 'rotten apple' they are presumed to be meritocratic ("it's about research quality") and uninfluenced by the candidate's background (national, ethnic, class status). However, as CRT tells us such a colour-blind approach is in fact simply reproducing the racist status quo by defining racism as malicious, intentional actions of individuals (in position of power) rather than the outcomes of BME students sanctioned by the set-up of the PG field (Gillborn, 2008). This is exactly what seems to be happening in Raul's quote whereby universities engage in discourses of blaming others rather than proactively engaging in making a change in admissions and course structures.

In the quote below, John, a graduate tutor, also at the University of Confidence, appears to perpetuate the discourses of hierarchy between universities, with some positioned as supposedly "good" (high status) and others supposedly "poor" (lower status), whereby the quality of a university seems to be judged by academic outcomes, which are narrowly defined by high status universities, rather than the academic journey travelled by a student or their lived experiences. Moreover, as John suggests students from lower status universities may face additional barriers to admissions into higher status institutions:

What we are trying to do is find evidence that they [potential students] will succeed on a PhD programme. So, to put it in other words I think you're balancing risk against opportunity, if that is the right word. So, we're all, I think, aware that some excellent academics have started out perhaps not so well academically... top professors in top universities absolutely excellent professors, fantastic publication record, really fantastic researchers and they started out at very poor universities, so you know this and so we wouldn't just say well this person went to this university, therefore we shouldn't take them. We would just say then, if they went to this university then we are not so sure that they have the right background to study what they want to study... Then you're going to say, well look they didn't even do well at a university where the bar is lower, are they really going to have the math's ability to do the kind of math's that is required for their PhD in their chosen field and we would say probably they haven't. So, it will be like that - it would be a lack of evidence, but if supposing you've got somebody who's got maybe not such a good first degree or maybe just a degree from not such a good university and they followed it up with a master's from a very good university, did very well then we would say, look they have clearly risen, demonstrated that they have got the ability in the master's level. Then

this gives us real confidence that they are good enough, so really, we are looking for this evidence that somebody is going to succeed.

(John, graduate tutor, University of Confidence)

On the one hand John seems to know of examples of "good" academics who got their first degree from what he refers to as "very poor" universities, thus disturbing the linear reproduction of privilege in the HE field. On the other, he still seems to firmly engage in a discourse of universities always re/producing specific capitals and habitus of their students, depending on the institutional habitus and position of these universities with the hierarchy of the HE field and disregarding how different categories of students may interact with these institutions. This is exemplified by him saying that all "good" universities will produce "good" graduates and "poor" universities will produce "poor" graduates (here: meaning having good or poor research skills). As John further explains, the only way for a graduate from a "poor" university to redeem themselves and acquire capitals valued by research-intensive universities is to get a master's degree at such a "good" university. However, he does not provide an explanation as to why universities would allow for such 'redeeming' transition between undergraduate and a PGT course but not for a PGR programme. To say that is to, again, suggest that a university will provide the same experience, knowledge, competences, graduate skills and outcomes to all its students, regardless of their raced, gendered, and classed identities and experiences and their alignment with the institutional habitus. But as national level research indicates this is not the case (HEFCE, 2015a, 2015b) – as different students perform differently, which, when comparing like for like students, cannot be explained by prior attainment – and given meritocratic assumptions of Raul and John it should. This is well illustrated by the ethnicity attainment/awarding gap, which persists across the entire HE sector when comparing degree outcomes of similarly qualified students from different ethnic backgrounds (HEFCE, 2015a). John's words suggest also that there are additional checks for students who come from the lower status universities to the higher status ones, which further questions the idea of fairness of admissions – which should be the same for all candidates. Therefore, the discourse of meritocracy is used to differentiate between candidates' institutionalised capitals (degrees) in order to justify differential treatment, which creates barriers for those coming from universities positioned lower in the hierarchy of the HE field.

6.2.2. Lack of transparency and fairness of admissions

Another factor which suggests that admissions are not actually purely meritbased (i.e. meritocracy is just a discourse not a practice) is the lack of transparency and fairness of the recruitment process stemming from limiting recruitment to internal candidates. This mechanism, which I present data for below, again serves to preserve the whiteness and to protect the white privilege of the high-status universities within the field of PG. The Bourdieusian analysis of the HE field and individual universities within it is helpful in understanding how higher status universities are more autonomous and can dictate the rules of the game through admissions policies (Bathmaker, 2015; Colley et al., 2014). As such, by limiting PGR recruitment to mostly internal candidates the universities preclude home BME students from applying to PhD programmes due to what Lupe, Raul and John called "the demographics" of "good" universities, i.e. the underrepresentation of BME undergraduate and master's students in research intensive universities. Fred, the head of graduate school at the University of Books spoke about why the majority of his home PhD supervisees were internal:

Many of them [PhD students] have studied their MSc here and that's how I've come to know them...I hand-picked them basically, because I know that they have done really well in the MSc programmes.

(Fred, head of graduate school, University of Books)

As Bathmaker (2015) argues currently the dominant discourse in the field of HE is identifying the best talent as opposed to ascertaining that everyone reaches their full potential. Thus, Fred's words resonate with this discourse as he seems to justify the lack of transparent and fair admissions by supposedly having identified such talent among students who were trained within the university. Employing Bourdieu, this can be interpreted as the academic recognising students' capitals only or mostly if they come from within the same university/field, or conversely, disregarding capitals from other fields. Similarly, Scott talks about the advantage of internal applicants while describing where most home PGR students come from:

So, once we get the UK studentships, or external fund for studentships, they tend to be taken internally first, because that's the first group who will see the adverts, so they will apply and often we know the students did well or had a good project and they want to keep the momentum, so we don't really have enough of those kinds of individually funded studentships, in order to advertise widely to get the kind of breadth in application that we might otherwise seek or will benefit from.

(Scott, postgraduate tutor, University of Labour)

Scott's discourse can be interpreted as attempting to justify the lack of openness and diversity due to small numbers of funded positions not warranting external recruitment as it supposedly would not produce better quality of candidates than those coming from within the institution. While there may be benefits to recruiting internally, such as the familiarity with the quality of students' work (capitals), the argument of few spaces does not seem to be a logical one, as each advertised place could draw a wide range of candidates who may come with the right capitals required for a PhD and from diverse backgrounds. Thus, a closed system of admission (internal applicants) serves to preserve whiteness by limiting the pool of candidates to the already existing, predominantly White, internal candidates.

6.2.3. Naming the unwritten rules of the admissions game

One of the ways that whiteness has been described to operate is by naïve interpretations of racial matters which fail to acknowledge structural oppression or deny one's responsibility (Ellison and Langhout, 2016). In this section, I argue that whiteness dictates admissions by not recognising the capitals and habitus of BME students, while simultaneously attempting to deflect blame from White actors of the HE/PG field. Several interviewed staff members used the language of "bias", "unconscious bias" and "chemistry" in recruitment of students as playing a part in mitigating meritocracy, which I argue can be interpreted as exposing the unwritten rules of the admissions game.

When asked about the reasons for underrepresentation of BME students at his department, Scott referred to the possibility of "bias" in the recruitment processes. Although he could not give a direct example in relation to BME students, he used an analogy with gender, which he learned about thanks to his

institution participating in the Athena SWAN programme, which aims to improve the representation and progression of women in academia:

One of my roles in chemistries is to serve on the committee called the Athena SWAN... That's a really good example of how people like me tend to think linearly in terms of a recruiting, in terms of function only... if you look around and just monitor what you do actually you can pick up on certain unconscious bias - that you think you're being very fair, but actually if you look what you're doing, [what] your embedded attitudes do, to some extent [they] steer the way that you think and act.

(Scott, postgraduate tutor, University of Labour)

The discourse of unconscious bias has become popular in UK HE recently and can be described as attributing prejudice to the subconscious parts of the brain (Atewologun et al., 2018). However, I argue that engaging in the discourse of unconscious bias is only partly helpful. On the one hand, unconscious bias training can potentially help academics to understand that admissions policies and processes are not always objective or purely merit-based, but are driven by deeply hidden racist, sexist and classist discourses, i.e. the unwritten rules of the field. However, employing a CRT and Bourdieusian lens of analysis, it can be argued that by placing the fault in the unconscious, automatic reactions of the human brain, this discourse attempts to exonerate from individual responsibility the actors of the field (e.g. admissions tutors) who play the field to their advantage in order to reproduce power and privilege. So, academics talking about unconscious bias can be interpreted as them simply recognising limitations of meritocracy discourses, yet not accepting their complicity in the process, playing to the "racism without racist" narrative (Bonilla-Silva, 2006). In other words, whiteness protects White academics from taking the blame for racism within the HE/PG field.

Bob, an assistant dean at the University of Merit, also talked about "bias" in the form of what he referred to as "chemistry", which can be argued as another unwritten rule dictating admissions, which demonstrates a lack of rigour and transparency in admissions performed by White academics onto BME candidates:

[it is said] that you make a decision on someone within three seconds of walking in the room... I think I'm guilty as I was absolutely forming opinion, strong opinions and being belligerent and not changing them. I

think it's one of those things, you'd have to sit in and watch to understand and I think, I guess, you know, a little chemistry.

(Bob, assistant dean, University of Merit)

Bob talks about the phenomenon commonly referred to as first impressions and forming opinions on someone within a few seconds, something that is not stated in any recruitment policies or candidate criteria. However, the "three seconds of walking in" does not allow for a full recognition of knowledge, capitals and habitus, what it does allow is for interviewers to note what gender and perceived ethnicity the interviewee is, and at most body language which can be linked to social skills and comfort in the situation, i.e. potentially, forming parts of the interviewee's habitus which may or may not be agreeing with the institutional habitus (Reay et al., 2001) and thus impacting admissions decisions. A relationship between the doctoral supervisee and the supervisor is one of the crucial aspects of the students' success and experience in PGR education (Phillips et al., 2016), and as Bob suggests an interview can give the first indication as to how this long-term relationship will develop, hence he talks about "a little chemistry". This "chemistry" can be interpreted as the alignment of individual and institutional habitus between the prospective student, academic and the institution. Thus, for academics this can supposedly legitimise the departure from a purely merit based admissions and allow for similarly qualified candidates (merit) to be distinguished via subjective judgment. However, intersectionality tells us that affinity and empathy (i.e. "a little chemistry") can be hampered if the two people do not share the same intersectional identities (Delgado, 2011). Since most senior staff at these institutions are White men this may have a negative impact on the recognition of capitals and habitus of, for example, Black female candidates during admissions process.

The above section argued that meritocracy, as it mainly referred to admissions, was merely a discourse which was used by institutions, and operationalised through their staff, in order to maintain whiteness of the PG field. This served to (re)create and (re)affirm hierarchies among different universities, placing universities with few BME students and staff at the top.

6.3. Othering as a tool of whiteness

In this section I argue that whiteness of the PG field manifested itself through the othering of BME students. Staff members displayed attitudes which stereotyped students and positioned them as 'other' thus centring whiteness as the norm.

Lola, a PhD student, experienced a bizarre comment from her supervisor which she claims made her realise she was being perceived differently from other students, with that difference being 'race':

I suddenly heard him out of nowhere say, would it be bad if I said you were my best black student? ... It turned out it was something that he wanted to write in the letter to the funder as to why they should continue to fund me. It was just a moment of clarity in terms of just how much he doesn't understand about being Black... He just couldn't understand that that could be possibly the worst thing you could say to me as a supervisor. Whether he meant it or not, whether he just thought it was a tactic to write to the [funder], whatever, it's the worst thing he could have said to me.

(Lola, PhD student, British-African)

The above paragraph can be interpreted as an example of academic staff engaging in a discourse creating racial difference by putting Lola in a separate category, i.e. 'Black student' as opposed to just 'student'. The Supervisor's comment suggests that his expectations of Black students were lower and that possibly he did not see Black students as smart as White ones, so they could not compete in the same category as them. Lola also mentioned how that othering made her think that her supervisor did not seem to have any understanding of the impact of 'race' and racism in Lola's life. Research elsewhere has found that the ability of the supervisor to engage with issues of 'race' and having the knowledge of working with BME students was conducive to them having a better experience and outcomes in their doctoral programmes (Graham, 2013; Phillips et al., 2016). However, lack of such knowledge among doctoral supervisors was identified long time ago as an issue (see for example: Dedrick and Watson, 2002) and at least in Lola's supervisor's case not much seems to have improved.

6.3.1. Othering the body

Bodies of people of colour, and Black women in particular have a long history of being othered, mistreated and politicised, with, for example, Black people being often valued for their physical attributes while the intellectuality is seen as the preserve of White people (Davis, 1983; Hopwood and Paulson, 2012; Puwar, 2004). As I argue, these othering discourses also appeared in the current data as the body-centred discourses were reproduced in the PG field by academic staff.

Lola experienced racist othering of her body during her PhD as she participated in international conferences:

Come to the break and it's the lunch, and I'm standing here, minding my own business, looking at cakes that I wanna eat, [standing next to the] man who is the measles guy, who's just presented the research, next to him, talking to his mate, not part of conversation, and next thing I know I feel him rubbing my skin. And I said, excuse me? Oh I'm just saying to my colleague here that on dark skin you can't see the measles and you have to look at the eye, the conjunctivitis, and... like, bitch why are you touching me, what is this where you think I'm going to be a prop for a conversation that I'm not a part of?

(Lola, PhD student, British-African)

As Lola put it she was being used as a "prop", in this example, which can have several consequences. Firstly, she is being essentialised, assumed different from the White male majority and somehow representative of all Back bodies (Gunaratnam, 2003; Puwar, 2004). Secondly, she suggests that she is not seen as an equal, but is being dehumanised, with her presence being reduced to and only validated as being useful to White men as a "prop" rather than as a researcher with contributions to knowledge. From an intersectional perspective, the behaviour of the "measles guy" exposes the sense of entitlement of White men to owning, managing and disrespecting female, in particular Black female bodies, which has been happening for centuries, such as, for example, the gynaecological experiments on Black women without their consent or anaesthetics (Davis, 1983; Ojanuga, 1993; Puwar, 2004). Thus the "measles guy" seems to be reproducing in educational settings the processes of othering the body from the wider society.

Lola's narrative below can be interpreted as exposing a wider problem in how Black bodies are treated and represented in her field. This example came from another international meeting/conference dedicated to public health and migrants:

There are two black women there.... Me and someone else, this woman from Sweden whom I've met before. And this is about migrants and ethnic minorities and on the, at the end of the first day, you know, I'm sitting here, like, because I haven't seen another black woman, I've seen more dead black women on the screen, because this is the thing that they are happy about showing, drowned black people, which they would never do, they wouldn't share, sit in a conference and see loads and loads of dead bodies, close ups of people's faces if these people were white... And what is terrifying about it is that these are the supposed good ones. Those are the people who care about the migrants and ethnic minorities.

(Lola, PhD student, British-African)

Lola talks about the bias the overwhelming majority White academics in her area display when representing people of colour. This resonates with Butler's work on 'grievable' lives (Butler, 2009, 2003), arguing that certain people, especially those seen as outside of the First World/Global North are often not deemed deserving of grief from the Westerners. This also speaks to the notion of whiteness being seen as more fragile, vulnerable and precious than the lives of the people of colour. And so, displaying dead White bodies would be too disturbing for the White audience, but seeing dead people of colour is not assumed to evoke the same compassion and grief. I argue that this communicates to Lola that, the supposedly empathetic White academics, do not see people who look like her as equally deserving the same level of respect or empathy. This also exposes the problematic narratives of a 'white saviour', which portray non-White people as supposedly passive, helpless and needing the help of Western men (Bell, 2013) regardless of the White man's level of understanding of their situation. Such instances speak to the knowledge production (research and conferences) perpetuating whiteness, i.e. done from a White perspective, placing White people as more important than people of colour, even in research about people of colour.

Another participant, Christiana, spent a few months of her PhD in Sweden, where she experienced othering comments from her supervisor:

It gets very dark in Sweden during the winter months... and apparently a lot of people get depressed... I must have been at the table, it was like me and four others, including him [the Icelandic supervisor]. And I was like, oh this darkness, it's just so depressing no wonder why people get all depressed, and he was like, yeah, must be more depressing for you because you look in the mirror and it's just dark. I was like, okaaaay, and it was so awkward, because... we were kind of all in giggles at the time, so when he dropped it, it was like, he-he-he [awkward laughter] and it was so awkward, everyone kind of looked at me - is this ok to laugh or not, and I'm like, oh god I don't even know what to say to this guy... If it weren't for the fact that he's always, he's always been quite supportive for me and he's always paying for flights and hotels and everything I would have taken it a lot worse, but I just see it as something where you obviously think that we are closer than we are maybe to drop a joke like that thinking it was funny.

(Christiana, completed PhD, British-Caribbean)

In that situation Christiana was faced with a racist comment which not only made her feel uncomfortable by its very nature of creating and marking racial difference between her and the norm of whiteness, but also required her to manage/deescalate the situation. She had to weigh whether or not to challenge her supervisor, whom she described as otherwise very supportive, and to what extent it was a malicious comment or a light-spirited/jokey remark. As she describes she felt the burden of defusing the situation as other people at the table also felt the awkwardness of the moment and were waiting on her reaction. As Rollock (2011) points out this kind of burden is common for people of colour as they must "constantly manage and circumnavigate" (p.4) their environment in White spaces.

Othering the body, i.e. marking racial difference of bodies was also visible in how the prospectuses of the five research intensive universities mis/represented people of colour, This happened, I argue, not only through the numerical representation but also by how they were portrayed in relation to White people and within different parts of the prospectus. Firstly, the numerical representation of people of colour in the publications bore little resemblance to the actual numbers of BME staff and students at the institutions, as table 6.1 demonstrates.

Table 6.1 BME representation in prospectuses versus actual institutional data

| Institution | BME students as % of all students in photos | % BME students in equality reports 2016 | BME staff as % of all staff in photos | % BME academic staff in equality reports |
|--------------------------|---|---|--|--|
| University of Benefit | 52% (11) | Not available | 19% (4) | 13% |
| University of Books | 35% (14) | 21% (UG and PG, | 50% (1) | 12% |
| | | and international) | | |
| University of Confidence | 42% (5) | 36% (PG) | 8% (1) | 19% (all staff) |
| University of Labour | 42% (21) | 48% (includes | 20% (1) | 12% (all staff) |
| | | international) | | |
| University of Merit | 75% (6) | 40% (PG) | 0% (0) | 18% |
| Average | 49% | | 19% | |

Overall the proportion of people who could be identified as BME students in the photographs in the prospectuses was higher than that of actual student populations. While this may be seen positively as a way to build an inclusive and encouraging image of the institution in order to draw in potential BME students, it is not genuine and as research elsewhere argues may backfire when students choose the institution and the reality does not meet their expectations – potentially impacting their sense of belonging and satisfaction (Bennett and Kane, 2010; Quinn et al., 2005; Roberts, 2011; Schofield and Dismore, 2010; Thomas, 2011).

When it comes to staff representation, the numbers were very small and thus proportionate representation became meaningless for the purposes of this analysis. However, the fact that the prospectuses portrayed only single figures of BME staff is quite telling in itself. It can suggest that BME staff are not present at the institution or, given the data which shows that they are actually there, that they are not seen as worthy of mentioning. Only the University of Benefit had 4 BME staff profiles, which accounted for 19% of staff representation in photos and was higher than their actual academic staff BME composition which was 13%. The University of Merit, despite having the highest BME staff proportion out of all the investigated universities (18% of academic staff being BME) did not seem to represent a single BME staff member in their prospectus.

More importantly, the portrayal (representation) of BME people (bodies) was different of that of White people in the prospectuses. Images of BME people were over-represented in sections about extracurricular activities such as sport or cultural events, student support and international students, while they were under-represented in sections to do with the core university activities, such as teaching and learning, and careers. In three out of four images with BME and White people in one-on-one situations it was the White person explaining something to the BME individual, and only one image had a person of colour seemingly explaining something to a White person. This, I argue, reinforces the discourses that BME people at universities are the receivers of knowledge, rather than the ones producing it, feeding the discourses of superiority of White knowledge (Osei-Kofi et al., 2013). University of Confidence offered eight whole pages to staff and student profiles. In each page, there was a big photo and a small photo. Out of the eight big photos six had people, four of whom where White academics, one White research subject/participant and one BME academic. Out of the eight small photos four were PhD students, three BME, the rest were White academics. While seemingly promoting the profiles of BME people (4 out of 14 i.e. 29%) this set up was arguably still showing a hierarchy in which most White people were given a lot of space on the pages (full page photos) and were mostly academics, i.e. producers of knowledge. At the same time, BME people were mostly given small photos and were mostly students and so could be seen as receivers of knowledge. Even though PhD researchers do produce new knowledge, in the UK they still have a status of a student – as opposed to some of the European countries where they are fully paid members of faculty – and can be seen as having less authority than other academics. On top of the people counted in table 6.1 above, there were 2 photos of just hands (no faces) handling sensitive STEM research procedures – both of which looked White, again adding to the discourses subtly centring whiteness and White people as knowledge producers.

6.3.2. Othering by gender

In this section I argue that the intersections of 'race' and gender played a significant part in the othering process of students. It has been well argued

elsewhere that women of colour do not only have to deal with racism in their environments, be it education, work or private life, but on top of it have to endure sexism and often manage their compounded, intersectional consequences (Crenshaw, 1991). For example, Black feminists pointed out how the needs of Black women were not reflected in the suffragette movement which aimed to allow (White) women to do paid work, while Black women have always been in employment – be it paid or slavery, playing a fundamental part in the upbringing of White children and the upkeep of White households (Davis, 1983). Similarly, in the US affirmative action has been shown to benefit mostly White women (Ladson-Billings, 1998). In UK academia, Women of colour are also particularly disadvantaged, with only 25 Black women holding a professorial positon out of nearly 15,000 UK domiciled professors (Advance HE, 2018a) - an underrepresentation in respect to the wider population, student population, and early career (e.g. lecturer) population of Black women.

Throughout the two interviews, Nana, stressed the impact of gender on her studies, both during her master's and PhD:

I think from doing the masters here and often being asked if I was okay, if I was coping, if I need any help with course work... and nice things as well that you feel bad taking offence at... going for lunch, they are holding the door, then after a while you're like, so why are they holding the door, why are they asking me like I got into this course as well as they did - on my merit. I mean my application didn't have a picture of me on it, so I don't see why everyone thinks that I need more aid than anyone else, so that was just the annoyance.

(Nana, PhD Student, British-African)

Nana's master's course, which she also did at the University of Confidence was predominantly made up of White men – mostly British and European, who displayed behaviours which could be described by some (mostly men) as traditional chivalry. However, from her words it can be interpreted that to Nana the actions of her colleagues were an example of benevolent sexism and othering, as she was not being treated as an equal and signalling that as a woman she supposedly did not belong in academia. During her PhD, however, it was her supervisor who displayed a behaviour which she read as sexist:

I was noticing there were a few issues because I also know that my supervisor has a few problems with the female students. So, in the past, most of his female students have actually had quite a few problems but then quite a few of them have asked to transfer from him and all this sort of things.

(Nana, PhD Student, British-African)

Nana was observing her supervisor's behaviour and noticed discrepancies in how he approached male and female students:

He, he tends to sort of push the male students a lot more and sort of help them out a lot more. So, for instance, when I started it was very few to nearly no meetings. I was expected to know everything before the meetings, any sort of small, minor mistakes were just these huge like, you should have known this before and I noticed the discrepancy when I had 2 master students, I had 1 male and 1 female and the male student was sent like loads of notes, papers to read and all these different things, whereas the female students, like every meeting, he'd be like, oh well, she clearly doesn't know anything or like, she's not quite getting it or whatever this, this and this and always complaining about her standard of work, even though when it came to both of them handing in their projects, it was clear that her work was above and beyond this male student, yet he seemed to not really notice what was going on but, yeah, but, so that was the sort of main problem with him.

(Nana, PhD Student, British-African)

According to Nana her supervisor did not provide the same level or support and recognition to female students as he did to the male ones. Her description of the discrepancy in the treatment of women and men by her supervisor fits into the wider discourses of over-policing the behaviours and over-scrutinising the knowledge of women of colour (Hughey, 2011).

Marian, also experienced similar issues of othering with her supervisor:

Yeah. So, I don't know if I mentioned before, so like my supervisor's slightly, hard to say, a bit difficult to work with in general... until about a year or something I just thought it's just the way he is, but I have sort of realised there's a hint of, or there's a lot of sexism going on with him for sure... Now he has [under supervision] three girls and one guy and I think I can see the difference in attitudes he has... Not take anything away from the guy because he's amazing and he is ... He [supervisor] has a very very different attitude to things we approach him for and things he approaches him [supervisee] for and how he reacts and it just ... It does have an impact on the work we do in the end, so yeah.

... over the years if I go to him with a problem... He'd probably say to me have you Googled that? Have you tried to search? Have you done the obvious things? And I'm like yeah usually I have and he will be like no I don't believe you. You should go back. Do it. It's quite easy. And at the same time I actually saw our [male] colleague ask a very similar question which I once asked him and he pretty much said, oh no no, that's very easy, I'll just show you how to do it. And within minutes it was done. And for me I had to go round, like literally spend weeks trying to figure out something very very simple which sort of really, I don't know, bothered me... Over the time I think things like that accumulate and sort of doesn't make you feel very good in the end.

(Marian, PhD student, British-Pakistani)

Similarly, to Nana, Marian noticed not only how she was being treated but also how other female students were being treated differently from the male ones. Marian's words can be interpreted as her not being given the same level of trust in her competence and dedication. This resonates with findings of researchers across the sector, with Heidi Mirza's (2015) investigations of educators' perceptions of female Muslim PGCE students and Nicola Rollock's (2019) work on the difficulties of gaining recognition and promotion by Black women professors.

It was not only the women in the study who felt the impact of gender on their studies. Vincent felt the constraints of masculinity when he was going through mental health issues:

I guess being a guy you're kind of supposed to... just deal with problems, but also not show emptions or let things get to you. Because I think in hindsight I was quite depressed for a while and I think I found it difficult to show it and I think maybe in the end I ended up seeing a counsellor and stuff, which I have never told anybody about this.

(Vincent, science journal editor, completed MPhil, British-African)

Vincent refers to what can be seen as discourses of masculinity which put pressure on a man to behave in a particular, dispassionate way, without showing one's emotions and just 'getting on' with things. However, an intersectional lens allows to see that these discourses are often even more pronounced for Black men who are portrayed as hyper-masculine (Hughey, 2011) and therefore could contribute to him feeling some sort of shame in seeking help from a counsellor – which was hinted by the fact that he only

revealed his counselling in the research (to me), but not to his supervisors or anyone else.

The accounts in this section seem to indicate that the oppressive structures of traditional masculinities and femininities were mediated by participants' 'race' and fitted into wider societal discourses of over-policing gendered and racialised bodies. In turn, this can be understood as the PG field not being hermetic or immune to outside influences, despite professed objectivity and meritocracy. Therefore, institutional practices reproduce unequal raced and gendered structures which uphold While, male privilege.

6.3.3. 'Acceptable' otherness

In this subsection I argue that while students were being othered they were simultaneously expected to perform their otherness in a way which would be acceptable to the dominant groups, i.e. they would not be disturbing the notions accepted as truths or norms by the dominant group, thus demanding that people of colour fulfil the stereotypes and roles imagined onto them by White people (Puwar, 2004). Adele talked about these tensions when talking about representation on recruiting panels:

And so, you find that when they're doing like interviews, like interviewing a candidate for a role or whatever, you end up always being asked to be put on the committee for it because you're like the token black person. I understand why they do it because you need a diverse group of people to represent the whole department, but is it really representing the whole department if there's only one of you? It's a bit annoying but then, I used to say that I'm not your stereotypical black person but then what is a stereotype anyway? I don't think anyone really fits the stereotype, so I don't really know exactly.

(Adele, PhD student, British-Caribbean)

Adele's concerns were around the issue that an approach to building diversity in an organisation, like her university, hinges on assumptions that there is a typical way to perform blackness and that she does not fulfil this stereotype. This could be interpreted as making/marking racial difference by agents of the field resulting in essentialising students of colour, i.e. making them seem different/other from the White norm while at the same time portraying them as and expecting to be a homogeneous group (Gunaratnam, 2003) which

supposedly can be represented by one person. Adele seemed to feel uncomfortable with such expectations being laid on her and the consequences it may have for the recruitment results. This suggests that if university structures and policies are recognising diversity in a tokenistic way, by treating minority groups as homogenous representatives of their 'race' or gender, then acting outside of the expected norms may result in the person being penalised for not adhering to the stereotypes.

Lola also mentioned tensions the expectations of performing her identity in a way acceptable to the dominant groups put on people of colour:

...it's not necessarily about being black, it's about being the wrong type of black. I think one of the things that is really difficult to convey is how there are lots of white academics who go around championing people of colour as long as they are a particular way. So as long as they're non-threatening in any way, completely subservient in the way in which they act... Interestingly, I think black men also have that issue as well. Of all the black male professors that I know, they're all exactly the same. You see these angry old white guys who are professors, you'd never come across one of them as a black guy, he just won't make it that far.

(Lola, PhD student, British-African)

Here Lola can be interpreted as referring to the idea of White sanction hinging on the right way of performing blackness (Miller, 2016) whereby BME academics are being recognised as worthy of promotion by White supervisors/superiors if they behave in a particular way, which is perceived as non-threatening to White people and whiteness. Lola's words resonate with wider literature which stipulates that BME people may need to limit their free expression of their identities, or assume different identities and "act White", i.e. moderate their behaviours and express their habitus in a way which is more palatable to the dominant (White) groups (Carbado and Gulati, 2013). This moderation can be understood as performing a "working identity", which can take its toll on self-esteem, the ability to work efficiently or to fully express one's views (Carbado and Gulati, 2013). Furthermore, it has not only individual consequences but also structural ones. As Puwar (2004) argues, by closely defining and policing how othered identities are allowed to be performed the possibility of "imagining professional spaces differently" (p.151), which could be achieved by having Black female bodies present in these traditionally White

male spaces (and having gatekeeper responsibilities, as Adele did) gives into "the assimilative pressure to mimic the hegemonic culture of whiteness" (p. 151) and "leaves the normative power of whiteness intact" (p.116). That is to say, having BME representation in positions of power in and of itself may not lead to dismantling whiteness if that BME representation does not actively challenge the racist assumptions of whiteness.

6.3.4. Motivations, othering and underrepresentation

As the data above suggested academics in this study created a difference between White and non-White students by putting them in artificial, separate categories, such as supposed difference of intelligence and ability. In this section I build on this argument further, arguing that in this study academics used othering discourses to individualise the problem of underrepresentation of BME students in PG education rather than recognise structural forces, which can be seen as an example of how whiteness operates (Ellison and Langhout, 2016).

Most of the academic staff engaged in discourses employing some sort of stereotype about BME students in one way or another, thus marking racial difference between White and BME students. Academic staff engaged in discourses which portrayed BME students as having different familial pressures and aspirations to White students which supposedly resulted in different participation rates. This was expressed by Fred when talking about the reasons for the underrepresentation of BME students in PG education:

I would imagine probably family issues going and money rather than study, coming to the family business perhaps, there is more pressure culturally I think from those backgrounds, than from the White European.

(Fred, head of graduate school, University of Books)

Although Fred seems to acknowledge that there is no difference in the IQ/ability between different racial groups (the difference not being in "study") he talks about BME students as having stronger family ties which bind them to work in family businesses rather than education, thus talking about racialised cultures. While many BME students display strong family ties, which as I highlight in the next chapter can be translated into familial capital (Yosso, 2005) to suggest this

as an explanation for underrepresentation of BME students in PG STEM is to dismiss the very familial capital that brings strong and supportive environment conducive to learning (Archer and Francis, 2007) and to reduce it to a one-dimensional view of BME families as occupying economic position of family owned small businesses that do not require STEM skills. This explanation is entrenched in the student deficit model – whereby the difference in admissions and progressions of BME students are supposedly not explained by any institutional factors but by the background of the student (McDuff et al., 2018).

Sam Brown, a graduate dean at the University of Books, exposed some stereotypical views of BME students' motivations when talking about their underrepresentation at PG level:

Well I think, I'm sure that these groups are even more underrepresented at faculty level so I think that makes a big difference, I think, if you don't see people like yourself... Now another reason might be, I mean an academic career is not viewed as particularly, let's say, lucrative.

(Sam Brown, graduate dean, University of Books)

While he recognises the importance of role models and the issue that the lack of these can pose for BME students, impacting their ability to see themselves in this line of work, Sam Brown also points out to academic career not being as "lucrative". This suggests that he views BME students as being primarily motivated by money, rather than more intrinsic factors, such as prestige, fulfilment or satisfaction, which by inference are left as the preserve of White people. This seems like a shallow understanding of students' motivations. Figure 6.1, however, presents data from the student survey conducted in phase two of the project, which provides a more complex picture of student motivations:

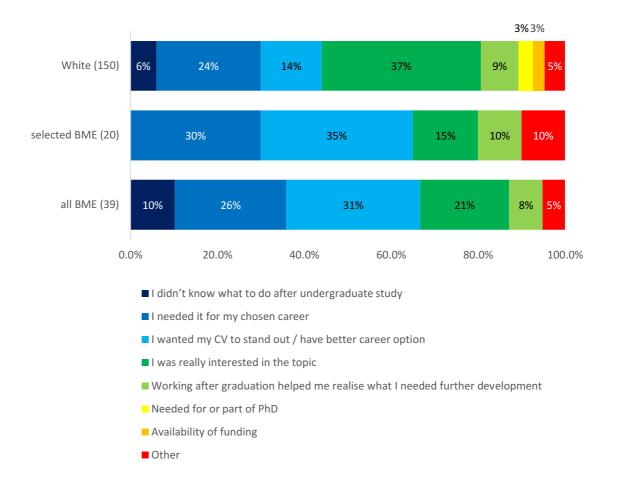


Figure 6.1 Student motivations for taking a master's or other PGT course, by ethnicity group

Figure 6.1 suggests that the survey respondents from BME backgrounds were more motivated to take on PGT education by their career prospects and in particular the need for their CV to stand out, with only 14% of White students and 31% of BME students giving this as their motivation. Nationwide studies have argued that such motivations to take on PGT education may be linked to lower employment rates or underemployment of BME graduates (d'Aguiar and Harrison, 2015). Bearing this in mind, BME students' postgraduate motivations may be interpreted as stemming from their navigational capital (Yosso, 2005), being a way to mitigate against racism and gaining additional qualifications (which I argue further in the Navigating toward success chapter), rather than, as Sam Brown simplistically suggested, money/greed.

While specific disciplines may attract people with different desires to study further onto a masters and a PhD, which in turn may be racialised, in this research there was no overall difference between White and BME students in their desire to take on PhD studies as shown in table 6.2:

Table 6.2 Aspirations to undertake PhD and other doctoral studies, by ethnicity group

| Are you hoping to do a PhD/doctorate in the near future? (Regardless of your ability to fund your studies) | All BME (30) | Selected BME (17) | White (92) |
|--|-----------------|----------------------|------------|
| Yes - it's my main goal | 20.0% (6) | 17.6% (3) | 18.5% (17) |
| Maybe - but it's not my main goal | 50.0% (15) | 47.1% (8) | 52.2% (48) |
| No - I don't want to do it | 30.0% (9) | 35.3% (6) | 31.5% (29) |

While there is no comprehensive, UK-wide research into students' willingness to undertake PhD studies, which would analyse racial differences, table 6.2 can serve as an argument, that, at least in this study, students' motivation (i.e. individual factors) could not fully explain their underrepresentation at PGR level and the explanations have to be looked for in the institutional/structural factors.

The problematic explanations to underrepresentation rooted in othering discourses, together with the aforementioned student accounts of discrimination arguably show that academic staff in this study very seldom recognised structural issues within the higher education system that may inhibit progression of BME students and instead were quick to reproduce sexist and racist discourses of student deficit by using othering and stereotypes of different motivations. Moreover, by othering students of colour, HEI staff were placing whiteness at the centre of the PG field.

6.4. Economic imperatives, ethnic diversity and (the lack of) meritocracy – a case of interest convergence.

In this section, I discuss themes cross-cutting through the discourses of the two sections above (Meritocracy as whiteness and Othering as a tool of whiteness). I argue that in the field of marketised HE, the supposedly merit-based admissions is actually sensitive to economic factors (i.e. international study fees) and that such admissions is used to preserve the interest of the White university, with othering discourses being used to support such practices. In particular, following interest convergence theory, I argue that concentrating on international recruitment exposes the lie of meritocracy, while providing financial and representational benefits to the institutions. Therefore, I argue, once again, that meritocracy is merely a discourse rather than an actual practice, the use of

which seems to be secondary when the economic needs of the institutions come to fore.

In an interview which took place before the current PG loan system was set up in 2016-2017, Raul, the head of the graduate school at the University of Confidence, remarked that the increase in UG fees in 2012 along with the lack of funding for PGT courses would mean that fewer BME students, who mostly come from lower ranking universities, would not be able to pay for such redeeming master's degrees, as mentioned above, which would result in there being even fewer BME students at PhD level. This brings in two closely connected aspects for further discussion – policy and economics. A question arises - what are the policy incentives and factors enabling high status universities to recognise capitals of students coming from lower status universities and to admit into their master's programmes? While this issue is a complex one, and beyond the scope of this thesis, I would argue that a part of the answer might be the fact that master's or PGT programmes are a lot less regulated than UG ones, and do not influence league tables as much (Turnbull, 2018), with the major rankings (The Guardian, The Times, and Complete University Guide) concentrating on undergraduate students and research quality. Therefore, following interest convergence theory, it can be argued that the lesser impact of PGT education on league tables means that PGT admissions can be less stringent and while it can be a gateway for students from a variety of backgrounds (BME and/or lower status university graduates and/or international students) into higher status institutions, at the same time it provides a good source of income for universities, which I explore further in the following paragraph. Thus, the economic aspects become an important factor in admissions. The data presented below suggests that whiteness is maintained by prioritising admissions of international students, over admissions of home BME students, who on the one hand pay higher fees, thus subsidising and contributing to economic success of universities which continue to perpetuate whiteness, and on the other hand are being used to help build a shallow sense of diversity on campus, which masks the differences of experiences and needs between international and home BME students.

Discourses and practices of internationalisation have been exposed as being implicated in the processes of marketisation, and characterised as being driven by economic gains and shallow engagement with the issues of diversity (Stein, 2018). Therefore, it may not be a surprise that when asked about the efforts to bring in BME students to the institution, Lupe, the head of the mathematics department at the University of Labour, linked them to the economic aspect:

So, for us as a department, it's not an issue in the sense that we get the best students that come along. For us there is more of a difference between international students and UK-based students, so UK-based students are typically very well-prepared students, and as I said some of them were our students, but we have to find funding for them. International students pay for themselves, but particularly those coming from Far East, India and Pakistan or Middle East, Saudi Arabia, Iraq they come even less prepared to [do] research, to know what it is to do research and so with that, that's where we find the difference in terms of where the best students come from, so that's in terms of background for students.

(Lupe, head of department, University of Labour)

Like others, Lupe also professes the meritocracy of his university's admissions ("getting the best home students") but makes a distinction in the standard of the admissions process between home and overseas students, which is dictated by finance. Lupe is quite candid about the fact that overseas students who bring in income are accepted even if they are not perceived to be as research ready as the home students, thus suggesting that economic capital have a significant influence on the quality of admissions and can, to an extent, make up for the lack of other capitals. His views are also reflected in wider studies from around the country (Edwards et al., 2007). This has several consequences.

First of all, it negates the professed meritocratic principle of admissions and exposes it as being sensitive to other factors (here, economic) with marketisation of HE being a significant driving factor for internationalisation (Stein, 2018). Scott, a postgraduate tutor in chemistry at the University of Labour, admits that the department lowered their entry standards to keep it afloat:

It was a lifeline for us to have overseas students, and without a doubt that's kept us alive as a chemistry department, because we are quite small and the kind of metrics that are used to judge performance of chemistry departments are almost all related to the scale and size. Okay, so it's quite hard for a small department to score well in the national kind of measure of things. So, in the past, we've taken students from overseas with the philosophy of, you know, training them up, so rather than insisting on a certain level of achievement at that level of entry, we've taken the decision that we are looking at their transcripts of the past years that they would be a good bet to invest in and then train them. And using that philosophy actually, we've generated quite a high number of good quality PhD graduates who then go largely speaking, go back to their own institutions and take teaching positions all the time... Now, we are in a position, moving forward, where we're growing strong as a department, so for example, we've just raised the bar on our undergraduate recruitment, we just increased the qualification level, you have to have to get in. And my feeling is that we should follow the same with our postgraduate recruitment.

(Scott, postgraduate tutor, University of Labour)

Scott's words can be interpreted, using Bourdieusian analysis, as his department playing the game in the field of marketised HE, whereby departments are judged globally by a set of (assumed) universal metrics, with the right performance in the metrics making a difference between perishing or thriving. Scott seems to suggest that taking international students with lower "levels of achievement" and training them up not only helped the department succeed in the game but also produced high quality graduates. Using a CRT lens to analyse this situation I argue that this situation can be seen as an example of interest convergence, whereby this approach was not directed by altruistic motivations (e.g. a belief in WP ethos) but rather economic needs. In other words, the whiteness of the department and the interests of its employees (staying in employment) were protected by taking on a large proportion of international fee paying BME students, who were deemed not quite research ready on entry, yet provided a financial boost. Furthermore, once the poor financial situation was averted, the response of the department seemed to be one of protecting white privilege ("we've raised the bar") rather than applying the same successful model of "training up" to students from underrepresented home BME backgrounds. Therefore, the lowering of admissions standards (and training up students) was only applied when it served to protect whiteness, even if it has been shown to produce quality results (meaning that it could be applied on diverse groups).

Secondly, the data suggests that this type of internationalisation (economically driven, with "weaker" students) can result in further entrenchment of negative stereotypes about home BME students because of staff confusing them with/mis-recognising them as overseas students. During the interviews many staff members displayed a lack of ability to differentiate between home and overseas BME students. For example, during the discussion on the possibility of Centres for Doctoral Training (CDT) aiding WP efforts, Fred, head of graduate school at the University of Books, kept referring to international students when asked about home underrepresented students:

Interviewer: Do you anticipate or do your fellow deans anticipate that with this model [CDT] you might have more underrepresented students, because what we've heard in some other places is that some students don't have the same kind of research background and understanding and then if they take extra courses that one year, then it may be better.

Fred: The issue is the funding. If the money is there, it doesn't matter where they come from, and if they're good enough they will be appointed.

Interviewer: Okay, let me ask the question in another way, because there is so much underrepresentation of particular groups, do you think that the potential students might see this is an option?

Fred: I doubt it because that will mean that they have to afford a further year of training, because normally PhD is three years, and now we would be asking them for four years. So, it's very unlikely, unless there is funding for them, but there isn't, they would have to come up with an extra year of funding just to do this course, so I doubt it, but I'm sure there will be exceptional cases like very, very, very rich [students] from Pakistan.

Interviewer: We're talking about home students, home students from minority ethnic groups.

Fred: There aren't many of them. I mean that's very rare. If you're saying somebody from a Pakistani *background* who is a UK citizen... then their background wouldn't make a difference in terms of their training, previous cultural upbringing in the UK.

(Fred, head of graduate school, University of Books)

This inability to distinguish between home and international students, as suggested by the quote above, combined with negative stereotypes about overseas students can translate into further negative stereotypes affecting home BME students. The confusion of home and overseas students of colour

can also be interpreted as an example of whiteness, whereby Britishness is equated with being White (Chadderton, 2018) and where the White gaze is othering anyone who is not racialised as White into the category of being 'forever foreign'.

This phenomenon of equalising Britishness with being White and by reverse equalising people of colour with being foreign was also noticeable through the analysis of the prospectuses of the five research intensive universities, which disproportionally associated and used the images of people of colour within the international student sections of the publications, with 91% of all people in the photos in the international students' sections of the prospectuses being BME compared to, for example, only 19% of people in the photos in the career and alumni sections. The publications also gave a lot of prominence to the research excellence of universities. One of research case studies highlighted by the University of Confidence in their prospectus related to DNA ancestry and seemed to reproduce the discourses of British-equals-White. The example depicted a map dividing the UK and Western Europe into sub-regions based on genetic differences and origins of the British population. The map seemed to disregard racial diversity of the current UK population as it made no reference to people from African or Asian backgrounds living in the country. Moreover, the research summary concluded that having "a strong sense of regional identity" in the UK may have "a scientific basis", which I argue could be interpreted as having racist-nativist undertones of belonging to the UK only if one is genetically from Western Europe, i.e. racialised as White (Smith, 2016).

Thirdly, as suggested by Fred in the quote below, with a limited capacity to teach and supervise PG students, the places which could be taken by 'home' BME students were being taken by overseas students, who had the ability to get funding easier than home students:

I think the university would really love to have more of those students [home BME], but once you build the market for your product, you get mostly applications from them [international students] and they probably overcrowd the applications from outside.

(Fred, head of graduate school, University of Books)

Fred provides another example of academics engaging in the neoliberal discourse of market forces, which are responsible for driving admissions, whereby economic factors are stronger than the equality and diversity ethos. The data in this study, then, suggests that the marketisation discourses within higher education result in the university admissions policies and practices prioritising increasing admissions from overseas students (and the income from their higher fees) and inadvertently disincentivising the recruitment of BME students (who are often presumed to have little economic capital). Therefore, the interest of majority White staff (saving their jobs and keeping departments financially afloat) and non-White overseas students increased admissions converge in increased overseas admissions, while they diverge (Gillborn, 2013) for 'home' BME students as seen in the limited admissions and the entrenchment of negative stereotypes.

For academic staff there might be another benefit to using the neoliberal discourses of marketisation and individual responsibility (preparedness to study). Namely, they allow staff to not think of themselves as racist, while reproducing racist outcomes, i.e. outcomes which are systemically and systemically negative for BME students, playing to the discourses of racism without racists (Bonilla-Silva, 2006). For example, while looking for home BME students for interviews at the University of Labour I heard on multiple occasions from staff that nearly half of postgraduate students were from BME backgrounds. However, on analysing institutional data it turned out that while 48% of PG students were in fact from non-White backgrounds, only 5% of PG students were from home BME backgrounds, which means that they were heavily underrepresented. Therefore, I argue that admitting oversees students helps make the university campus seem more diverse. However, that diversity masks the difference between 'home' and international BME students. According to the neoliberal discourses of marketisation, who is studying and how well they are doing in their course has nothing to do with their 'race' but with finance (economic capital) and readiness to do research independently (technical capital, in this case – science capital). Therefore, I argue that the above data suggests that prioritising admissions of international BME students can be seen as the field of HE/PG being entrenched in the discourses of "racism without racists" (Bonilla-Silva, 2006). That is to say, it produces racist

outcomes, e.g. 'home' BME students being underrepresented or having bad experiences, while protecting whiteness/White privilege, e.g. keeping departments financially afloat, while also allowing university staff to consider themselves as "nice people" (Castagno, 2014) who are not actively and consciously engaging in abhorrent and overtly racist discourses or actions but who celebrate the (assumed) campus diversity.

6.5. Whiteness of organisational structures

In this section I argue that the structures of the PG field, such as organisation of the courses, support systems or funding are entrenched in whiteness and thus are much more disadvantageous for BME than White students. I argue that, on the one hand, this results in White students having the privilege of fitting well into the structures of the PG field, while simultaneously othering BME students and positioning them as needing additional support. Moreover, I contend that this support is inadequate, which further stresses the whiteness of the foundations of the PG field.

Students participating in the survey were asked about their overall perception of disadvantage, as presented in table 6.3:

Table 6.3 Students' overall sense of advantage and disadvantage throughout the entire educational journey, by ethnicity group

| Thinking about your entire educational journey to date | All BME | Selected | White |
|--|---------|----------|-------|
| (from primary to now) do you feel that | (42) | BME (22) | (166) |
| Your experiences of education have been overall positive | 60% | 64% | 79% |
| That you have been disadvantaged, because (please | | | |
| specify why and at which level, do you think it was an | | | |
| individual event or a systemic issue, etc.) | 40% | 36% | 21% |

From table 6.3 it can be read that while a majority of respondents had overall positive experiences of their entire educational journey, it was more so for the White respondents, with 79% of them opting for this response, versus only 60% of all BME respondents. The students, who indicated that they felt disadvantaged (35 White and 17 BME students) provided further responses (via free text) as to why they felt that way. These were analysed, coded and grouped, which resulted in 73 occurrences of issues, arranged into 13

subgroups and 5 main groups. These were: racism, inadequate structures of support, poor quality of provision, social class, and other issues. Table 6.4 presents the details. The last column in table 6.4 indicates how likely White students were to give the answers from the same group of issues in comparison with BME respondents. It was calculated by comparing what the frequency of answers of White students should be against BME students' answers if the two samples had been equal size, where the value of 1.00 means that both groups were equally likely to give a particular answer and values < 1.00 mean that White students were less likely to provide that particular reasoning, for example a value of 0.5 indicates that White students were only half as likely as BME students to point to a particular issue. However, caution has to be taken while interpreting these results as numbers are very small.

Table 6.2 Students' explanations of the sense of disadvantage

| | White (35) | BME (17) | Total (52) | | | |
|--|----------------------------------|-------------|---|--|--|--|
| Type of explanation for the perceived disadvantage | Number of occurrences | | Likelihood of occurrence (White vs BME) | | | |
| Racism | | | | | | |
| Direct or indirect racism, e.g. 'race' related bullying, lack of representation, non-inclusive curriculum | 0 | 7 | 7 | 0.00 (Only BME reported it as an issue) | | |
| Inadequate str | Inadequate structures of support | | | | | |
| Issues around lack of support and recognition of individual circumstances at university, e.g. for mature students, carers, people in employment, struggling with finance | 8 | 7 | 15 | 0.56 (White half as likely as BME to report this as an issue) | | |
| Issues to do with lack of support for a learning difference (ADHD, dyslexia, autism) | 1 | 3 | 4 | 0.16 (White significantly less likely to report this as an issue) | | |
| Issues around mental health/wellbeing in PG | 1 | 1 | 2 | 0.49 (White half as likely as BME to report this as an issue) | | |
| Poor quality of provision | | | | | | |
| Issues within HEI's organisation and staff competence - course disorganisation, poor teaching, no academic challenge, bad supervision. | 8 | 3 | 11 | 1.30 (White moderately more likely to report this as an issue) | | |

| Issues to do with poor IAG related to going to UG or PG and career options | 6 | 0 | 6 | - | |
|--|------|----|----|--|--|
| Social class | | | | | |
| Issues to do with being in poorly performing schools, being in comprehensive schools rather than private schools, being in mixed ability classes, low teacher expectations | 8 | 4 | 12 | 0.97 (White and BME similarly likely to report this as an issue) | |
| Issues to do with lack of support from family, stemming from parents' lack of (middle class) cultural capital and/or knowledge of the education system | 3 | 2 | 5 | 0.73 (White moderately less likely to report this as an issue) | |
| | ther | 1 | | | |
| Misfit between motivation to study (for intrinsic value of knowledge) and perceived university ethos (neo-liberal managerialism, box-ticking, careerenhancing tool) | 2 | 1 | 3 | 0.97 (White and BME similarly likely to report this as an issue) | |
| Feeling of loneliness | 2 | 1 | 3 | 0.97 (White and BME similarly likely to report this as an issue) | |
| Other forms of bullying – for unspecified reasons | 1 | 1 | 2 | 0.49 (White half as likely as BME to report this as an issue) | |
| Schooling in Welsh for a non-Welsh native speaker | 1 | 0 | 1 | -(only White reported it as an issue) | |
| School not recognising overseas qualifications | 1 | 0 | 1 | -(only White reported it as an issue) | |
| Being disadvantaged because of diversity in HE (being a White male) | 1 | 0 | 1 | - (only White reported it as an issue) | |
| Total number of occurrences | 43 | 30 | 73 | 0.70 (White moderately less likely to indicate issues) | |

A broad interpretation of the above table suggests that BME students are not only more likely to experience a bigger number of disadvantaging factors but also that there is a stark difference in the types of negative experiences between White and BME students in PG education. As I discuss and argue in detail below, issues of BME students seemed to stem from the way the PG field was structured to serve a narrowly defined student population, speaking to the whiteness of the field and the intersectionality of disadvantage. At the same

time, the issues of White students seemed to move beyond the fundamentals of the PG structures and concentrate on issues of 'higher order' – to do with the quality of the provision within the field, which I argue can be seen as an example of their White privilege within the HE field.

6.5.1. Not for people with diverse responsibilities

The BME survey respondents were twice as likely to mention issues around the lack of adequate structures and support for their individual circumstances than the White respondents. This mainly focused on the lack of adequate financial support, support for people with caring responsibilities, or the design/organisation of courses not taking into account people with employment or caring responsibilities, as in the quotes below:

Some assignments have been set up for people who do not work and are studying full time.

(BME, female, non-STEM)

Very disadvantaged due to my age and the way lecturers and students perceived me (BME, female, non-STEM)

Disadvantaged due to lack of emotional support for young carers who also are studying at the same time.

(BME female, non-STEM)

I postulate that this suggests that the field of PG education similarly to UG education (as I discussed in the literature review chapter) is set up to uphold whiteness, by structuring PG education to meet the needs of a narrowly defined, assumed "typical", student (a young, White, economically independent man) (Bancroft, 2013; Bhopal, 2018; Cabrera, 2014; Chadderton, 2018), while students of colour, people with working or caring responsibilities (where these often intersect) are positioned as needing extra support and made to feel like "fish out of water" (Bourdieu and Wacquant, 1992). Moreover, the support offered to them (as a result of not fitting into the narrowly defined form of an ideal student) was inadequate, making it difficult for them to succeed, which I discuss next.

6.5.2. Not for people with hidden disabilities

Another way in which the narrow design of the PG field has manifested itself was the lack of adequate support for people with hidden disabilities, by which I mean learning difficulties such as dyslexia, ADHD, Autism/Asperger's Syndrome and other mental health conditions, such as depression.

In the survey, BME respondents were more likely to point to these issues than White respondents:

I decided to continue onto postgrad but was struggling with reading and numbers. I took a dyslexic test during my post grad which found I was dyslexic. However, this was done after my exams which means I did not get the support I needed

(BME female, non-STEM)

From the above quote it can be seen that although the student was diagnosed with dyslexia (albeit very late in her academic career) the support was not put in place by her university in time for her examination which prompted her to feel disadvantaged.

The inadequacy of support was also mentioned by the students who participated in the semi-structured interviews. For example, Nana struggled with mental health in her first year of PhD but did not find the counselling support of value:

Nana: I did go through a phase of just like dealing with sort of mental health issues in the first year...

. . .

Interviewer: Did you seek help at [University of Confidence] at all?

. _ .

Nana: Yeah, Yeah, so it's just one hour sessions of like talking to someone and they give you 6 free sessions... but I think you can get more help, I'm not sure what else is available

Interviewer: Okay, so, so how did you cope with it because it doesn't sound like that was particularly helpful?

Nana: ...just getting yourself out of it really... I think I read a lot and a lot of neuroscience journals and came to the conclusion that a lot of is it is... like, whether it's information or all these different health things, so I just kind of changed my diet, changed lifestyle and did a lot of every day

practices and I had a daily routine to deal with everything and then gradually with time it just got easier and easier.

(Nana, PhD student, British-African)

Nana's example can be interpreted as her having to take care of her own mental health by researching neurological articles and changing daily habits, which points more to her resistant capital⁴ than being able to count on the help from the University, which did not seem to be well communicated or enough. This fits in with other studies that found that BME students did not have access to culturally appropriate mental health support, which lacked cultural understanding, presented communication issues and lacked recognition that racism could contribute to mental health problems (Arday, 2018).

Moreover, while BME students complained about the lack of appropriate support, universities seemed to be engaging in discourses deeming BME students as needing more help. On top of the already discussed deficit discourses of international students, the imagery of prospectuses also seemed to be playing into these deficit discourses, with 50% of all people in the photos in the student support sections of the analysed publications being of BME descent, i.e. higher than the actual BME proportion of the populations at the research sites.

6.5.3. Organisational structures and White privilege

White students were more likely to complain about the organisation of the university provision, with issues around the knowledge of academic staff, bad quality of supervision, poor teaching, disorganised course management and poor quality of IAG:

I feel that the university is very unorganised and as a result we have missed out on key learning opportunities. I also feel the majority of the module content is irrelevant and not essential.

(White female, STEM)

This nature of these complaints about the quality of provision rather than the fundamentals of the structures/design of the HE/PG field, can be interpreted, I argue, as the White privilege of students, who have the 'luxury' of fitting into the

⁴ For more on resistant capital see chapter 7 – Navigating toward success.

PG field better than the BME students and thus having a certain sense of entitlement to demand higher quality of provision. This fits with other studies which argued that White students felt a sense of entitlement to be at university (Crozier et al., 2016) and that institutional habitus of universities played a key role in whether students felt they fitted in or stood out (Reay and Crozier, 2010).

I argue that together, the inadequacy of support for people with caring responsibilities and hidden disabilities, both of which were more prevalent among BME respondents, along with White students' focus on the quality of provision can be interpreted as an example of how whiteness underpins the foundations of the design of the PG field at the researched sites. This was, on the one hand, gracing White students with the privilege of fitting in more easily and with a sense of entitlement for demanding higher quality of service and at the same time othering and disadvantaging students of colour, relegating them to the category of needing support, while simultaneously not providing adequate support.

6.6. Impact of whiteness on the students and the PG field

In this section I argue that participants argued that the experiences of racism and navigating the whiteness of the PG field had profound negative impact on students of colour – ranging from impact on their academic progression to mental health issues, to having a decreased sense of belonging. I further argue that the negative impacts of whiteness on individuals can translate into systemic impacts on the PG field, which allows White privilege within the field to grow in strength. This I argue happens by hindering or slowing down the progress and success of BME students in the field of PG education and by making students of colour feel less like they belong in the field.

After having a difficult time with her supervisor Marian decided to stop asking him for help:

So, I've obviously stopped approaching him for problems and I think that's made me fall back on my work

(Marian, PhD student, British-Pakistani)

While Marian's choice was conscious, Lola's lack of engagement with her supervisor after his comment about Lola being his "best Black student" was less so:

Bizarrely that [incident] was in June 2015 and I haven't seen him since. It occurred to me at some point last year, maybe December [2015] coming up to January [2016], that actually we haven't had a supervision since that meeting, and obviously subconsciously that's why I've been avoiding him... I didn't realise how much it had got to me. It's difficult because I feel very isolated in trying to complete my PhD because my boss is also my other supervisor.

(Lola, PhD student, British-African)

In both cases the contact with a supervisor, who is meant to provide, primarily, academic support and direction, became limited, which meant that the students were not progressing well through their PhD programmes. Therefore, the conduct of supervisors may have negative consequences on BME students' academic progress (as it was with Lola and Marian) and potentially their completion/graduation. It is known that students of colour are already underrepresented in PGR education in the UK (Advance HE, 2018c). However, their graduation rates are not well known as HESA do not provide these data, which, I argue, may serve to hide the White privilege of students in PG education. And while only one student in this study, Vincent, had to change his award from PhD to MPhil, the other PhD students took much longer to study than they expected. At the time of the follow up interviews Christiana was the only one who had been awarded a PhD after 4 years, John McIntyre was awaiting his viva after 4 years of studying, Lola and Annabelle were doing their PhDs part time, while Marian and Nana were in their third year but did not foresee finishing in that year. So, the nature of contact with the supervisor, which as students suggested can be impacted by 'race' has the potential to affect their progress, which may result in extending studies period.

Moreover, I argue that the negative experiences of students in this study had consequences on their self-esteem, belief in capability to progress through the system and mental health. Lola was quite clear in articulating her position as a Black woman in academia and the consequence it may have for her future career:

So, things that are accessible to White women for example, and ways of being that are accessible to White women, are not accessible to me. Basically, it doesn't matter what I actually do, in a lot of people's minds, the identity that they put on you is the identity that you have to accept... If I became a senior lecturer and tried to work my way towards being a professor, but like I said to you before, I can't see how that can happen. (Lola, PhD student, British-African)

While Lola was confident in her technical abilities and knowledge (which I touch on in chapter 7, Navigating toward success) her experiences and the awareness of her positionality as a Black woman contributed to what seems like lacking a belief in her ability to achieve success in academia (seen here as becoming a professor) which she understood to be a racist and sexist system, in which her identity would cloud people's judgments of her.

Several students also mentioned their mental health and wellbeing being affected. In the sections above I already mentioned Nana, who was going through issues in her first year:

It was just a build-up of anything and everything going wrong, like whether it's sort of money or living or relationship... I think the last thing on my mind was the PhD.

(Nana, PhD student, British-African)

I also mentioned Vincent, who felt depressed. In his case, this was directed by him having to switch from PhD into MPhil, which he did and decided to leave academia and take a job in Switzerland:

I came to Switzerland which actually felt really nice compared to the months before which I was actually probably quite depressed about, probably quite understandably, because I had felt a bit forced out of what I wanted to kind of go for.

(Vincent, science journal editor, completed MPhil, British-African)

For others their mental health was more explicitly linked to dealing with racial issues. When talking about racism and xenophobia in the post-Brexit-referendum UK John McIntyre remarked that:

...do we want to look like the hypocritical nation of the world, you know, kind of going out, even invading other countries with these ideals, when

actually we're quite racist and xenophobic ourselves... Well there are some days where you just want to get to work [university] and not be taunted... sometimes ignorance is bliss.

(John McIntyre, PhD student, British-African)

John McIntyre's words can be understood as a sign of mental fatigue with the constant micro-aggressions, neo-colonial discourses and direct racism, which could be interpreted as racial battle fatigue (Smith, 2017). It has been argued that racial battle fatigue is common among people of colour and affects their mental wellbeing, which then has negative repercussions on their sense of belonging in their work/study space, and their work outputs, such as academic progression, which in turn can add to the stress (Arnold et al., 2016; Smith, 2017). The lowered sense of belonging was also recorded among BME respondents when asked if they felt they belonged to the university community, as presented in figure 6.2:

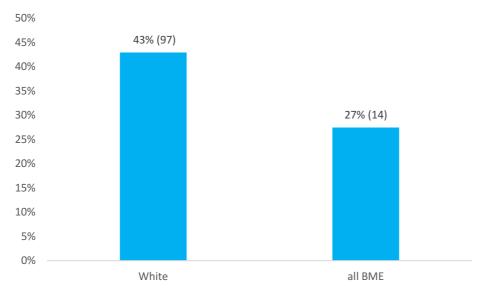


Figure 6.2 Students who agreed and strongly agreed with statements "Overall I feel I belong to the university community" (relating to current PGT and PGR course) or "Overall I felt I belonged to the university community" (relating to the past PGT course)

While it was impossible to accurately establish statistical correlation between the sense of belonging and overall sense of disadvantage due to how the survey was constructed, other studies looked at belongingness and argued that the sense of belonging was key to student retention and success (Thomas et al., 2017). However, it was mediated by local (institutional) and global (wider societal) discourses of othering being operationalised by students and staff (Morrice, 2013).

Therefore, the whiteness of the PG field can be seen as having negative impacts on the wellbeing and progression of BME students in this study, which in turn can lead to the furthering of White privilege in the field.

6.7. Conclusions

The data presented in this chapter pointed to whiteness as being central to the construction of the field of postgraduate education at the research sites and permeating its discourses, policies and practices. I argued that the way PG field has been set up, from admissions to timetabling to funding was upholding White privilege of students and staff, while othering students of colour. At the same time these students were expected to perform their otherness in a way which would not disrupt the whiteness of the field. I also argued that the othering had negative consequences on students' progress and mental wellbeing, with the PG field offering inadequate support to address the issues it was responsible for causing in the first place. I argued that meritocracy professed by staff was merely a discourse, rather than an actual purely merit-based system of admissions, which was operationalised to uphold whiteness. I contended that this was done on the one hand by limiting access of home BME students into the PG field, while on the other hand admitting international students, which, according to interest convergence theory, benefited the institutional budgets and could act as a shield against accusations of racism. In the following chapter I analyse how students navigated through the difficult conditions of the PG field.

7. NAVIGATING TOWARD SUCCESS – FACTORS CONTRIBUTING TO BME STUDENTS' EDUCATIONAL SUCCESS

7.1. Introduction

In the previous chapters I argued that whiteness, being the central building block of postgraduate education at the research sites along with the widening participation policy and its enactment, was disadvantaging BME students in their education. In this chapter, I analyse survey data and student interviews and some staff interviews in order to address the research question regarding the factors which can contribute to BME students' educational success, understood as reaching and navigating through postgraduate education. While the interviewed students faced structural challenges, as the previous chapters argued, they negotiated and achieved their success, in no small part, using a variety of capitals both embodied in them and accessible to them through family upbringing, school environment, community support and wider social networks. Building on the arguments from chapter 5, I further argue that it was thanks to these factors that the BME students achieved educational success and not thanks to educational policy and practice, including WP. Therefore, based on the theoretical framework, the chapter discusses a range of capitals: science capital (Archer et al., 2015b, 2012), aspirational, linguistic, familial, social, resistant and navigational capitals (Yosso, 2005), and a form of capital which I describe and explain in the chapter as perspective capital – which I argue should be added to Yosso's existing six community cultural wealth (CCW) capitals. Following Bourdieusian thinking the capitals do not provide any guarantee of being transformed into advantage on their own but will work only if they are recognised within a given field (Bourdieu, 1997; Bourdieu and Passeron, 1990). Thus, the chapter is a story of agency working with, against and alongside structure(s). The findings presented and analysed in this chapter also make contributions to the theory of capitals, whereby I argue that existing notions should be refined by (1) providing a typology of social capital divided into three categories: role models, facilitators and sponsors, and (2) by adding perspective capital to Yosso's (2005) existing CCW capitals. The latter in turn emphasises the interconnectivity and interdependence of capitals, as I argue

that the perspective and familial capitals in particular can act simultaneously as capitals in their own right as well as building blocks of other capitals.

7.2. Science capital as particularly strong for BME students

In this section I argue that science capital is one of the key factors enabling BME students to navigate towards success as it is particularly strong among BME learners, much more than among White students, and that a strong influence on creating science capital stems from family.

Science capital can be described as a collection of elements of social, cultural and economic capitals relating to science, such as scientific knowledge, qualifications, or interests, which are often supported by everyday exposure to science through school and family (Archer et al., 2014, 2012). Most students talked about developing their interest in science from early ages, with a majority of interviewees talking about what they perceived as natural abilities for sciences:

I liked science in general when I was a little boy, but yeah, I think gradually I drifted into physics and maths

(John McIntyre, PhD student, British-African)

I think I probably had a natural ability with maths so from a very young age I was always very mathematical. And when I was at school I would do that kind of competitions that teenage people do.

(Anabelle, PhD student, British-African)

I enjoyed science and I was good at it, I understood it and it felt like something real.

(Elena, PhD Student, British-Pakistani)

When I was 15 we did this thing called London Record of Achievement... I'd written I wanted to be a scientist at a university... I was always conducting experiments at home, doing all sorts of stuff.

(Lola, PhD student, Epidemiology, British-African,)

I think I've always been interested in sciences just because it was the first thing I sort of knew.

(Nana, PhD student, British-African)

Students did not precisely trace the source of their interest in science or a point in time at which it started, but rather couched them in the discourses of natural abilities and "always" being good at it. However, as their responses hint their skills were built up by exposure to science at school (e.g. competitions) and the support of their family in developing or nurturing these interests, with Lola "conducting experiments at home", or John McIntyre and Nana being exposed to science from early years as their parents had STEM education (i.e. science capital). Nana further explained:

Nana: Yeah, I was living in a student accommodation.

Interviewer: Oh, because your mother was a student, so you were running around the university as a little baby.

Nana: Yeah.

Interviewer: Do you remember?

Nana: I remember [library name].

Interviewer: Oh you do, okay?

Nana: I was spending hours in there, just hours.

(Nana, PhD student, British-African)

Thus, the exposure to science in the form of social/familial capital (parents) may have contributed to demystifying (or pre-empting mystification) of science and creating positive attitude toward it, which became a part of the students' habitus, hence perceived as a natural ability.

Elena was very clear about her parent's influence on her choosing a scientific pathway:

...during my A-levels when I had to decide what career I had to take... so at that point I was still, like, oh you know I'm ok, but then with my parents they were like, oh you know, you need to have a sort of a career path, so they were quite focused on getting me into university and getting me to do my A-levels

(Elena, PhD Student, British-Pakistani)

Her parents influenced Elena to take up more science A-levels than humanities, which she still enjoyed, and eventually this translated into her doing a science

degree. John McIntyre's parents also seemed very instrumental in his development of science capital, however, they were less prescriptive than Elena's parents:

He did take me to the lab, a couple of times. I was more interested in physics and maths, so it was nice to see, but I think with my dad, once he realised that, I think the environment that was created at home was one where if I were interested in something there would always be books and there would always be videos around that I could kind of find out more about interest, so physics and maths, there were a lot of maths or physics books that I eventually picked up.

(John McIntyre, PhD student, British-African)

John McIntyre's father was a chemistry teacher, while his mother studied to be a nurse before changing to an economics degree. As he describes his parents created an encouraging environment to develop interests in STEM by providing him with books and even taking him to his father's laboratory.

Family influences on the development of students' academic interests also came across in the survey data, where it seemed stronger for BME students within STEM area and White students outside of STEM (Figure 7.1).

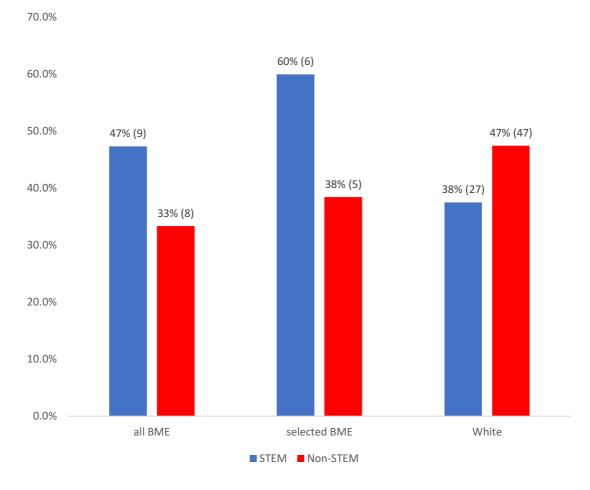


Figure 7.1 Students who agreed and strongly agreed with a statement "My family had a strong influence on the development of my interests", by ethnicity group and discipline

Figure 7.1 shows that 47% of BME students in STEM (i.e. 9 out of 19 students who answered this question) agreed and strongly agreed that their family had an impact on the development of their discipline interests, compared to only 38% of White students in STEM.

Among the interviewed students nine out of the 15 had at least one parent who either studied or had a job within the STEM area, including two with PhD degrees. Additionally, survey data revealed a much higher proportion of BME students in STEM indicating that at least one of their parents/guardians had education or a job in the broad area of their academic interest (50% of BME STEM students). This was not as strong for White students in STEM (24%), nor for any ethnic group within non-STEM subjects. Figure 7.2 indicated these patterns; however, they have to be looked at with caution as the numbers are quite low, particularly in the BME category.

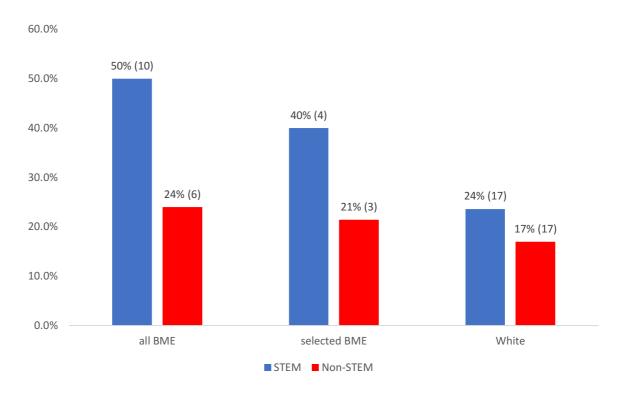


Figure 7.2 Students who agreed and strongly agreed that at least one parent had education or a job in the broad area of their academic discipline, by ethnicity group and discipline.

Together, figures 7.1 and 7.2 start building a picture of the influence of families, particularly on BME students within STEM, suggesting that the impact of science capital derived from family may be stronger among them than for White students in terms of creating and influencing discipline interests.

Another interviewee, Rachel, also talked about her mother's impact on her development of interest in science:

I remember once she [mother] went to the butchers and got a cow's heart for me to dissect in the kitchen. And that was... it's not until you speak to other people who think you're weird that you've done that, that you realise how great it was that you could do that.

(Rachel, PhD student, British mixed White and African)

Rachel's mother was a nurse (social/familial capital) who invested in her daughter's extracurricular education (cultural capital) by buying (economic capital) a cow's heart and dissecting it with her (technical capital). All these capitals could be argued to have contributed to the development of Rachel's interest, aspirations and knowledge in science, i.e. science capital.

Science capital also presented itself as providing students with scientific confidence and contributed to them building a scientist identity, which in turn contributed to building the sense of legitimacy in academia:

Within academia I've always felt my intelligence goes before me... So, I've always been fine, you can just see my grades, and its flying colours every time.

(Christiana, completed PhD, British-Caribbean)

Christiana's discourse seems to link her sense of confidence in her scientific/intellectual abilities with her good grades and thus legitimising her position.

This section suggests, I argue having presented both qualitative and quantitative data, that BME students displayed strong science capital which may be more influential on their academic pathways than in the case of White students. BME students derived their science capital, in no small part, from their family. This points to the importance of familial capital which is discussed further in this chapter.

7.3. Community Cultural Wealth capitals

Developed by Yosso (2005) based on previous work of CRT scholars and Bourdieusian thinking tools the concept of community cultural wealth (CCW) includes, as she says, at least six forms of capital: aspirational, linguistic, familial, social, navigational and resistant capital. All of them were displayed by the interviewed students, with further evidence for some of them in the quantitative data. Yosso believed that the capitals should not be seen as separate but rather "dynamic processes that build on one another" (Yosso, 2005, p. 77). While not necessarily contradicting the dynamism and interconnectivity of the capitals, I argue that certain capitals, in particular perspective and familial, acted more often as the building blocks of other capitals. I also argue that the educational success of the BME students could be traced to their agency, understood as mobilising their various capitals, more than to the way the higher education system (including Widening Participation policy) was set up.

7.3.1. Familial capital

For Yosso (2005) familial capital can be described as the "cultural knowledges natured among *familia* (kin)" (p.79), whereby family is understood in a broader sense of not only nuclear family but also the extended family, family friends or family members who passed away. I argue here that familial capital was key for all BME students I interviewed in building their habitus and access to economic capital, while in other subsections I demonstrate data to argue that it acted as a building block for other forms of capital.

When asked about what she believed contributed to her successes, Elena mentioned her confident demeanour, which she credited to her parents:

They [parents] are also quite loud, you know, people with very good social skills and I kind of just picked that up from them, you know.

(Elena, PhD Student, British-Pakistani)

For Nana, her family set a very high standard of success:

I can't say I don't see any success but I don't know whether that's because my mum did her PhD here [University of Confidence], my uncle did his PhD here. It's, and a lot of the people in my family have PhDs, so it's kind of like another part and class kind of thing.

(Nana, PhD Student, British-African)

When asked about important moments or people in his education Vincent also pointed to his family:

I don't know if it was seeing the teacher in school that influenced me as much. I think it was more from my family, because my aunt is a doctor and, she actually, so she's only about 12 years older than me so when I was about six she was just starting university, like a medical degree so I kind of had that influence and actually, I wanted to be a doctor when I was growing up so when I was in school I had that in my mind.

(Vincent, science journal editor, completed MPhil, British-African)

As Vincent contends he had a close model figure in his extended family who showed him that achieving success in education was a possibility for people like him. At the same time, he makes a point of noting that his teachers were not as

influential. This suggests, as I argue here and later on in the chapter, that students' educational success is to a greater extent due to their capitals (both internalised/embodied and external, i.e. social capital) rather than as a result of how the educational field is constructed.

The above quotes are just a small demonstration of how the interviewed students saw the influence of their families on what can be interpreted as their habitus, which equipped them with, for example, confidence (Elena) and aspirations (Nana, Vincent), i.e. attitudes useful for navigating the field of HE.

Another way in which BME students seemed to have access to familial capital was in terms of funding their master's (and other PGT) studies. Figure 7.3 shows a breakdown of what the surveyed students indicated as their main sources of funding.

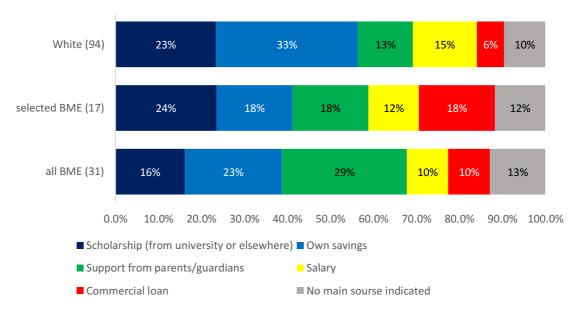


Figure 7.3 Main sources of funding for current masters and other PGT students, by ethnic group.

Figure 7.3 suggests that there was a difference in how students from different ethnic groups funded their studies. White respondents seemed to rely more on their own savings and salary from their current job, while BME students relied more on the support from parents. However, the above figure on its own is not enough to conclude that BME students had better access to familial capital (which translated into economic capital), as other factors could have an impact, for example, the age difference, generational education difference (first or

second generation HE) and wealth difference between the two populations (BME vs White) in the sample could explain away this pattern. Age may be a factor, with an assumption that the older students become the less likely they are to depend on their parents, or even have parents that are alive. Therefore, dependence on parental support by age was explored in table 7.1.

Table 7.1 Parental support as the main source of income for masters and other PGT students, by age and ethnicity group

| Age | BME (31) | Selected BME (17) | White (94) |
|-------|----------|-------------------|------------|
| 21-24 | 36% (4) | 20% (1) | 23% (7) |
| 25-30 | 33% (3) | 20% (1) | 11% (2) |
| 31-34 | 33% (1) | 50% (1) | 14% (1) |
| 35-40 | 0% | 0% | 17% (1) |
| 40+ | 14% (1) | 0% | 3% (1) |

In table 7.1 the % represents a proportion of all students within a given age and ethnic group who said that their main source of income was family support, e.g. 36% or 4 out of 11 BME students aged 21-24 who answered the question said that their main source of support was from family. While White students were generally older than BME students (see figure 4 in appendix 14), the lack of access to parental economic capital differences could not be explained purely by the different age profile between ethnic groups, as within most age categories BME students were more likely to depend on parental support than their White counterparts, which would suggest that familial capital among BME PG students played out differently than for White students. There was no difference between White and BME students in terms of their first/second HE generation status, with 51% of BME students and 50% of White students having parents with an HE degree (see figure 5 in appendix 14). However, the parents of BME students were less likely to be in a professional employment (see figure 6 in appendix 14) and to own their home (see table 2 in appendix 14) implying that the BME families had less economic capital than the White families in the study. Thus, I argue that the BME families in the study were more likely to support their children's study despite potentially having less means to do so which points to the strength of familial capital as well as the need for such familial capital among BME students.

Family as a source of capital can be traced to many theorisations of capitals — from the original work of Bourdieu who saw it, along education, as the main social unit equipping individuals with capitals (Bourdieu, 1977) to the already discussed Archer's (2012b) science capital, to Islamic capital of South Asian families (Franceschelli and O'Brien, 2014), to ethnic capital (Modood, 2004) and other conceptualisations of capitals based on the Bourdieusian notions. The above data suggests that familial capital was stronger for BME students than for White students and linked to building their confidence as well as mobilising economic capital to support their studies. Further on in the chapter I present data in which students referred to the impact of their parents, cousins and wider family on developing their aspiration and resistance/resilience, which I argue can be interpreted as the familial capital building up other forms of Yosso's capitals. Therefore, moving through the chapter and the descriptions of different forms of capital there will be many references to family as their source.

7.3.2. Aspirational capital

In this section I argue that aspirational capital is a strong feature of BME students, which in turn is built up mostly by familial capital rather than institutional habitus of universities (HE field).

Yosso (2005) described aspirational capital as "the ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers" (p.77). These aspirations were clear in accounts of students and even staff referring to their students.

Hannah, who was in her first year of PhD during the interview had high aspirations to become an academic:

I do want to lecture in the future and I haven't seen a lecturer who's [Black]... I know it's really early, but I looked at applications for jobs for the future, and I've seen at the bottom it says, you know, ethnic minorities are especially welcome to apply. So, for me it's encouraging. I'd rather be an ethnic minority and have better chances, use this to my advantage. And also, you know, if I can inspire others to also do the same, why not. And I've read about, what is it, less than one percent of professors are Black.

(Hannah, PhD student, British-African)

While she acknowledged it was still early in her programme to think about a career post her PhD, Hannah already knew she wanted to become a lecturer and a researcher – both because of her interests and professional aspirations but also because she wanted to be an inspiration for others. And despite knowing there were very few Black professors she found the wording in job adverts encouraging, which points to the effectiveness of positive action being adopted by universities, i.e. a superficial, yet not unnoticed, change in the institutional habitus of universities helping build hope in the face of barriers. However, Hannah, was the only person giving some credit to universities.

Adele also wished to become an academic:

I always thought I wasn't good enough to go that far, but the further I go through my PhD I'm thinking you know, I should probably do it. Because this is the only way that we're going to get more people like me up there, if they can see that it can be done. So maybe I do have to be that token person. And that trail blazer. Which I kind of despise in the same way.

(Adele, PhD student, British-Caribbean)

Her words suggest that her motivation, at least partly, stems from the realisation that there were not many people in academia who looked like her and that she had to be the 'trail blazer' to be an example for others. These aspirations then link closely to resistant and perspective capitals which will be discussed further on. Adele, was conscious that her journey to success might be difficult with her words of frustration ("despise") at the inbuilt inequalities in the HE field. Adele's words resonate with literature on Black female academics in the UK which stresses the severe under-representation of Black women and the double marginalisation (the intersection of gender and 'race') that comes with it (Stockfelt, 2018).

Aspirational capital of BME students did not seem to only manifest itself in the face of barriers (which I refer to as active factors), as Yosso (2005) argued, but also in conditions of a lack of encouragement (which I refer to as passive factors), as indicated in figure 7.4.

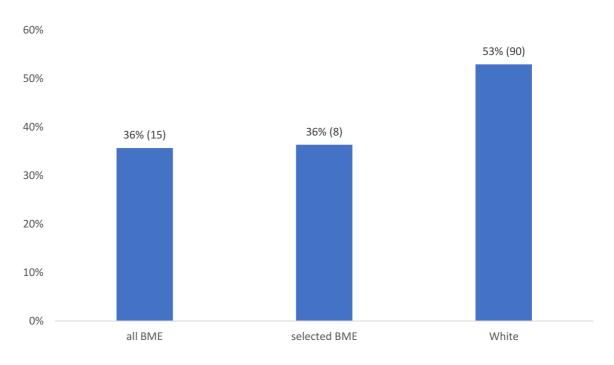


Figure 7.4 Students who agreed and strongly agreed that they had been encouraged by a UG lecturer to take on PG study, by ethnicity group

The above figure shows a difference between White and BME students, where a much larger proportion of White students (53%) agreed that they have had the encouragement from an undergraduate tutor to continue onto postgraduate study versus only 36% of BME respondents (i.e. 15 out of 42 who responded to this question). This may suggest that lecturers (and by extension the HE field, whose actors/players lecturers are) did not play a significant role in building BME students' aspirations (aspirational capital), and instead their aspirations had to be drawn from other sources. The qualitative data can provide some answers as the interviewed students were quite clear where they derived their aspirations from, locating their sources in the family upbringing. For example, Tom pointed to his parents instilling in him high aspirations:

I think the main reason that I went into further study was probably because of my family. They kind of really drummed education into me, and even though they might not know what the best course is to study and what jobs are the best jobs, it was always like if you study then you get far and stuff like that. So definitely education is valued quite highly in my family, I mean my parents are really proud that I'm doing a PhD.

(Tom, PhD student, British Bangladeshi)

Although according to Tom his parents did not seem to have the cultural capital to help him navigate through education, nevertheless, his words suggest that

his parents instilled high aspirations in him, which he contributed to being a source of his progression through to a PhD. Similarly, Buzz indicated that her parents were instrumental to her developing high aspirations:

I feel like, because of my parents and how they are and my family, that it's really encouraged me to do whatever I want to do. Not because I have to... but I should follow and be able to follow my own dreams and my aspirations and not be hindered by anything because my parents never, you know, stopped us from doing anything.

(Buzz, teacher, completed MSc, British Pakistani)

The two examples above, from Buzz and Tom, indicate a close relation of aspirational and familial capitals, with the latter being an important building block of the former. Combined with the quantitative data this points, I argue, to the aspirational capital being mostly derived from outside of academia, i.e. despite the lack of encouragement from educators, which may be interpreted as their lower expectations of the students, which has been well argued by others to be the feature of pre-university education for BME pupils (Rollock et al., 2015).

However, aspirational capital was not a straightforward agentic factor. Raul, who works as the head of graduate school at the University of Confidence and has had a number of doctoral students, mentioned one, whose aspirations he perceived to be an outstanding feature of his personality:

...my student Sam, whose parents are Nigerian, very aspirational in a way that in general is not always the case.

(Raul, head of graduate school, University of Confidence)

While Raul goes on to explain that British African students have been aspirational, Sam being one of them, he contrasts this with British Caribbean students, which could be interpreted as implicitly linking sources of aspirations to community habitus:

I think you would probably find that Black African is stronger, higher numbers [in the faculty], than Black Caribbean... the Caribbean population has been less aspirational than the Black African populations, immigrant populations in this country. But I don't really have evidence for that.

For Raul, there seems to be a link between students' aspirations and their propensity to study for a postgraduate degree at his faculty. While on the surface this is a positive comment, on the one hand it puts too much emphasis on the individual's agency and aspiration (or lack thereof) as opposed to institutional role in contributing to educational success, and on the other, it operationalises stereotypical views not based in data ("I don't really have evidence for that") of both British Caribbean and African students as if in competition with one another. Therefore, just as Bourdieu envisaged capitals as increasing a chance for success but not guaranteeing it, aspirational capital can be an asset, but offers no assurance of educational progression as it can become a tool of comparing and contrasting BME students against one another and against White students, thus creating winners and losers.

Summarising this section, the data suggested that the source of aspirational capital among BME students could be linked to familial capital much more than to the habitus of the HE field. That is to say, the development of capitals facilitating their navigation of the HE field stemmed from the capitals outside rather than inside the field.

7.3.3. Social capital

In this section I argue that social capital was a significant asset in helping BME students to navigate towards educational success. While there are many types of social capital and ways in which it can support students, examples of which I present at the beginning of this section, further on in the section I argue that there were three specific types of social capital, which I named: role models, facilitators and sponsors, which came across as particularly strong in the recollections of the research participants.

The literature on social capital is very rich. Bourdieu understood social capital as a network of people who are not just known but also can be mobilised to gain advantage (Bourdieu, 1997). In her paper outlining community cultural wealth, Yosso (2005) gave a few examples of how that social capital can be utilised by people of colour, namely, identifying scholarships, helping with the

preparation of applications, providing reassurance or actually obtaining education and work. Thus, in that sense it differs from the other capitals in that it is external (other people) as opposed to internalised/embodied.

In some of the students' accounts social capital referred to the community, rather than an individual, which in turn seemed instrumental in building one's habitus, i.e. dispositions and attitudes, which help navigate different fields:

When I was younger it [race] really wasn't an issue... I grew up in [a city in the Midlands], yes, there are lots of White people, but there are Black people as well and it was never really an issue.

(Annabelle, PhD student, British-African)

Annabelle's words can be interpreted as her multi-racial community providing her with examples of co-existence and of successful people who looked like her so that the issue of 'race' was not obvious to her, and only became more pronounced when she climbed professional ladder, as I discuss in the linguistic capital sub-section. Students mentioned they could count on their networks from early on, including their school experiences:

That was one incident that got me really upset at primary school, but luckily, I had some really decent friends, who really supported me when I told them what happened.

(Tom, PhD student, British-Bangladeshi)

Tom experienced racist comments while at school but could count on his friends (social capital) to provide support.

While the above quotes can begin to illustrate the different forms of support offered by the social capital in the respondents' lives, I argue that from the analysis of the current data three distinctive groups of social capital playing specific functions in students' educational journeys could be distinguished. These were: (1) role models – inspirational individuals personally known to the students, (2) facilitators – people who 'went out of their way' to help the students, and (3) sponsors - people who had a direct say on students' future. While these different functions of social capital: (1) building aspirations (Archer and Francis, 2007; Rhamie, 2012), (2) facilitating skills development (Coleman,

1990) and (3) providing direct access to opportunities (Tonkaboni et al., 2013), had been theorised separately and in different contexts, in this study I bring them together to emphasise how all of them can play a part in the educational journeys of students of colour. Students in this research could count on these forms of social capital at different stages of their lives – from early years/primary education to current times/postgraduate study. While these are not the only ways in which social capital presented itself, nor are they rigid categories, this typology allows for a clearer understanding of the different ways in which social capital works and potentially allow for institutions and policy makers to create conditions that promote the development of these forms of social capital in order to improve student success.

7.3.3.1. Role models

Role models can be described as model figures that the students looked up to or were influenced by throughout their educational journey. However, while traditionally understood role models include both personally known as well as abstract or distant people like celebrities or famous scientists, I use the term role models here to refer to figures, who were personally known to the students in their social networks –family friends, teachers or supervisors. I argue that role models can help build up aspirational capital by making success seem within reach.

Tom had some really close model figures in his close network when growing up:

The reason I chose science is that I did have some family friends who were kind of well educated and yeah, engineers and obviously they came from an ethnic background as well so I think that probably led to it [choosing science] as well.

(Tom, PhD student, British Bangladeshi)

For Tom it seemed "obvious" that the inspiration to study science came from people who were of the same ethnic background as he was and people he knew. I argue that this indicates the strength of representation, which was derived from within the personally known role models (social capital), as a motivational and inspirational factor. For Adele, however, ethnic matching did

not have the same importance as gender solidarity, as she looked up to her White female supervisors:

I know there is a big thing about women in certain subjects and I know for both [name] and [name], they have two kids and they're both professors, so it shows it can be done. I know a lot of people think that it's... it is hard for women to get to those roles but having two supervisors who have done it and have been able to have a family at the same time, it just shows if you really do have the drive for it you really can do it.

(Adele, PhD student, British-Caribbean)

Adele seems to have found motivation from observing the success of her female supervisors, who managed to combine family and professional obligations. While the women were both White, personally knowing an individual who achieved success against the odds based on their shared identity (womanhood) may have helped Adele to concentrate on that particular identity, which she saw as an avenue to success. This quote suggests that the argument in the literature on intersectionality (in this case of 'race' and gender) potentially being a barrier to empathy (Delgado, 2011) did not stand in the case of Adele.

Role models – as a form of social capital are therefore closely linked with aspirational capital – as the above quotes seem to suggest that role models had a role in building up students' aspirations, helping them realise that they could be successful, albeit the success being difficult to achieve.

7.3.3.2. Facilitators

Facilitators were people, who went above and beyond their job descriptions to support the development of students' skills and capitals. I argue that the facilitators provided their support in spite of, rather than in agreement with, the habitus and the rules of the game of the education field. In this case, all the facilitators were White individuals who recognised and promoted the capitals of the BME students which can be an example of White sanction (Miller, 2016) – which I explain further in this section.

Annabelle's brother died of leukaemia when they were children but the doctor treating him, a White man, became a family friend and an important figure in her life:

I did have a friend of a family who's a doctor, a consultant, haematologist, who actually was my brother's doctor when he had leukaemia and he always kept in touch, so he became like another member of the family and he was quite instrumental in us pursuing further education. He was always very encouraging. He'd print past papers for us and help us with things if we struggled so he was really great.

(Annabelle, PhD student, British-African)

Annabelle could count on the family friend's cultural capital, including science capital, and knowledge of higher education and its value to help her navigate her educational pathway. He was a person who went out of his way, beyond the realms of his job as a doctor to make a positive impact on Annabelle's family. Similarly, Sebastian had the luck of meeting someone on his way, who made extra effort to support him:

I think in college, one of my maths teachers, who[m] I respected, and I do feel like he was one of the best, if not the best teachers that I had, basically I was applying to Cambridge and because they thought I should, after my first year and the teachers knew that I wasn't even trying. So that's why they wanted me to do further maths, because they saw that maybe I could. So my tutor and that maths teacher, they encouraged me to do it. But ... he [the maths teacher] had an operation so he was out for a couple of months. By the time that my interview for Cambridge came round, he only had two days to prepare me because he had some problems... I went through the, you had to do problem solving, so he did prepare me for that. He came back early from his leave to do that, which I'm grateful for.

(Sebastian, MSc student, British-Bangladeshi)

Even though Sebastian had a very troubled time at college, whereby some boys were picking a fight with him because of neighbourhood rivalry, and because of his attitude being labelled as "not trying" at school, his teacher, a White man, recognised and helped build Sebastian's science capital (in mathematics) and encouraged him to apply to Cambridge University and did his best to prepare him, despite being signed off sick.

Although in very different roles, for Sebastian his teacher, whose job was to take care of his education, and for Annabelle a family friend doctor who went beyond his job role to support her, both examples illustrate how students had support of someone paying special attention to them and making an extra effort in order for them to succeed by facilitating the development of their skills.

John McIntyre's master's supervisor also displayed characteristics of a facilitator, who took a keen interest in supporting him and another BME student:

I think on paper you might see that actually we were the only ethnic minorities in the class, but I don't think that was anything to do with it. I just think that we got on with him at a personal level in a sense that we all shared a passion for the work that we were doing and also some kind of more philosophical questions and that's how we all got talking and we enjoyed just discussing this and I think, for him, anything he was very passionate about, he is very passionate about the subject and so, anybody that shared this, this passion, he would probably go out of their way for.

(John McIntyre, PhD student, British-African)

The above quote can be seen as another example of a facilitator going beyond their normal level of engagement, recognising students' science and cultural capitals and helping to develop the capitals further. Additionally, while John McIntyre was quick to deny any explicit influence of 'race' in the interactions between his supervisor and the only two BME students in his class, reasons for which are beyond the scope of the data, he mentioned agreements on "philosophical questions" which could signal similar habitus and attitudes toward equality and diversity.

What all these three examples have in common is that the facilitators were all White men. As Miller (2016) argues the success of people of colour in academia often hinges on what he refers to as 'White sanction', i.e. White people allowing BME staff and students access to predominantly White spaces. This was clearly observable in the data, whereby White people with a level of authority were able to recognise capitals that BME students bring to the table and help facilitate their further development.

7.3.3.3. Sponsors

While the above functions of role models and facilitators can be seen as supporting functions, the sponsors had a more direct influence on students' pathways by actually choosing them to continue to doctoral studies or personally introducing them to people making the decisions. Therefore, I argue that in the conditions of a lack of transparency of admissions (as I argued in chapter 6) a part of the educational success of BME students may hinge on White sanction and social capital in the form of sponsors. At least four interviewees knew their PhD supervisors before applying for their doctoral studies:

... during my master's I used to have regular meetings with [name] about what I wanted to do afterwards, and I wasn't actually going to do a PhD. I thought I would get out after my master's and go in to the working world and leave academia forever. Then [he] was like, actually I think you'd be quite good at doing a PhD, have you really thought about it and I hadn't so we would sit down and discuss what I was really interested in and speaking to [him] about it, he said actually, what I think you're interested in is more what's catered in Earth Science than what's in Chemistry. So, have a look at the PhD proposals on the Earth Science website and so I had a look and there was one project that I was like, that's exactly what I want to do. So [he] got me in touch with the person who was lead supervisor in it... So, I had a conversation with her and she was like yes, it's fine... because I didn't know as well, coming from a chemistry background if I had the right background about it. She was like, it's fine and so I applied for it that way. I also had a PhD offer from my... because I did a year in industry with a pharmaceutical company in my third year.... So, with this industrial supervisor, he offered [a PhD] ... at [university name].

(Adele, PhD student, British-Caribbean)

Adele had a lecturer in her master's course who recognised her science capital and convinced her to do a PhD. He then also introduced her to the person that became her supervisor. She also had a PhD offer from her industry placement which she did during her third year of UG programme. In both cases there was a person who was actively persuading Adele to do further research. Similarly, Christiana was approached by one of her lecturers during her undergraduate degree, who then became her supervisor:

Christiana: I've got funding for a particular project. My supervisor had already just noticed me and was just, oh I think you'll be good for this, I was like, ok and I had my interview.

Interviewer: So that was your supervisor you have now? And he knew you already before?

Christiana: Yes, he did. I did my, I did my third-year project, not project, third year course, module with him.

(Christiana, completed PhD, British-Caribbean)

Another example is Elena, who was already looking for a PhD when a professor she knew from her course approached her:

I didn't automatically think I was going to stay at [University of Merit]. I was looking around for PhD and then professor suggested, oh there's this PhD are you interested in it.

(Elena, PhD Student, British-Pakistani)

Halle Berry had very good rapport with her PhD supervisor ever since they met in her third year of UG programme:

I think she [the supervisor] just got the soft spot for me really, ever since I have met her, so it's been okay, it's been alright, she's been very encouraging, very supportive, very nice, really. I guess if I was white they might think I am her daughter [laughs].

(Halle Berry, PhD student, British-African)

She then went on to explain how she got to do her PhD:

After my MEng, on my third year before my fourth-year project I had an opportunity to work with my third year supervisor in summer, so doing some summer work, tissue engineering in the labs and everything, so getting loads of experience before because I did my third year project relating to that as well, so it was quite interesting. So, after my third year working with her she said, do you want to do a PhD with me, I was like, I don't know if I want to do my PhD... after my fourth year, she told me again, the PhD slot is still available if you wanted to do it...

Interviewer: Okay so did you have a formal interview for your PhD, or no because your supervisor knew you?

Halle Berry: ... I didn't have a formal interview, now I did apply for it online because you have to apply for it online, but I didn't have a formal interview.

(Halle Berry, PhD student, British-African)

Halle Berry compared her relationship with her supervisor to that of a mother and daughter and explained that the supervisor waited for her to finish her fourth year of study to offer her a PhD position. This can be interpreted as an example of the strength of the patronage of the supervisor (sponsor) in Halle

Berry's case, whereby the sponsor did not only recognise her science capital ("loads of experience") but also other cultural capitals and habitus which Halle Berry hinted at by talking about the supervisor's "soft spot" for her.

When I asked Nana, what made her decide to do a PhD she credited her supervisor for it:

It was kind of my supervisor's decision in a way, he sort of, after I finished and handed in my project, I got and email from him, he was like can you come into my office and I was like, oh god what have I done, but he just asked me if I could finish some of the work, because there were so many time constraints, nothing managed to be finalised, so he was just like can you come in and because he wanted to get a few like publishing or conferences, so he was like, if you want to just finalise everything, whatever and so, it just ended up turning into a PhD.

(Nana, PhD students, British-African)

Nana, Halle Berry and Adele were all uncertain of whether they wanted to do a PhD. And while the current data is not conclusive as to why all of them did not immediately consider a PhD route, the personal approach of their supervisors (social capital) offering advice, confidence and even scholarships (economic capital) seem to have been key factors in them taking on PGR studies. This is consistent with other literature which suggests that sponsorship, as opposed to mentorship, is highly efficient in allowing BME people to move up the career ladder, more than, for example, for women (Hewlett, 2013; LFHE, 2017).

7.3.3.4. Differences in access to social capital

It is also worth noting the sources of access to the above forms of capital. Role models were mostly embedded in the family and/or community. This is in congruence with Rhamie's (2012) research which stressed the importance of family and community as a factor facilitating educational success, and again emphasises the interconnectivity of community cultural wealth capitals – here social capital with familial capital. However, the students' access to the facilitators and sponsors seemed more serendipitous than systemic, i.e. it did not seem to be built into the fabric of the educational field, but rather happened by chance and on an individual basis. I argued in the Whiteness of the PG field chapter that the lack of transparency in PGR admissions can facilitate such underrepresentation. While in this study this lack of transparency benefited some of the interviewed BME students it hinged on White sanction (Miller,

2016). And as I argued in the earlier section of this chapter concentrating on aspirational capital, BME students were overall less likely to be encouraged to continue education onto PG study (see figure 7.4). Together, this suggests that BME students were less likely to have access to the forms of social capital within the educational settings which would facilitate their progression. This is further supported by survey data, although caution has to be taken as numbers are very small. Figure 7.5 shows the difference between White and BME students in meeting influential teachers during their educational journey.

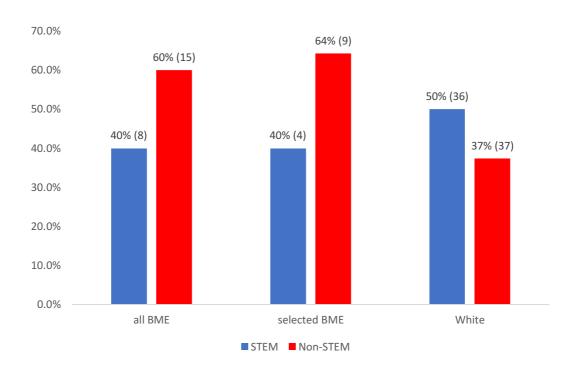


Figure 7.5 Students who agreed and strongly agreed with the statement: "There was one (or a few) influential teacher(s) who helped me develop my interest", by ethnicity group and discipline

Figure 7.5 indicates that BME students in STEM were less likely than White students in STEM and BME students in non-STEM subjects to encounter a teacher in secondary school that they considered to have significant influence on the development of their interests, suggesting that access to the forms of social capital which may facilitate progression of BME students may not be easy for BME students in STEM. Figure 7.6 along with table 7.2 below indicate the differences and similarities in access to role models between White and BME students.

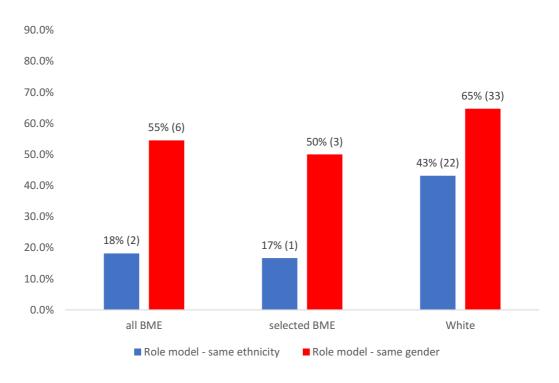


Figure 7.6 Students who agreed and strongly agreed that they had a role model who was (1) the same ethnicity and (2) the same gender as they were, by ethnicity group

Table 7.2 Students who agreed and strongly agreed that they had a role model in their discipline, by ethnicity group

| Question/statement | All BME | Selected BME | White |
|---|-------------|--------------|----------|
| | (45) | (24) | (172) |
| I had a role model who was an expert in the area of my interest (can be a teacher, family member, celebrity, other) | 24% (11) | 25% (6) | 28% (51) |

Figure 7.6 indicates that fewer BME students had role models of the same ethnic background than White students, which may suggest that there is a deficit of BME role models or access to such role models. Along with table 7.2 which indicates that a similar proportion of White and BME students had some sort of role-models the data further problematises the question of the importance and straightforwardness of such solutions as ethnic matching argued in the literature (Gunaratnam, 2003; Phillips et al., 2016).

Summarising, the data suggests that social capital played a significant part in students' educational pathways, albeit to varying degrees - from building up aspirations through the presence of role models (and therefore helping to build aspirational capital – again stressing the interconnectivity of different forms of capitals), to providing direct opportunities for progression through sponsors. The

current study and wider literature also seem to suggest that access to these forms of social capital was much more important, yet not straightforward, for BME students than for other students.

7.3.4. Navigational capital

Navigational capital refers to the people of colour's ability to manoeuvre and achieve success within institutions, which were built on racist assumptions (Yosso, 2005). I argue in this section, that navigational capital is important for BME students to achieve educational success and is closely linked to familial capital, which plays an important part in building it. I also argue that navigating through whiteness of institutions is not an easy or comfortable task for BME students.

In this study, navigational capital manifested itself in several ways. For example, students talked a lot about their family instilling in them a sense of good work ethics and hard work as a way to achieve success despite the obstacles such as racism:

I feel like, because of my parents and how they are and my family, that it's really encouraged me to do whatever I want to do... I want[ed] to grow up knowing that I did everything that I could and that my ethnicity never hindered my progress.

(Buzz, teacher, completed MSc, British Pakistani)

My parents would just be like you need to work hard, you might need to work harder, but that's just something you have to do.

(Vincent, science journal editor, completed MPhil, British-African)

Buzz and Vincent seem to employ a discourse of, on the one hand, hard work paying off (meritocracy), but on the other hand a realisation that their ethnicity may mean that they will have to work harder than a White person would for the same recognition (i.e. inequality of recognition of merit), with that hard-work ethos being a tool to navigating whiteness of the PG field.

The above discourses of hard work paying off, yet not being equally recognised, may be interpreted, along with the survey data below, as meritocracy being used simultaneously as a way for people of colour to fight against racism

(navigational capital) i.e. getting a good job is a result of good education and being a person of colour should not interfere with that, as well as, in opposition to this, a way to stop their progress, i.e. people of colour can *only* get a good job with good education, while White people may have the unwarranted privilege of this requirement waived. Data in figure 7.7 demonstrates the difference in the levels of professional employment of respondents' parents visa-vis their educational background, which I argue supports the above argument.

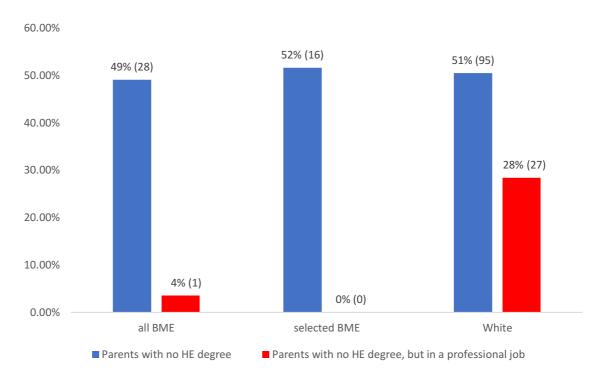


Figure 7.7 Students with parents who had no higher education degree, but were in a professional job, by ethnicity group, % indicates the percentage of students from a particular ethnicity group who met the criteria

The figure 7.7 presents that there were 28 surveyed students who indicated that they had parents in a professional job but without an HE degree, out of which 27 (or 96%) were White. While there is a possibility of some mis-reporting by students, due to, for example, different interpretation of what a professional job may mean (although the questionnaire clearly stated that a professional job required a degree), knowledge of which jobs require a degree, or simply not knowing what their parents do/did professionally, it seems very unlikely that such huge differences be primarily due to such mis-reporting. Instead, the figure seems to indicate another process operating, namely, the protection of White privilege in the labour market (Chadderton and Edmonds, 2014). A possible analysis of the figure may be that White people (in this case parents of the

surveyed students) are able to build a professional career, i.e. be in jobs requiring degrees, without always having higher education, while such possibility is mostly not given to people of colour. Although protection of White privilege in the labour market has been well researched (Chadderton and Edmonds, 2014; Roediger, 2005) it tended to concentrate on the segmentation of the market and how processes such as access to vocational education served to keep White people in higher status jobs and people of colour in lower status occupations. This data, however, adds another aspect to the understanding of such protectionist tendencies and how whiteness operates. Not only does the protection of White privilege in the labour market acts to direct people of different ethnicities into different segments of the market, but also, within the same segment of the market (here, professional jobs) it can provide advantage in access to that segment for White people. It suggests that there is a possibility for White people, but not so much for people of colour, to gain higher status jobs without them actually having the necessary requirements, thus directly invalidating the professed meritocracy of the labour market. In other words, meritocracy is wheeled out against people of colour, demanding that they meet formal merit-based criteria, while it is often waived for White people. Nevertheless, obtaining a qualification, in particular a PG qualification, which makes one stand out, may be a way for people of colour to navigate the labour market successfully. Thus, I argue, navigational capital becomes a necessary component of the habitus of successful students of colour.

In Vincent and Buzz's case it seemed clear how familial capital helped to build up their navigational capital. Christiana was also very aware of her mother's influence on how she presented herself, however, that influence concentrated on hiding certain aspects of personality:

She's [her mother] like don't bring up your diversity stuff too much, because I've been on the Diversity Committee at university and did the Inclusion Diversity Committee for [name of institution]. So, she tells me not to bring up that stuff. I do, but sometimes I maybe hesitate a little bit because of what my mum says. I don't feel like I've really tried but I don't feel as if I've done anything really Black to really have to hide anything.

(Christiana, completed PhD, British-Caribbean)

Although Christiana claims she does not listen to her mother's advice, she does admit that it made her think twice about how to present herself during job interviews. She mentions not doing "really Black" things that she would have to hide. This can be interpreted as her knowing that cultural capital stemming from her community (e.g. resistant capital) or linked to her ethnicity may not be valued or may even be seen as a disadvantage by the interviewers, who thus become representatives of institutions which adhere to whiteness. Therefore, the quote hints that Christiana is constantly assessing and reassessing the situations, weighing her blackness (here, manifesting itself though engagement in equality and diversity activities furthering racial equality) versus individual and institutional expressions of whiteness, in order to circumnavigate them to her benefit (Rollock, 2011). This is consistent with wider literature that finds that "acting White" can provide a navigational technique in a world dominated by whiteness, albeit an uncomfortable one (Carbado and Gulati, 2013). I then asked her if she moderated her CV, for example if she hid her participation in the Afro-Caribbean Society:

I haven't written anything about my clubs and societies. In fact, if there's anything that I do feel more conscious of, more than that, is actually the fact that I was in the Gospel Society, because that one I was most active in. Even in an interview I had last week I just almost stuttered on it, and that made me feel really bad about that, like I was worried how they're going to feel about me being a Christian, which is just odd. I find this stuff really odd. You're trying to keep yourself as neutral as possible, and I think that's why I get concerned about all the things that I say to them. I just want them to take me for what they want, which is someone who can do that role. Not oh, you're also this Black activist, Christian thing. So, I try and keep things a bit more neutral.

(Christiana, completed PhD, British-Caribbean)

Christiana's words may be interpreted as her being worried about her identity as a Christian (her religious capital), which could be inferred from her Gospel Choir activity, being seen by an interviewer as supposedly getting in the way of her ability to perform her duties, i.e. operationalising her science capital. As she said, her way to navigate around this was to try to stay "neutral", by which she means not being seen as a "Black activist, Christian thing". In this sense neutral becomes synonymous with White (and secular/atheist) and using the language of CRT and Bourdieu it can be exposed as a smoke screen discourse which makes invisible the unfair/non-neutral rules operating in a given field (STEM

institutions) which are set by the dominant groups (White, secular, and most likely men) in order to maintain their dominance. Therefore, on the one hand Christiana can be seen as internalising discourses of this supposed neutrality by trying to whiten her image, or act more White (Carbado and Gulati, 2013). However, her words also bring in the sense of struggle and discomfort at doing so. This highlights the tensions and difficulties that the people of colour have when trying to navigate White spaces (Rollock, 2011).

Not only were students feeling uncomfortable with having to navigate whiteness but some of them also seemed to expose contested views on tools designed to help them navigate the fields of education and work, such as equality and diversity policies. For example, Adele, on the one hand seemed to engage in a discourse of longing for a world in which her ethnicity did not matter, while on the other hand, she seemed to have already internalised such post-racial notions:

See, I'm not really a fan of positive discrimination. I understand that it's important, it's needed right now because we do have discrimination, but I don't like the idea of someone choosing me over someone else just because of something like that, because as I said that's not important to my studies. Like being Black and being a woman is not relevant at all to what I do.

(Adele, PhD student, British-Caribbean)

In the above paragraph Adele exposes tensions that positive discrimination might create, in that she would feel bad about herself, knowing that she achieved something not purely because of her ability, but because of seemingly irrelevant factors to her, like ethnic or gender identity. These findings are consistent with Warikoo's (2016) work on students' perception of fairness, whereby British students, unlike American ones, felt uncomfortable with the idea of positive discrimination and 'race' having impact on admissions as for them it would deem admissions unmeritocratic ⁵. At the same time Adele's words could be interpreted as a discourse of the neutrality of her field ("being Black...is not relevant to what I do"). This can be explained by both CRT and Bourdieusian

⁵ Positive discrimination, i.e. a practice of giving preferential treatment to people with a particular protected characteristic, for example, by a system of quotas, is illegal in the UK. It is, however, allowed in the US, where it is referred to as affirmative action.

frameworks, whereby it is understood that whiteness and racism (and other forms of oppression) are hidden through discourses of norms, which in turn are set by the dominant groups, up to a point where even people of colour (dominated groups) may believe in and support the status quo (Delgado, 2011). Students reproduced these discourses particularly in relation to the assumptions of neutrality and meritocracy in their STEM fields:

I don't feel like I'd have a preference, if I was hiring someone - to hire a young talented Black female as opposed to a young talented White female or Japanese... the lady in the meeting was Japanese... But I think that's maybe a product of the work that I do. So, a lot of it's very technical... you'd much rather have someone who was talented on your team than any other criteria, so even the female part is perhaps less important to me than it would be in other situations.

(Annabelle, PhD Student, British-African)

Although, this example relates to work, Annabelle's words, similarly to Adele's indicate that in their STEM fields the possession of technical skills (science capital) is seen as more important than the questions of equality and diversity. They also seem to suggest that acquisition and recognition of science capital is disjointed from the identities of those who possess them, which again feeds into the harmful colour-blind discourses. Therefore, there is a danger that people of colour, who are in position of responsibility (e.g. Annabelle hiring staff) can potentially sustain the racist status quo, and therefore perpetuate whiteness, particularly if they do not understand the importance of identity on creation of capitals.

On the other hand, Nana who comes from an upper-class background, utilised her navigational capital to move away from difficult situations with her supervisor, without the feeling of discomfort or compromising her integrity while doing so:

So, I've actually recently complained about him as well but it was a... I don't have a secondary supervisor, so I managed to find a female supervisor from the maths department and she's a lot more sort of hands on, quite helpful.

(Nana, PhD Student, British-African)

Although gender or 'race' matching does not guarantee improved supervision (Phillips et al., 2016), in this case Nana perceived it as a good pairing. Nana perceived her supervisor as being sexist and to counteract this she made a complaint against him which allowed her to get a second supervisor as a means of mitigating against her issues. Not only did she gain the possibility of having a second supervisor she also actively sought a female academic for that position. This suggests that Nana's use of navigational capital was complex (involved several steps) and strategic. It can also be seen as linked with a middle-class cultural capital and habitus, whereby middle-class people often display a level of familiarity with institutions and feel confident in challenging their status quo. This adds an important element to Yosso's framework, which she seems to have somewhat neglected in her original work i.e. impact of social class on mobilising capitals. This is further explored in the following section on linguistic capital.

The above data suggests that navigating the fields of education and workplace, which are steeped in whiteness was not always comfortable for the BME students in this research. Moreover, the initiatives designed to help them navigate have to be carefully thought of as they have to fight against discourses of meritocracy, which as I argued here and in the Whiteness of the PG field chapter may be applied more rigorously to people of colour.

7.3.5. Linguistic capital

Linguistic capital can be understood as the cognitive and communication skills derived from using more than one language or different styles of language or expression, including artistic expression (Yosso, 2005). I argue in this section that in England linguistic capital is heavily linked with social class – which differs from Yosso's original work, which concentrated on bilingual Latinx people. Moreover, similarly to Rollock and her colleagues (2015), I argue that the recognition of capitals, in this case linguistic capital, is mitigated by racism and can provide only limited advantage, such as partially buffering against racist discourses equalising people of colour with being uneducated.

Nana suggested that her accent helped her mitigate any possible impacts of 'race' in her postgraduate studies:

Yeah, I think being a female has been more of an impact than being black, but I know for a fact that it's because I, I have an English accent. I, I know for a fact it's ... because I'm the type of person who speaks as soon as they enter a room, so there's no sort of grey areas to where I'm from. I think if I had an accent, if I wasn't so confident, if I wasn't so loud, or like imposing, I would probably have a problem with my race.

(Nana, PhD student, British-African)

According to Nana her accent and confident manner of speaking sheltered her from racism. Therefore, her linguistic cultural capital, which identifies her as British middle class, she argues, stopped others from associating her with the stereotypes of being Black, which might include, being a foreigner, working class or inarticulate (Wallace, 2017). Nana's reference to being "confident" and "loud" can perhaps be interpreted as her middle/upper class cultural capital and habitus which exude a sense of entitlement to being in a traditionally middle-class environment. This stresses the interaction of Yosso's capitals with middle class habitus, in which the latter seems to act as a catalyst to use the former and as Nana seems to suggest somewhat buffer from racism.

Similarly, other studies have argued that people of colour who speak a standard variety of language (e.g. British received pronunciation, Hochdeutsch, Standard French) and therefore break against the negative stereotypes associated with ethnic minorities, tend to be seen as more competent than White counterparts with a similar language register (Hansen et al., 2017). However, they may still be subject to being questioned and challenged, as high register and an ethnic minority face cause expectancy violations, i.e. they go against the expected deficits of people of colour (Hansen et al., 2017). This was the case for Anabelle:

More recently, I think I've had a lot of questions from senior members of staff about why I speak English so well and actually, I find that, I don't necessarily mind the question, but I do mind the reaction that I get from people. So, one of the [work] supervisors had recently asked me if I went to a public school. And I'd said, well no, why, and he'd said, oh well because you speak so well. And I just said well I speak English because it's my first language and I am British, I was born here. And he was like, well have you ever been home? And I thought, well I've already just explained that I was born here so this is home for me.

(Annabelle, PhD Student, British-African)

While in other parts of the interview Annabelle seemed to acknowledge that her linguistic capital helped her with her earlier educational and work-related success, the higher up the professional ladder she went, the more her linguistic capital seemed to be seen as problematic. This is consistent with the findings of Rollock and her colleagues (2015) who argue that cultural capital of Black middle-class families was valued less than that of White people in educational and professional settings. Annabelle's linguistic capital associated with middle-classness seemed at odds with what her managers expected of a Black woman to sound like. Therefore, I argue that the same capitals can be beneficial in different ways depending on who owns and who recognises them rather than what those actual capitals are. Thus, the recognition of a middle-class cultural capital is mitigated by 'race' and racism.

There was also a link between linguistic and navigational capital, in that the manner of using one's linguistic capital played a part in navigating the field, as in Lola's words:

So, you have to be who they want you to be and then, and you see the Black people who do succeed, black researchers who do succeed and the ones that go on... [are] extremely agreeable, very quiet, very soft spoken, very this, very that, very meek, blah, blah, blah, blah, blah.

(Lola, PhD student, British-African)

Although Lola does not see being "soft spoken" and "agreeable" as a positive thing, but rather as a sign of conforming to the White norms of how blackness is to be performed (Carbado and Gulati, 2013), she does recognise that these kind of behaviours and linguistic skills are conducive to success in academia. Therefore, her words can be interpreted as linking the linguistic capital with navigational capital, discussed earlier. Other literature has explored how Black men in academia used linguistic techniques, such as code-switching (switching from vernacular to standard English) to mirror the behaviours of the White majority and gain acceptance in order to be recognised as competent and intelligent and further one's career prospects, which they saw as performing, rather than their natural way of speaking (Glenn and Johnson, 2012).

So while linguistic capital may require a lot of "identity work" (Carbado and Gulati, 2013; Stahl, 2012) to perform or project a particular impression and may not be comfortable for the people engaging in this act (Glenn and Johnson, 2012, p. 357) or as in this research be seen negatively ("very meek" in Lola's words), it serves as an example of how, using the framework's language of Bourdieusian tools and CRT, a certain capital (linguistic), which is characteristic of the dominant group (White middle class) can be consciously and strategically deployed by people from outside of the dominant group (BME students) in order to navigate and succeed in a particular field (higher education field) in which rules of the game are created (in an unspoken/invisible manner) by the said dominant group.

Thus, the above data suggests that linguistic capital can be seen as an example of the interconnectivity of capitals, i.e. linguistic and navigational, as well as the links between Yosso's CCW capitals and social class. While middle-classness can help mobilise linguistic capital, 'race' can mitigate its effectiveness in a world dominated by whiteness.

7.3.6. Resistant capital

The final form of capital conceptualised by Yosso (2005) is resistant capital, which can be understood as the knowledges and skills used to resist subordination by countering negative societal messages and valuing oneself despite/against these messages. It is premised on understanding structural racism and the will to fight it (Yosso, 2005). In that sense it links with perspective capital, which is discussed later on in the chapter, whereby being aware of being othered through racism within the society is a prerequisite for developing resistant strategies. Following Yosso, I argue below, that it is also linked with and most often stems from familial capital, whereby family is the most important social unit passing on inter-generational knowledge that equips students of colour with resistant strategies. In this study, participants suggested that what I argue is a form of resistant capital enabled them to navigate towards success not only in PG study but also throughout their lives leading up to PG study. For example, Lola organised a Jesus is Black day while she was in secondary school:

I remember when I was 15 I held 'Jesus is Black' day... what happened was, we were in RE [religious education] room and there were all these pictures out there, Jesus, Moses, and I was like, why is this picture of Moses White? Moses couldn't have been White, blah bah blah blah blah. I asked a couple of kids and they just flipped out on the possibility of Moses being Black and so the next day, my mate [name], she was Black, she brought her dictaphone and we held 'Jesus is Black day', and we went round telling people that Jesus was Black and what did they think, da da da da da. And I mean, it was, it caused the huge, I mean a massive problem. There were people wanting to fight me, my friends wanting to fight me for it.

(Lola, PhD student, British-African)

Lola's words can be seen as displaying resistant capital, whereby she understood that the imagery of Jesus portrayed as a blond White man was a sign of whitewashing, i.e. the notions of whiteness were deeply engrained in the education system and the wider society leading to distorting historical accuracy (White Jesus). She therefore organised actions which were seen as rebellious by school staff but were aimed at reclaiming a positive model/influential figure (Jesus) as part of her culture (non-White).

Equally, John McIntyre articulated what could be perceived as resistant capital, and the strong influence of his mother's words on building this consciousness and resistance:

So, I've been doing just some casual reading very recently and something that someone mentioned in passing and they mentioned kind of a stereotype threat. And for me, I think my mum, she probably wouldn't have... put it in those terms but I think she was always aware of these types of biases that I might face. And looking back on some of the things that she said, I think that she was behaving in such a way to kind of [counter] that potential. She would have always said that you could achieve whatever and I think that she had these biases in mind and now looking back and looking at what I see on the TV, looking at what I see in the newspapers, I have no doubt that it would probably affect someone in an adverse way.

Okay, yeah, so in a nutshell, I really do think it [educational success] was that counter-activity from my mum. There's no doubt about it, because I think she went far out of her way to show me examples of success[full] people... [who] look like me... So, I think British media is not good for me in my personal opinion in presenting young, black, especially men, in a positive way. It's terrible. So, I think that that for me is... one of the key determining factors [for success].

(John McIntyre, PhD student, British-African)

In John McIntyre's words his mother had a very strong impact on his belief in his success. His words can be understood as him drawing his resistant capital against the negative representations in the media from his familial capital, i.e. his mother. The combination of his familial and resistant capital allowed him not to fall trap to what he refers to as stereotype threat, i.e. the barrage of negative messages fed through the British media, newspapers and TV and instead find his worth through educational success. Studies have indicated impacts of stereotype threat on lower performance and higher attrition among ethnic minority students, in particular women from underrepresented minority backgrounds in STEM (Beasley and Fischer, 2012; Helms, 2005; Massey and Owens, 2014; O'Brien et al., 2015), but as John McIntyre's example indicates resistant capital built up by perspective capital (awareness of stereotype threat) and familial capital (influence of his mother) can be a factor in facilitating educational success.

Buzz also displayed attitudes which could be interpreted as resistant capital:

I feel like there's a lot of stigma attached to Pakistanis being under achievers, even I've studied that at school myself and I've seen it first hand as a teacher as well ... I think that because I'm aware of that, maybe subconsciously I am doing everything I can to become the best that I can as a person but also from my ethnic background...

(Buzz, teacher, completed MSc, British-Pakistani)

Buzz was aware of the "stigma" around Pakistani families which she learned more about while doing her PGCE and then observed it while working as a teacher. She suggests that the awareness (perspective capital) of how these negative messages were operationalised allowed her to resist falling into their trap. Her resistance capital was built up by her aspirational capital which can be inferred from her desire to "become the best".

However, as Yosso (2005) explains resistant capital is not always transformative and can display conformist traits, which could be seen in Adele's words:

Don't think that being in an ethnic minority is going to hold you back because it will if you think like that... If you don't see colour, then people don't see it... If you've got the right support around you and you've got the drive, you can do anything really... Well like I've had very good support with my family, so they put me on the right path in the first place and then throughout school, I've always done well in school so I don't know... my teachers have always been there to help me, guide me and then university.

(Adele, PhD student, British-Caribbean)

While Adele mentions support she received from family (familial capital) and school teachers (social capital) as contributing to helping her succeed, in recognising that she must not allow negative societal messages (resistant capital) interfere with progress (aspiration capital) she used colour-blind rhetoric ("if you don't see colour then people don't see it"). To not see colour is to conform to the norms of whiteness (Bonilla-Silva, 2006; Gillborn, 2008). And while this can be conducive to success in the White dominated world, as discussed earlier with navigational and linguistic capital examples, it may come with negative consequences, as discussed in chapter 6.

Resistant capital, strongly related to familial, perspective and aspirational capital, again stresses the interconnectivity of different forms of capital and the positioning of familial capital a building block of other capitals.

7.3.7. Perspective capital

In this section I argue for the addition of what I refer to as *perspective capital* to Yosso's CCW framework. One of the main assumptions of Critical Race Theory is that racism is hidden in plain sight in everyday activities, where it is being normalised (Gillborn, 2008). People of colour, due to their historic and current experiences of oppression are well placed to expose these norms as racist, and therefore make the invisible racism visible. Noticing these biases puts them in a position to address, challenge and change them (Moore, 2008). Nicola Rollock (2012) refers to this as a perspective advantage (p.65). Translating that notion of perspective advantage into the framework of Yosso's community cultural wealth capitals I have conceptualised it as *perspective capital*. Coming through the data, I suggest that perspective capital in this study can be seen as a resource that allows people of colour to perceive of structural oppressions and their positionality within them. This awareness can be a powerful tool (capital) of

perceiving self-worth within the field or translated into and closely linked with other forms of capital, such as aspirational, navigational or resistant capital. While the different perspective is a result of being treated differently by the society, perspective capital can also often stems from familial and social capitals, whereby family and community teach an individual how to interpret their experiences, as already suggested in the previous subsections. In this study, I argue that the perspective capital, as I theorise it, helped students navigate the PG field as well as make contributions to it, earning them legitimacy in the field.

For example, Annabelle noticed peculiar patterns within her company which, I argue, allowed her to mobilise her navigational capital:

But having been there [company] for a while, I actually realise that most of the people that we would classify as ethnic minorities are probably British or have been here for kind of fifteen, twenty years and very similar attitudes to work and life and do very similar things outside of the office and go to all the same places on holiday. So in terms of diversity, I think this is the first time that I have felt that I am different. And I will do a lot of the things that they do outside of work, but I will also do other things... And actually, having more discussions especially in the light of Brexit, etcetera, with friends and family I've come to realise that perhaps it's not as diverse as I originally thought.

(Annabelle, PhD Student, British-African)

According to Annabelle the people of colour who have been successful in her industry shared very similar habitus, including interests and attitudes, to that of the (White, male, middle-class) majority. Therefore, Annabelle's words can be interpreted as a recognition that the institutional culture/habitus of her organisation values only certain types of cultural capital which mirror that of the dominant group. The awareness of these patterns can be seen as perspective capital which allows Annabelle to find her position within the company. In this sense perspective capital builds up the already discussed navigational capital, whereby people of colour assimilate with the dominant group (regardless of how authentic and/or comfortable that is for them) in order to be recognised within the field of work or higher education. Annabelle also mentions the influence of "friends and family" (familial and social capitals) on helping understand her

experiences and her otherness, thus indicating the source of perspective capital as coming from family and community.

Another example of how perspective capital builds up navigational capital, I argue, is observable in the quote below:

So, for example, it doesn't do me any good to come across as coy and coquettish and self-effacing because then it looks like I don't know what I'm talking about. That I am just a product of some sort of White saviour giving me all the ideas. But at the same time being assertive in any way. So, there are lots of White women, particularly the White women medics that are really assertive and really put their point across quite strongly, much in the same way that I do, and quite passionately. But again, that is accessible to them and they're allowed to be like that without caricatures of being an aggressive Black woman.

(Lola, PhD student, British-African)

Lola perceived which behaviours were accessible to her and which were linking her to negative stereotypes, which then allowed her to moderate her comportment, i.e. turn the perspective into navigational capital. Therefore, similarly to family capital, perspective capital can serve as a source of development of other capitals. This example also further suggests that the HE field is only prepared to recognise certain types of blackness which are much more limited in their expressions than those of whiteness (Miller, 2016) and BME students need to perceive of this fine balance in order to navigate it successfully.

Perspective capital was also used by some students to perceive of difference between them and their lecturers and see themselves as being able to contribute a unique perspective to their field, which was not easily accessible to their lecturers (mainly White men):

In the engineering department, I mean they're just socially, it's not even socially awkward, it's just socially backwards

(Nana, PhD Student, British-African)

Mathematicians aren't known for their social skills.
(Sebastian, MSc student, British-Bangladeshi)

By observing and interpreting others' social skills as somewhat lacking, I argue, the students positioned themselves as possessing more advanced emotional intelligence and empathy. This provided a sense of being able to contribute to the field something that a stereotypical White male scientist was not seen as able to normally do, and therefore legitimised their presence in the field. This was perfectly captured in Lola's story from an international meeting of epidemiologists in one of the European cities in which she took part:

They were going on about how the Gypsy community don't allow us to come in and vaccinate their children and I was slightly becoming irritated and I said quite calmly, look, is it perhaps that the years of persecution over the centuries, that mean that these Roma communities are more fear[ful] of authority, maybe what you need to do is to establish blah, blah, blah, blah, blah. You know the answer. And this rang a chord with a few people in the room.

(Lola, PhD student, British-African)

To understand why Lola's contribution can be seen in the context of perspective capital her suggestion has to be put against a wider backdrop of people of colour in London (but also in other places in the western world) having a history of being harassed, over-surveillanced and abused by the police (e.g. Yesufu, 2013), which can lead to a sense of distrust for authorities. Therefore, by using her perspective capital (experiences of not trusting the authorities) Lola was able to find commonality with her experiences and those of the Roma Traveller community and add a valid alternative solution, which was recognised by colleagues despite her being more junior (a PhD student). To her colleagues Lola's words were a revelation, while to her the proposal seemed like the most obvious thing (as suggested by "blah blah blah, you know the answer").

This differs from Archer and her colleagues' (2015b) findings in which students saw the ideal scientist as a smart, White, middle class man. BME students in the current study were able to see the limitations that such positionality puts on some of their White colleagues and utilise their perspective capital to provide an alternative perspective, providing them with a sense of legitimacy in the field, rather than underlining their minority status. Therefore, the data in this study suggests that the perspective capital, as I have theorised it, has contributed to students' success in academia.

7.4. Conclusions

In this chapter I argued how various factors contributed to students' success in academia. While the previous chapters concentrated on structural barriers to success, this chapter conceptuliased students' agency to achieve success in PG education. I argued that the combined framework of Bourdieu's thinking tools, the ideas of Archer's science capital, Yosso's CCW capitals and my own addition of perspective capital provided a thorough analysis of what students of colour 'bring to the table' in the field of postgraduate education and beyond. The data suggested that students felt confident about their technical skills (science capital), had aspirations, e.g. to become lecturers, in the face of oppression (aspirational capital), applied perspective capital to make invaluable contributions to the field of PG, and were able to navigate the social structures and institutions (navigational capital) by fighting against the submission to the racist HE system (resistant capital) or by using their varied forms of expression (linguistic capital) to achieve success. The students were able to count on their community and other people to provide support (social capital) in different capacities, which I conceptualised as: role models (providing the ever-needed representation, which allows for realistic aspirations), facilitators (people who went out of their way to support the students) and sponsors (who had direct impact on promoting/admitting students). I contend that the clear typology of the above forms of social capital can be useful for HEIs, WP practitioners and other sector bodies to help create conditions/policies for the development of these forms of capitals (with the proviso that these are not the only forms of social capital) to support student success.

In this chapter I also supported Yosso's (2005) notion that the capitals of the community cultural wealth "are not mutually exclusive or static, but rather are dynamic processes that build on one another" (p. 77). I further argued, that the familiar and perspective capitals could be seen as playing a particularly significant role in building up other forms of capitals. I have also highlighted the intersectionality between middle class habitus and community cultural wealth of BME students, which I argued was not sufficiently explored in Yosso's original work, with the former acting as a catalyst for the latter. Thus, I argued, the addition of the concept of perspective capital and the focus on the intersections

of CCW capitals with social class refined Yosso's framework by providing clarity to the conceptualisations of the conditions conducive to mobilising different forms of capitals. While intersectionality and CRT are useful theoretical lenses, they often struggle with conceptualising agency beyond it stemming from analysing status quo (Rollock and Gillborn, 2011; Yosso, 2005). Thus, I argue that this chapter contributed to conceptualising agency from a more proactive standpoint with the framework of intertwined capitals (science, Yosso's six capitals, perspective capital) playing off one another and providing an understanding of how students proactively challenged whiteness by successfully navigating the PG field.

8. CONCLUSIONS, CONTRIBUTIONS AND RECOMMENDATIONS

8.1. Introduction

This study concentrated on BME students in PG STEM education in England, with a particular attention paid to investigating the role of WP policy in improving BME access to and success in PG education (research question 1), the experiences of BME students and the role of institutions in shaping these experiences at PG level (research question 2 and 3), and the mechanisms used by the students to navigate the PG field toward achieving educational success (research question 4). In this chapter I answer the above research questions by highlighting the contributions that this thesis makes to theory and knowledge. For the purposes of this chapter I make a distinction between *theory*, i.e. the lenses used to interpret the world and knowledge, i.e. what is learned about the world through these lenses. I argue that this thesis has on the one hand finetuned theorisations of community cultural wealth (CCW) capitals (Yosso, 2005) including the addition of a new type of capital I theorised as perspective capital and on the other hand helped to address the paucity in literature on BME students in PG education. I further ague that this research not only helped to understand how students navigate through the PG field toward success, but also helped to understand the role of institutions in facilitating or inhibiting that success. Stemming from this, the chapter provides recommendations for the sector, which institutions may choose to adopt to facilitate BME students' success in PG education. This, I argue, should include (1) re-conceptualising WP with issues of 'race' and racism at the centre of the policy, (2) institutions systematising BME students' access to specific forms of social capital and (3) making admissions more transparent and fair. I also make a case as to why universities should take BME students' access and success in PG education more seriously. Finally, I point toward limitations of this study, further gaps in literature and the need for additional research.

8.2. Key contributions to theory

In this section I lay down my main contributions to theory. I argued that the combination of the theoretical lenses used in this thesis (intersectionality, Bourdieusian thinking tools, Critical Race Theory and Yosso's Community Cultural Wealth) (Crenshaw, 1991; Bourdieu, 1997; Gillborn, 2008; Yosso, 2005) created a coherent, thorough and flexible framework to analyse how BME students in this study accessed, experienced and navigated the field of PG education. This approach highlighted the agentic character of capitals, which were strategically deployed by students to achieve educational success. Unlike other concepts, such as Black cultural capital, ethnic capital or Islamic capital (Franceschelli and O'Brien, 2014; Shah et al., 2010; Wallace, 2017) which have been applied to very narrow contexts and populations, I argued that the framework, and in particular Yosso's (2005) concept of community cultural wealth (CCW) capitals (aspirational, familial, linguistic, navigational, resistant, and social capital) was versatile enough to apply to the analysis of diverse populations. As CCW was conceptualised in the USA, transferring it to the UK context to help analyse the experiences and agencies of British minority students, who come from different backgrounds (e.g. African, Caribbean, Indian subcontinent, first-, second-, third generation migrants) required fine-tuning or expanding definitions, including the addition of what I theorised as perspective capital. This fine-tuning of theory, which I outline below, forms one of this thesis's key contributions to theory.

In particular, I proposed that the linguistic capital had a potentially stronger connection with social class dimensions in the UK than in the US, whereby across the Atlantic it concentrated on bilingualism of Latinx people (Yosso, 2005). I argued, then, that middle-class habitus and capitals could help mobilise linguistic capital, something which seems to be missing from Yosso's framework. However, 'race' can still mitigate the effectiveness of the linguistic (and other capitals) associated with middle-classness in a world dominated by whiteness (Rollock et al., 2015).

Another contribution to theory, I offered, was providing a coherent typology of the social capital that students in this study had at their disposal, which manifested itself in at least three distinctive forms; these were: (1) role models – people personally known to the students providing representation and aspirations, (2) facilitators – people who went beyond their job descriptions to help support the development of skills (capitals) of the students, and (3) sponsors – people who directly offered opportunities, such as places on PhD programmes.

My theorisation of perspective capital as an additional form of capital within the CCW framework, is another contribution to theory, addressing a gap in Yosso's framework. I argued that the perspective capital could be seen as a resource that allows BME students to add value to the PG field and strengthen their legitimacy in the field by offering a perspective not easily available to the dominant groups. Perspective capital is closely linked to other forms of CCW capitals with the awareness of being othered helping students to navigate through the PG field (navigational capital) and resist negative discourses (resistance capital).

Furthermore, this study suggests that perspective capital, but also familial capital were often the main building blocks of other forms of capital. For example, BME students reported higher levels of economic support (economic capital) from their family/parents to help them through their master's degrees. Familial capital was also important in building science capital, which came across strongly through interview and survey data.

I also argued that the combination of the theoretical framework, diverse methods of data collection and the analysis being closely mapped onto the theory helped address three common drawbacks of CRT research as identified by Baber (2016), i.e. disconnect between theory and analysis, lack of interdisciplinarity, and lack of diverse sources of data.

8.3. Key contributions to knowledge

In this section I outline my main contributions to knowledge by responding to the research questions. As I argued in the literature review chapter, there is a stark lack of literature concentrating on BME students in postgraduate education in England, with some notable exceptions, which have mostly concentrated on initial teaching training courses (Arday, 2017; Thompson and Tomlin, 2013). Their experiences, factors impacting access to and success in PG education as well as how they navigate the PG field remain underresearched. However, this thesis has offered a contribution to this limited body of knowledge, through a small scale exploratory study which concentrated on BME students in PG STEM education.

1. What is the role of WP policy in improving BME access to and success in PG education?

I argued that WP policies and practices, which are designed to improve access and participation of diverse students in higher education were actually a barrier rather than a facilitator for students of colour in PG education. This, I contended, happened due to a variety of factors. First of all, the lack of intersectional considerations in WP policy has side-lined issues or 'race'. This was exemplified by higher levels of spending on direct financial support for students rather than work aimed at improving success of students and changing the institution. This meant that WP policy operated within a student deficit model, which centres whiteness as the norm to which compare students of colour. Furthermore, staff in PG education engaged in discourses of pushing responsibility for student success onto UG education, which can be linked to the concentration of WP policy efforts at UG level. I also argued that WP policy operated within the existing structures of the HE field, with WP initiatives acting as add-ons to the field rather than an integral part of it. This rendered WP policy efforts ineffective and contributing to protecting the status quo of whiteness within the PG field.

2. What is the role of institutions in shaping the experiences of 'home' BME students in PG education, with a particular attention to STEM fields?

An overarching contribution to knowledge, as the data in this study suggests, is that the field of PG education at the researched institutions was steeped in whiteness. This manifested itself at every stage of the students' educational journey, from admissions, to on course support, to progress toward completion

of studies. In particular, I argued that at the researched sites meritocracy, understood as a merit-based system of recognition (Young, 1994), was merely a discourse rather than an actual practice, which was often non-transparent and unfair. This was exemplified by staff engaging in discourses of inferiority (in terms of preparedness for research) of international students while still admitting them into PhD programmes – an action which was dictated by economic imperatives (fee income). The data, then, suggested that meritocracy was applied selectively, i.e. as and when it served to protect whiteness of the institutions. This, in turn, might have had negative impact on the availability of PG places for 'home' BME students, which, as staff admitted, were being taken up by fully funded international students.

Furthermore, the data from interviews and the survey suggest that while White university staff being the gatekeepers to educational progression may be a systemic feature of the higher education field, their recognition of capitals that BME students bring to the game seemed to be an individual, almost accidental phenomenon. Thus, the recognition of their capitals happening not thanks to but despite the habitus of the PG field.

The data in this study also agreed with other literature which argued that the field of HE was constructed with a very narrow image of student in mind, namely that who is White, non-disabled, economically secure, and young (with no familial responsibilities) (Bancroft, 2013; Bhopal, 2018; Cabrera, 2014; Chadderton, 2018), with my contributions shedding light on how this issue played out at PG level. This, I argued was systematically disadvantaging students of colour, othering and deeming them as needing support, while at the same time not providing adequate, culturally appropriate support (Arday, 2018).

3. What are the experiences of 'home' BME students in PG education, with a particular attention to STEM fields?

In this thesis I argued that the experiences of BME students in PG education were complicated by the intersecting oppressive structures of racism, sexism, and classism. This meant that students had to navigate their way toward success, rather than smoothly sail through the system.

In particular the data suggested that BME students experienced othering, which I interpreted as an example of the whiteness of the PG field. University staff engaged in discourses marking racial difference between White and BME students in terms of their perceived bodies, intellectual abilities and motivations. Students experienced these othering discourses particularly strongly from their supervisors. The racialised othering intersected with gender, resulting in compounded negative effects, such as lack of trust in technical skills, on women of colour in the study. Moreover, BME students in this research, similarly to examples from other literature (e.g. Puwar, 2004) were expected to perform their otherness in a way which was palatable and non-threatening to the White majority. The data suggested that the experiences of students might have contributed to adversely impacting their academic progress and mental wellbeing.

4. How do BME students negotiate their presence and success in the PG field?

The thesis highlighted the importance of a variety of capitals (science capital, CCW capitals, perspective capital) at the disposal of students of colour, which they often deployed strategically. I interpreted these capitals and their use as the agentic factors in the students' journey through the field of HE. For example, they displayed aspirational capital in the face of adversity, with certain students being motivated to pursue an academic career in order to be the inspiration for future generations. Students' high aspirations were maintained despite them reporting lower levels of encouragement to continue onto further study from academic staff, as evidenced in the survey. Students also displayed navigational capital by altering their CVs or manners of speaking. They also accessed different forms of social capital (role models, facilitators, sponsors) supporting their success. Importantly they displayed resistance capital in the face of adversity and proactive attitudes to maintaining mental health. The above capitals, I argued, were often built up by perceptive and familial capitals. And so, while students still operated within the structures of whiteness (and other oppressive forms) and thus operationalising their capitals was not always straightforward or comfortable, their use of capitals allowed them to achieve

something that the educational field was not designed for, namely, a success of minority ethnic students.

Therefore, my thesis made contributions to knowledge which highlights an under-researched context of postgraduate education. It also provided a refinement of existing theorisations of success of BME students through the lens of the CCW framework.

8.4. Recommendations for the sector

In this section I outline the recommendations, stemming from the data, for the field of PG education and WP policy and practice that have a potential for improving access to and participation of BME students in PG education, with a particular focus on research intensive universities, where they are heavily underrepresented (Advance HE, 2018). However, it has to be noted that following Bourdieusian and CRT frameworks the possibility of a meaningful change is extremely low. Bourdieu was very sceptical about the possibility of any field changing its rules of the game, which were set by the dominant groups in order to maintain the status quo (Bourdieu, 1977). Similarly, CRT has been negative about ever achieving racial equality, claiming that any progress would be temporary and partial (Bell, 1992). However, I argue that the combination of capitals (Bourdieusian thinking tools and CCW) and the CRT principle of interest convergence (Bell, 1980; Gillborn, 2008) can provide an avenue in which the change may happen. While building up students' capitals can equip them with tools for achieving educational success, providing changes to the PG field through interest convergence can help systematise the recognition of their capitals. This I argue is one of the key findings of this thesis.

8.4.1. Recommendations for the PG field

From my research certain recommendations may be proposed which I elaborate on below: (1) the systematisation of the impact of social capital, e.g. sponsorship (2) the systematisation of the transfer of opportunities for graduates of modern universities, (3) making PGR admissions more transparent and fair, and (4) the re-organisation of student support to be embedded in the core of the design of the HE/PG field.

Firstly, in my research I have identified three (among others) distinctive types of social capital which facilitated BME students' educational journey: role models, facilitators and sponsors. Institutions should take steps to try to systematise access of BME students to these forms of social capital, so that gatekeepers to progression and success in the field of HE, who can recognise the capitals that BME students bring, do not appear in their lives accidentally (despite the set-up of the field), but systematically (built into the system). This research, as well as wider literature (Hewlett, 2013) argued for the effectiveness of sponsorship in the success of people of colour. Therefore, universities could provide an avenue to systematising access of BME students to the right forms of social capital. This could be achieved, for example, by sponsorship schemes.

Secondly, outreach activities, which are a staple of widening participation to undergraduate study should not only continue to improve access and progression of BME students to and through all types of universities (both research-intensive and modern), but at postgraduate level could also concentrate on research-intensive universities working with modern universities to systematise transition of BME students from modern to research-intensive institutions. Postgraduate admissions should also be made fairer and more transparent, ascertaining that graduates from modern universities do not have to face additional hurdles, above what graduates from research-intensive universities have to prove, in gaining access to PG courses at research-intensive institutions, which was indicated as a feature of the admissions process by some of the interviewed staff. However, while this could possibly get more BME students into research intensive universities and therefore improve their access to PGR courses, it risks further reinforcing the hierarchy and divide between different universities within the field of HE (Colley et al., 2014).

Thirdly, the student support mechanisms should be reconceptualised. The data in this research suggested that the BME students lacked adequate support for their mental health, academic support and accommodations for people with family or work-related responsibilities. I interpreted this as an example of the whiteness of the PG field, i.e. not being inclusive or responsive to individual needs of diverse students, but rather being created with a 'traditional' student in

mind. This re-conceptualisation requires changing to a more flexible system of support, which would form the core design of the field, such as, for example, broadly understood inclusive learning and teaching.

8.4.2. Recommendations for WP policy and practice

An intersectional analysis of Widening Participation policy in its current form revealed it as acting more as a barrier to than a facilitator of increased access, successful completion and progression of BME students to and through PG education. Therefore, I would argue that in order for WP policy to be an effective tool in improving access to and experiences of postgraduate education among BME students it requires a major overhaul. Drawing on this research, this should concentrate on: (1) re-centring 'race' at the heart of the WP policy, (2) asserting WP as the main driving force for policy shift in HE, (3) moving away from the student deficit model and instead working on changing policies and upskilling staff within universities and schools and (4) extending the scope of WP policy to cover PG education, and what is tied to it, funding for institutions. Given the high scrutiny of public spending, the latter suggestion would allow for further research into the experiences of diverse students at PG level and therefore addressing any institutional issues, including challenging whiteness and post-racial discourses (Bhopal, 2018) based on a sound evidence base. This should be an iterative process of constant re/evaluation.

8.4.3. Meaningful interest convergence

With the recommendations laid out above a question remains, what would persuade the actors of the WP and PG fields to start implementing these changes? In response, I argue following CRT that an element providing interest convergence would be required. However, this is a controversial proposal, as unlike in the typical case of interest convergence this would have to be a well-thought and meaningful element of interest convergence to provide an actual change. In chapter 5, I argued that the 2016 HE white paper offered a partial interest convergence by setting the target of increasing the number of BME students in UG education. This, I argued, was largely tokenistic due to the already increasing proportion of young people of BME background in the general UK population (Bekhradnia and Beech, 2018; ONS, 2017) and not

setting targets for the equality of outcomes of degree classification. Therefore, unlike in the example above the interest convergence has to offer meaningful benefits for both BME and White actors in the field of HE, and while this thesis cannot provide easy solutions it can hint at some possible avenues.

The increased numbers of BME students carry strength within them. Firstly, increasing the numbers of BME students in higher education without the field changing will result in yet bigger numbers of students being failed by the system and therefore institutions having increasingly worse outcomes overall. Some universities, which lead the way in the sector for closing the ethnicity degree attainment gap have realised that and made a case to their governing boards for a holistic, whole-institution approach to cultural change, i.e. changing institutional habitus rather than the student (McDuff et al., 2018). Therefore, making a business case for catering to BME students' diverse needs as the key to institutional wellbeing can provide an element of meaningful interest convergence. However, this may work better in some institutions, with more BME students, than others, who would not have the critical mass of BME students to justify any major policy shifts.

Secondly, as I argued in this thesis, marketisation rather than WP seems to be a driving force in the HE field. Given the new role of the Office for Students, set up by the Conservative government as the sector regulator, moving away from market forces driving the HE policy seems unlikely (Brown et al., 2019). Therefore, interest convergence has to be sought at the level of market forces. Several aspects here are worth noting. The UK, similarly to other countries wishes to maintain its international economic competitiveness through knowledge economy, of which STEM subjects, which often require postgraduate and in particular postgraduate research education, are a key component (BIS, 2016). With decreasing numbers of 18-19 year olds overall and the increasing BME demographic, as noted above, BME graduates will play an increasingly important role in the sector. Maximising full human resources potential of the STEM workforce can be achieved by engaging BME populations (Leggon, 2010). Therefore, ascertaining equality of outcomes (not just access) by increasing success of BME students in PG education in STEM should be a guiding principle for policymakers wishing to increase the number of STEM

graduates in order to maintain international economic competitiveness of the UK.

Therefore, to help address racial inequalities and negative experiences of BME students more attention should be paid in Widening Participation, student support, admissions, and other areas of the PG field to 'race', rather than avoiding it through post-racial discourses or omissions and finding solutions which would be beneficial to both BME students and the White majority.

8.5. Limitations and further research

There is a significant paucity in literature investigating experiences of BME students in postgraduate study in England. It should be addressed with both qualitative and quantitative data. While this project begins to address this paucity, its main limitation is the small scale – with just 15 BME students, 18 staff across five research-intensive universities and a survey of 246 students across four institutions (two research intensive, two modern institutions) this research cannot make any claims about the whole country. However, it can help to map out further investigations. Therefore, there is a need to expand the current research at a larger scale and to other subject areas. There are also limited statistical reports about the performance of BME students and the likelihood of their progression to and through PG study (Advance HE, 2018c), which this project did not address either and which should be further investigated in such areas as retention and degree performance. This may require enhanced processes of data capture, which could be mandated by the Office for Students.

Another area worth investigating, which has not been looked into in this project, is the influence of postgraduate curriculum and pedagogy on the experiences and successes of BME students. Researchers in the UK and South Africa, among others, have pointed to the potential that decolonising curriculum, i.e. diversifying the content of the syllabus by disrupting the Western hegemony of knowledge, has on improving the equality of outcomes for BME students (Heleta, 2016; Nazar et al., 2015), and this work should be further investigated at PG level.

8.6. Closing remarks

The numerous ways in which whiteness asserts itself in the field of postgraduate education can make for a disheartening experience for students on the receiving end of racism. However, this thesis offers a glimpse into the complex ways of how BME students can navigate the system to achieve success in higher education. While universities have to take more responsibility for creating environments in which all students, regardless of background, have equal opportunities for success, they struggle with conceptualising how this could be achieved. This research begins to indicate certain steps, which institutions can undertake in order to start dismantling whiteness. Widening participation policy, designed to improve access and success of diverse students in higher education, as a way to improve social mobility, remains largely ineffective, yet extremely needed in a divided Britain. This thesis helps to identify how WP should be re-conceptualised in order to deliver on its promises.

Reference list

- Abrahams, J., 2016. Honourable mobility or shameless entitlement? Habitus and graduate employment. *British Journal of Sociology of Education*, 0, 1–13. https://doi.org/10.1080/01425692.2015.1131145
- Adnett, N., Slack, K., 2007. Are there economic incentives for non-traditional students to enter HE? The labour market as a barrier to widening participation. *Higher Education Quarterly*, 61, 23–36. https://doi.org/10.1111/j.1468-2273.2006.00336.x
- Advance HE, 2018a. *Equality + Higher Education: Staff Statistical Report 2018*. Advance HE, London.
- Advance HE, 2018b. *Postgraduate Taught Experience Survey*. Advance HE, London.
- Advance HE, 2018c. *Equality + Higher Education: Students Statistical Report* 2018. Advance HE, London.
- Archer, L., 2007. Diversity, equality and higher education: a critical reflection on the ab/uses of equity discourse within widening participation. *Teaching in Higher Education*, 12, 635–653.
- Archer, L., 2012. 'Between authenticity and pretension': parents', pupils' and young professionals' negotiations of minority ethnic middle-class identity. *The Sociological Review*, 60, 129–148. https://doi.org/10.1111/j.1467-954X.2011.02042.x
- Archer, L., Dewitt, J., Osborne, J., 2015a. Is science for us? Black students' and parents' views of science and science Careers. *Science Education*, 99, 199–237. https://doi.org/10.1002/sce.21146
- Archer, L., DeWitt, J., Osborne, J., Dillon, J., Willis, B., Wong, B., 2012. Science aspirations, capital, and family habitus: how families shape children's engagement and identification with science. *American Educational Research Journal*, 49, 881–908.
- Archer, L., DeWitt, J., Seakins, A., Dawson, E., Wong, B., 2015b. "Science capital": A conceptual, methodological, and empirical argument for extending Bourdieusian notions of capital beyond the arts. *Journal of Research in Science Teaching*, 52, 922–948. https://doi.org/10.1002/tea.21227
- Archer, L., DeWitt, J., Willis, B., 2014. Adolescent boys' science aspirations: Masculinity, capital, and power. *Journal of Research in Science Teaching*, 51, 1–30. https://doi.org/10.1002/tea.21122
- Archer, L., Francis, B., 2007. *Understanding Minority Ethnic Achievement:* Race, Gender, Class and "Success." Routledge.
- Archer, L., Halsall, A., Hollingworth, S., 2007. Class, gender, (hetero)sexuality and schooling: paradoxes within working-class girls' engagement with education and post-16 aspirations. *British Journal of Sociology of Education*, 28, 165–180. https://doi.org/10.1080/01425690701192570
- Archer, M., 1995. *Realist Social Theory: The Morphogenetic Approach*. Cambridge University Press, Cambridge.
- Archer, M.S., 1988. *Culture and Agency: The Place of Culture in Social Theory*. Cambridge University Press, Cambridge.
- Arday, J., 2018. Understanding mental health: What are the issues for black and ethnic minority students at university? *Social Sciences*, 7.
- Arday, J., 2017. Exploring Black and Minority Ethnic (BME) Doctoral Students' perceptions of a career in Academia: Experiences, Perceptions and Career Progression. University and College Union, London.

- Arnold, N.W., Crawford, E.R., Khalifa, M., 2016. Psychological heuristics and faculty of color: Racial battle fatigue and tenure/promotion. *Journal of Higher Education*, 87, 890–919.
- Ashdown, M., 2017. League tables "mislead on school success". BBC News.
- Atewologun, D., Cornish, T., Tresh, F., 2018. Unconscious Bias Training: An Assessment of the Evidence for Effectiveness (No. 113). Equality and Human Rights Commission, Manchester.
- Au, W.W., 2008. Devising inequality: A Bernsteinian analysis of high-stakes testing and social reproduction in education. *British Journal of Sociology of Education*, 29, 639–651.
- Baber, L.D., 2016. Beyond the "tenets": Reconsidering critical race theory in higher education scholarship. In: Adrienne D. Dixson, Rousseau Anderson, C.K., Donnor, J.K. (Eds.), *Critical Race Theory in Education All God's Children Got a Song*. London Routledge.
- Ball, S.J., Rollock, N., Vincent, C., Gillborn, D., 2013. Social mix, schooling and intersectionality: identity and risk for Black middle class families. Research Papers in Education, 28, 265–288. https://doi.org/10.1080/02671522.2011.641998
- Bancroft, S., 2013. Capital, kinship, & white privilege. *Multicultural Education*, 20, 10–16.
- Bartram, B., 2009. Student support in higher education: Understandings, implications and challenges. *Higher Education Quarterly*, 63, 308–314.
- Basit, T.N., McNamara, O., Roberts, L., Carrington, B., Maguire, M., Woodrow, D., 2007. 'The bar is slightly higher': the perception of racism in teacher education. *Cambridge Journal of Education*, 37, 279–298. https://doi.org/10.1080/03057640701372616
- Bathmaker, A.-M., 2015. Thinking with Bourdieu: thinking after Bourdieu. Using 'field' to consider in/equalities in the changing field of English higher education. *Cambridge Journal of Education*, 45, 61–80. https://doi.org/10.1080/0305764X.2014.988683
- Bean, J.P., Metzner, B.S., 1985. A Conceptual Model of Nontraditional Undergraduate Student Attrition. *Review of Educational Research*, 55, 485–540.
- Beasley, M.A., Fischer, M.J., 2012. Why they leave: the impact of stereotype threat on the attrition of women and minorities from science, math and engineering majors. *Social Psychology of Education*, 15, 427–448. https://doi.org/10.1007/s11218-012-9185-3
- Bekhradnia, B., Beech, D., 2018. *Demand for Higher Education to 2030* (No. 105). Higher Education Policy Institute, Oxford.
- Bell, D.A.Jr., 1992. Racial realism. Connecticut Law Review. 24, 363–379.
- Bell, D.A.Jr., 1980. Brown v. Board of Education and the interest-convergence dilemma. *Harvard Law Review*, 93, 518–533.
- Bell, K.M., 2013. Raising Africa?: Celebrity and the rhetoric of the white saviour. Journal of Multidisciplinary International Studies. 10.
- Bennett, R., Kane, S., 2010. Factors associated with high first year undergraduate retention rates in business departments with non-traditional student intakes. *International Journal of Management Education*, 8, 53–66.
- BERA, 2011. *Ethical Guidelines for Educational Research*. British Educational Research Association, London.

- Berry, J., Loke, G., 2011. *Improving the Degree Attainment of Black and Minority Ethnic Students*. Higher Education Academy and Equality Challenge Unit, London.
- Bhattacharyya, G., Ison, L., Blair, M., 2003. *Minority Ethnic Attainment and Participation in Education and Training: The Evidence*. Department for Education and Skills; Nottingham.
- Bhatti, G., 2011. Outsiders or insiders? Identity, educational success and Muslim young men in England. *Ethnography and Education*, 6, 81–96.
- Bhopal, K., 2018. White Privilege: The Myth of a Post-Racial Society. Policy Press, Bristol.
- Bhopal, K., Rhamie, J., 2014. Initial teacher training: understanding 'race,' diversity and inclusion. *Race Ethnicity and Education*, 17, 304–325. https://doi.org/10.1080/13613324.2013.832920
- BIS, 2016. Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice. Department for Business Innovation and Skills, London.
- BIS, 2014. *National Strategy for Access and Student Success*. Report by the Higher Education Funding Council for England (HEFCE) and the Office for Fair Access (OFFA). Department for Business, Innovation and Skills.
- Boliver, V., 2013. How fair is access to more prestigious UK universities?: How fair is access to more prestigious UK universities? *The British Journal of Sociology*, 64, 344–364. https://doi.org/10.1111/1468-4446.12021
- Bonilla-Silva, E., 2006. Racism without racists: Color-blind racism and the persistence of racial inequality in the United States, 2nd ed. Rowman and Littlefield Publishers, Lanham.
- Bonilla-Silva, E., 1997. Rethinking racism: Toward a structural interpretation. American *Sociological Review*. 62, 465–480. https://doi.org/10.2307/2657316
- Bourdieu, P., 1997. The forms of capital. In: Halsey, A.H., Lauder, H., Brown, P., Wells, A.S. (Eds.), *Education: Culture, Economy, and Society*. Oxford University Press, Oxford.
- Bourdieu, P., 1984. *Distinction: A Social Critique of the Judgment of Taste*. Harvard University Press, Cambridge, MA.
- Bourdieu, P., 1977. *Outline of a Theory of Practice*. Cambridge University Press, Cambridge, U.K.; New York.
- Bourdieu, P., 1976. The School as a conservative force: scholastic and cultural inequalities. In: Dale, R. (Ed.), *Schooling and Capitalism: A Sociological Reader*. Routledge & Kegan Paul, in association with The Open University Press, London.
- Bourdieu, P., 1973. Cultural reproduction and social reproduction. In: Brown, R. (Ed.), *Knowledge, Education, and Cultural Change: Papers in the Sociology of Education*. Tavistock Publications Limited, Birkenhead, 71–112.
- Bourdieu, P., 1958. *Sociologie De l'Algérie*. Presses Universitaires De France, Paris.
- Bourdieu, P., Passeron, J.C., 1990. *Reproduction in Education, Society and Culture*, 2nd ed. SAGE Publications Ltd, London; Newbury Park, Calif.
- Bourdieu, P., Passeron, J.C., 1979. *The Inheritors: French Students and Their Relation to Culture*. The University of Chicago Press, London.
- Bourdieu, P., Wacquant, L., 1992. *An Invitation to Reflexive Sociology.*University of Chicago Press, Chicago.

- Bradbury, A., 2017. "Critical Race Theory in practice: supervising research into 'race' and education." *Race, Ethnicity and Postgraduate Issues SRHE Seminar*, London.
- Bradbury, A., 2013. From model minorities to disposable models: the delegitimisation of educational success through discourses of authenticity. Discourse: *Studies in the Cultural Politics of Education*, 34, 548–561. https://doi.org/10.1080/01596306.2013.822618
- Broecke, S., Hamed, J., 2008. Gender Gaps in Higher Education Participation: an Analysis of the Relationship Between Prior Attainment and Young Participation by Gender, Socio-Economic Class and Ethnicity.

 Department for Innovation Universities and Skills, London.
- Broecke, S., Nicholls, T., 2007. *Ethnicity and Degree Attainment* (Research Report No. RW92). Department for Education and Skills, London.
- Brown, P., Halsey, A.H., Lauder, P., Wells, A.S., 1997. The transformation of education and society: an introduction. In: Halsey, A.H., Lauder, P., Brown, P., Wells, A.S. (Eds.), *Education: Culture, Economy, and Society*. Oxford University Press, Oxford.
- Brown, R., Pratt, C., Curnow, T., 2019. The abject failure of marketisation in higher education. *The Guardian*.
- Burgess, S., Greaves, E., 2013. Test Scores, Subjective Assessment, and Stereotyping of Ethnic Minorities. *Journal of Labor Economics*, 31, 535–576. https://doi.org/10.1086/669340
- Burke, C., 2017. Capitals and habitus: A Bourdieusian framework for understanding transitions into higher education and student experiences. In: Mountford-Zimdars, A., Harrison, N. (Eds.), Access to Higher Education: Theoretical Perspectives and Contemporary Challenges. Routledge, Abingdon.
- Burke, P.J., 2012. The Right to Higher Education: Beyond Widening Participation: Foundations and Futures of Education. Routledge, London.
- Burrows, R., 2003. *Poverty and Home Ownership in Contemporary Britain*. Policy Press, Bristol, UK.
- Burton, D., 2009. "Reading" whiteness in consumer research. *Consumption Markets & Culture*, 12, 171–201. https://doi.org/10.1080/10253860902840982
- Butler, J., 2009. Frames of War: When Is Life Grievable? Verso, London.
- Butler, J., 2003. Violence, mourning, politics. *Studies in Gender & Sexuality*, 4, 9–37.
- Butt, G., MacKenzie, L., Manning, R., 2010. Influences on British South Asian Women's Choice of Teaching as a Career: "You're Either a Career Person or a Family Person; Teaching Kind of Fits in the Middle." *Educational Review*, 62, 69–83.
- Byrom, T., 2009. "I don't want to go to a crummy little university": social class, higher education choice and the paradox of widening participation. *Improving Schools*, 12, 209–224.
- Cabrera, N.L., 2014. Exposing whiteness in higher education: White male college students minimizing racism, claiming victimization, and recreating white supremacy. *Race Ethnicity and Education*, 17, 30–55.
- Cabrera, N.L., Franklin, J.D., Watson, J.S., 2016. Whiteness in Higher Education: The Invisible Missing Link in Diversity and Racial Analyses. ASHE Higher Education Report. 42, 7–125. https://doi.org/10.1002/aehe.20116

- Callender, C., Jackson, J., 2008. Does the fear of debt constrain choice of university and subject of study? *Studies in Higher Education*, 33, 405–429. https://doi.org/10.1080/03075070802211802
- Carbado, D.W., Gulati, M., 2013. *Acting White? Rethinking Race in Post-Racial America*. Oxford University Press, New York.
- Carlone, H.B., Johnson, A., 2007. Understanding the science experiences of successful women of color: Science identity as an analytic lens. *Journal of Research in Science Teaching*, 44, 1187–1218. https://doi.org/10.1002/tea.20237
- Carrington, B., Bonnett, A., Demaine, J., Hall, I., Nayak, A., Short, G., Skelton, C., Smith, F., Tomlin, R., 2001. *Ethnicity and The Professional Socialisation Of Teachers: Final Report To The Teacher Training Agency*. Teacher Training Agency, London.
- CaSE, 2014. *Improving Diversity in STEM*. Campaign for Science and Engineering.
- Castagno, A.E., 2014. *Educated in Whiteness: Good Intentions and Diversity in Schools*. University of Minnesota Press, Minneapolis, London.
- Chadderton, C., 2018. *Judith Butler, Race and Education*. Palgrave Macmillan, London.
- Chadderton, C., 2012a. UK secondary schools under surveillance: what are the implications for race? A Critical Race and Butlerian analysis. *Journal of Critical Education Policy*, 10.
- Chadderton, C., 2012b. Problematising the role of the white researcher in social justice research. *Ethnography and Education*, 7, 363–380.
- Chadderton, C., Edmonds, C., 2014. Refugees and access to vocational education and training across Europe: a case of protection of white privilege? *Journal of Vocational Education & Training*, 67, 136–152. https://doi.org/10.1080/13636820.2014.922114
- Chen, J.M., 2017. The contentious field of Whiteness Studies. *Journal for Social Thought*, 2.
- Chitty, C., 2001. IQ, racism and the eugenics movement. *Forum (Genova)*, 43, 115–120.
- Chowdry, H., Crawford, C., Goodman, A., 2009. *Drivers and Barriers to Educational Success: Evidence From The Longitudinal Study of Young People in England*. Department for Children, Schools and Families.
- Cintron, R., 2010. Critical Race Theory as an analytical tool: African American male success in doctoral education. *Journal of College Teaching & Learning,* 7. https://doi.org/10.19030/tlc.v7i10.152
- Clark, C.R., Mercer, S.H., Zeigler-Hill, V., Dufrene, B.A., 2012. Barriers to the success of ethnic minority students in school psychology graduate programs. *School Psychology Review*, 41, 176–192.
- Cole, M., 2012a. 'Abolish the white race' or 'transfer economic power to the people'?: Some educational implications. *JCEPS*, 10, 202–232.
- Cole, M., 2012b. Critical Race Theory in education, Marxism and abstract racial domination. *British Journal of Sociology of Education*, 33, 167–183. https://doi.org/10.1080/01425692.2011.649830
- Cole, M., 2011. Racism and Education in the U.K. and the U.S. Towards a Socialist Alternative. Palgrave Macmillan, New York.
- Coleman, J.S., 1990. *Foundations of Social Theory*. Harvard University Press, Cambridge, MA.
- Colley, H., Chadderton, C., Nixon, L., 2014. Collaboration and contestation in further and higher education partnerships in England: a Bourdieusian

- field analysis. *Critical Studies in Education*, 55, 104–121. https://doi.org/10.1080/17508487.2014.852987
- Collins, P.H., 2015. Science, Critical Race Theory and colour-blindness. *The British Journal of Sociology*, 66, 46–52. https://doi.org/10.1111/1468-4446.12117 3
- Concannon, J.P., Barrow, L.H., 2009. A cross-sectional study of engineering students' self-efficacy by gender, ethnicity, year, and transfer status. *Journal of Science Education and Technology*, 18, 163–172. https://doi.org/10.1007/s10956-008-9141-3
- Connelly, R., Gayle, V., Lambert, P.S., 2016. A Review of occupation-based social classifications for social survey research. *Methodological Innovations*, 9, 2059799116638003. https://doi.org/10.1177/2059799116638003
- Connor, H., 2001. Deciding for or against participation in higher education: The views of young people from lower social class backgrounds. *Higher Education Quarterly*, 55, 204–224. https://doi.org/10.1111/1468-2273.00183
- Connor, H., Dewson, S., Tyers, C., 2001. Social Class and Higher Education: Issues Affecting Decisions on Participation by Lower Social Class Groups. (No. 267). Department for Education and Employment, London.
- Connor, H., Tyers, C., Modood, T., Hillage, J., 2004. Why the Difference? A Closer Look at Higher Education Minority Ethnic Students and Graduates. (Research Report No. 552). Department for Education and Skills, London.
- Cousin, D., Cuerton, G., 2012. *Disparities in Student Attainment*. Higher Education Academy.
- Crawford, C., 2014. The Link between Secondary School Characteristics and University Participation and Outcomes (CAYT Research Report). Institute of Fiscal Studies and University of Warwick.
- Crenshaw, K., 1991. Mapping the margins: intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43, 1241–1299. https://doi.org/10.2307/1229039
- Crown, 2018. Race Disparity Audit: Summary Findings from the Ethnicity Facts and Figures URL https://www.gov.uk/government/publications/race-disparity-audit (accessed 7.1.19).
- Crozier, G., Burke, P.J., Archer, L., 2016. Peer relations in higher education: raced, classed and gendered constructions and Othering. *Whiteness and Education*, 1, 39–53. https://doi.org/10.1080/23793406.2016.1164746
- d'Aguiar, S., Harrison, N., 2015a. Returning from earning: UK graduates returning to postgraduate study, with particular respect to STEM subjects, gender and ethnicity. *Journal of Education and Work*, 0, 1–30. https://doi.org/10.1080/13639080.2014.1001332
- Daniels, J., 2014. White Women and Affirmative Action: Prime Beneficiaries and Opponents. URL http://www.racismreview.com/blog/2014/03/11/white-women-affirmative-action/(accessed 3.8.19).
- Davies, P., Slack, K., Hughes, A., Mangan, J., Vigurs, K., 2008. *Knowing Where to Study? Fees. Bursaries and Fair Access*. Sutton Trust.
- Davis, A.Y., 1983. Women, Race, & Class, 1st ed. Vintage, New York.
- DCSF, 2010. *Identifying Components of Attainment Gaps*. Department for Children, Schools and Families, London.
- Dedrick, R.F., Watson, F., 2002. Mentoring needs of female, minority, and international graduate students: A content analysis of academic research

- guides and related print material. *Mentoring & Tutoring: Partnership in Learning*, 10, 275–289. https://doi.org/10.1080/1361126022000024541
- Delgado, R, 2011. Rodrigo's reconsideration: Intersectionality and the future of Critical Race Theory. *Iowa Law Review*, 96, 1247–1288.
- Delgado, R., Stefancic, J., 2001. *Critical Race Theory: an Introduction*. New York University Press, New York.
- Delgado, R., Stefancic, J., 1997. *Critical White Studies Looking Behind the Mirror*. Temple University Press, Philadelphia.
- DeNicolo, C.P., González, M., Morales, S., Romaní, L., 2015. Teaching through testimonio: Accessing community cultural wealth in school. *Journal of Latinos & Education*, 14, 228–243. https://doi.org/10.1080/15348431.2014.1000541
- BIS, 2016. Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice. Department for Business Innovation and Skills, London.
- BIS, 2011. Students at the Heart of the System. Department for Business Innovation and Skills, London.
- BIS, 2014. *National Strategy for Access and Student Success*. Report by the Higher Education Funding Council for England (HEFCE) and the Office for Fair Access (OFFA). Department for Business, Innovation and Skills, Bristol and London.
- DfE, 2003. The Future of Higher Education. Department for Education, London.
- DHSC, 2017. NHS Bursary Reform. Department of Health and Social Care, URL https://www.gov.uk/government/publications/nhs-bursary-reform/nhs-bursary-reform (accessed 2.16.18).
- DfE, 2018. Revised GCSE and Equivalent Results in England, 2016 to 2017 (No. SFR01/2018). Department for Education, London.
- DfE, 2017. Permanent and Fixed Period Exclusions in England: 2015 to 2016 (No. SFR35/2017). Department for Education, London.
- DfES, 2005. Fair Admissions to Higher Education: Recommendations for Good *Practice.* Department for Education and Skills, London.
- DfES, 2003. *The Future of Higher Education*. Department for Education and Skills, London.
- DiAngelo, R.J., 2018. White Fragility: Why It's So Hard for White People to Talk About Racism. Beacon Press, Boston.
- Donnor, J.K., 2005. Towards an interest-convergence in the education of African-American football student athletes in major college sports. *Race Ethnicity and Education*, 8, 45–67. https://doi.org/10.1080/1361332052000340999
- Doyle, M., Griffin, M., 2012. Raised aspirations and attainment? A review of the impact of Aimhigher (2004–2011) on widening participation in higher education in England. *London Review of Education*, 10, 75–88. https://doi.org/10.1080/14748460.2012.659060
- Driver, J., 2011. Rethinking the interest-convergence thesis. *Northwestern University Law Review*, 205, 149–198.
- Dunne, L., Kay, V., Boyle, R., Obadan, F., Lander, V., 2018. 'I love a curry': student-teacher discourse around 'race' and ethnicity at a UK university. *Journal of Education for Teaching*, 44, 162–174. https://doi.org/10.1080/02607476.2017.1415514
- ECU, 2017. Equality in Higher Education: Students Statistical Report 2017. Equality Challenge Unit, London.

- ECU, 2015. Equality in Higher Education: Statistical Report 2015: Part 2: Students. Equality Challenge Unit, London.
- Edwards, V., Ran, A., Li, D., 2007. Uneven playing field or falling standards?: Chinese students' competence in English. *Race Ethnicity and Education*, 10, 387–400. https://doi.org/10.1080/13613320701658431
- Ellison, E.R., Langhout, R.D., 2016. Collaboration across difference: a joint autoethnographic examination of power and whiteness in the higher education anti-cuts movement. *Race Ethnicity and Education*, 19, 1319–1334. https://doi.org/10.1080/13613324.2016.1150825
- EHRC, 2016. Healing a Divided Britain: The Need for a Comprehensive Race Equality Strategy. Equality and Human Rights Commission, London.
- ECU, 2014. Equality in Higher Education: Statistical Report 2014. Equality Challenge Unit. URL http://www.ecu.ac.uk/publications/equality-higher-education-statistical-report-2014/(accessed 5.12.15).
- Eunyoung Kim, Hargrove, D.T., 2013. Deficient or resilient: A critical review of black male academic success and persistence in higher education. *Journal of Negro Education*, 82, 300–311.
- Evans, C., Nguyen, T., Richardson, M., Scott, I., 2018. Managing the transition from undergraduate to taught postgraduate study: perceptions of international students studying in the UK. *Research in Post-Compulsory Education*, 23, 249–265. https://doi.org/10.1080/13596748.2018.1444386
- Eyferth, K., 1959. Eine Untersuchung der Neger-Mischlingskinder in Westdeutschland. Vita Humana, 2, 102–114, In: Jencks, C., Phillips (1998), M. (Eds.), *The Black-White Test Score Gap*. Brookings Institution Press.
- Foote, M.Q., Gau Bartell, T., 2011. Pathways to equity in mathematics education: how life experiences impact researcher positionality. *Educational Studies in Mathematics*, 78, 45–68. https://doi.org/10.1007/s10649-011-9309-2
- Fordham, S., Ogbu, J., 1986. Black students' school success: coping with the burden of 'acting White.' *Urban Reviews*, 18, 176–206.
- Foucault, M., 1981. The Order of Discourse. In: Young, R. (Ed.), *Untying the Text: A Post-Structural Anthology*. Routledge & Kegan Paul, Boston, MA.
- Foucault, M., 1972. *The Archaeology of Knowledge*. Tavistock Publications Limited, London.
- Franceschelli, M., O'Brien, M., 2014. 'Islamic Capital' and Family Life: The Role of Islam in Parenting. *Sociology*, 48, 1190–1206. https://doi.org/10.1177/0038038513519879
- Fuller, A., Paton, K., 2007. "Barriers" to participation in Higher Education? Depends on who you ask and how. *BERA Annual Conference*, 6-8 September 2007, London
- Furlong, A., 2005. Cultural Dimensions of Decisions about Educational Participation among 14- to 19-Year-olds: The Parts that Tomlinson Doesn't Journal of Education Policy. 20, 379–389.
- Gartland, C., 2014. STEM Strategies: Student Ambassadors and Equality in Higher Education. Trentham Books, London.
- Gayles, J.G., Ampaw, F.D., 2011. Gender matters: An examination of differential effects of the college experience on degree attainment in STEM. *New Directions for Institutional Research*. 2011, 19–25. https://doi.org/10.1002/ir.405

- Giddens, A., 1991. *Modernity and Self-identity: Self and Society in the Late Modern Age.* Polity Press, London.
- Gillborn, D., 2015. Intersectionality, Critical Race Theory, and the primacy of racism: Race, class, gender, and disability in education. *Qualitative Inquiry*, 21, 277–287. https://doi.org/10.1177/1077800414557827
- Gillborn, D., 2013. Interest-divergence and the colour of cutbacks: race, recession and the undeclared war on Black children. *Discourse: Studies in the Cultural Politics of Education*, 34, 477–491. https://doi.org/10.1080/01596306.2013.822616
- Gillborn, D., 2012a. Education and institutional racism, (Inaugural Professorial Lecture); Inaugural Professorial Lecture. Institute of Education Press, London.
- Gillborn, D., 2012b. The white working class, racism and respectability: Victims, degenerates and interest-convergence., In: Bhopal, K., Preston, J. (Eds.), *Intersectionality and "Race" in Education*. Routledge, New York, 29–56.
- Gillborn, D., 2010. The colour of numbers: surveys, statistics and deficit-thinking about race and class. *Journal of Education Policy*, 25, 253–276.
- Gillborn, D., 2008. *Racism and Education: Coincidence or Conspiracy?*Routledge, London.
- Gillborn, D., Ladson-Billings, G., 2009. *Education and Critical Race Theory*. Routledge Handbooks Online.
- Gillborn, D., Warmington, P., Demack, S., 2018. QuantCrit: education, policy, 'Big Data' and principles for a critical race theory of statistics. *Race Ethnicity and Education*, 21, 158–179. https://doi.org/10.1080/13613324.2017.1377417
- Glenn, C.L., Johnson, D.L., 2012. "What they see as acceptable:" A co-cultural theoretical analysis of black male students at a predominantly white institution. *Howard Journal of Communications*, 23, 351–368. https://doi.org/10.1080/10646175.2012.722817
- Goffman, E., 2012. The presentation of self in everyday life [1959], In: Calhoun, C., Gerteis, J., Moody, J. (Eds.), *Contemporary Sociological Theory*. John Wiley & Sons.
- Gorard, S., 2008. Who is missing from higher education? *Cambridge Journal of Education*, 38, 421–437. https://doi.org/10.1080/03057640802286863
- Gorard, S., See, B.H., 2009. The impact of socio-economic status on participation and attainment in science. *Studies in Science Education*, 45, 93–129. https://doi.org/10.1080/03057260802681821
- Gorard, S., See, B.H., Davies, P., 2012. *The Impact of Attitudes and Aspirations on Educational Attainment and Participation*. John Rowntree Foundation, York.
- Gorard, S., Smith, E., May, H., Thomas, L., Adnett, N., Slack, K., 2006. Review of Widening Participation Research: Addressing the Barriers to Participation in Higher Education. A report to HEFCE by the University of York, Higher Education Academy and Institute for Access Studies. Higher Education Funding Council for England.
- Graham, E., 2013. The experiences of minority doctoral students at elite research institutions. *New Directions for Higher Education*, 2013, 77–87. https://doi.org/10.1002/he.20067
- Grant, C.A., Zwier, E., 2012. Intersectionality and education. In: Banks, J. (Ed.), *Encyclopedia of Diversity in Education*. SAGE Publications Ltd, Thousand Oaks, CA, 1263--1271.

- Green, L., 2009. Challenging epistemologies: Exploring knowledge practices in Palikur astronomy. *Futures*, 41, 41–52. https://doi.org/10.1016/j.futures.2008.07.007
- Green, L., Green, D., 2010. The rain stars, the world's river, the horizon and the sun's path: astronomy along the Rio Urucauá, Amapá, Brazil. *Tipití:*Journal of the Society for the Anthropology of Lowland South America, 8, 1–66.
- Greenhalgh, T., Seyan, K., Boynton, P., 2004. "Not a university type": focus group study of social class, ethnic, and sex differences in school pupils' perceptions about medical school. *BJM*, 328, 1541–1544.
- Greenwood, N., Bithell, C., 2005. Perceptions of physiotherapy compared with nursing and medicine amongst minority ethnic and White UK students: implications for recruitment. *Physiotherapy*, 91, 69–78. https://doi.org/10.1016/j.physio.2004.07.011
- Gunaratnam, Y., 2003b. Researching Race and Ethnicity: Methods, Knowledge and Power. Sage, London.
- Haigh, M.J., 2002. Internationalisation of the Curriculum: designing inclusive education for a small world. *Journal of Geography in Higher Education*, 26, 49–66. https://doi.org/10.1080/03098260120110368
- Hall, S., 2000. Who needs identity. In: Du Gay, P., Evans, J., REdman, P. (Eds.), *Identity a Reader*. SAGE, London.
- Hammond, J., Dakin, C., White, H., Treadwell, E., Grant, R., 2015. Ten years on: the long term impact of widening participation healthcare summer schools. *Widening Participation and Lifelong Learning*, 17, 49–66. https://doi.org/10.5456/WPLL.17.4.49
- Hancock, A.-M., 2007. When multiplication doesn't equal quick addition: examining intersectionality as a research paradigm. *Perspectives on Politics*, 5, 63–79.
- Hansen, K., Steffens, M.C., Rakić, T., Wiese, H., 2017. When appearance does not match accent: neural correlates of ethnicity-related expectancy violations. *Social Cognitive and Affective Neuroscience*, 12, 507–515. https://doi.org/10.1093/scan/nsw148
- Hanson, S.L., 2006. Success in science among young African American women: The role of minority families. *Journal of Family Issues*, 28, 3–33. https://doi.org/10.1177/0192513X06292694
- Harrell, M., 2015. On the possibility of feminist philosophy of physics. In:
 Amoretti, M.C., Vassallo, N. (Eds.), *Meta-Philosophical Reflection on Feminist Philosophies of Science*. Springer.
- Harrison, N., Baxter, A., 2007. From opportunity to OFFA: discretionary bursaries and their impact. *Journal of Access Policy and Practice*, 5, 3–21.
- Harvey, A., Andrewartha, L., 2013. Dr Who? Equity and diversity among university postgraduate and higher degree cohorts. *Journal of Higher Education Policy & Management*, 35, 112–123. https://doi.org/10.1080/1360080X.2013.775921
- Hatt, S., Hannan, A., Baxter, A., Harrison, N., 2005. Opportunity knocks? The impact of bursary schemes on students from low-income backgrounds. *Studies in Higher Education*, 30, 373–388.
- HEA, 2017. Postgraduate Research Experience Survey 2017: Experiences and Personal Outlook of Postgraduate Researchers. Higher Education Academy, London.

- Heath, S., Fuller, A., Johnston, B., 2010. Young people, social capital and network-based educational decision-making. *British Journal of Sociology of Education*, 31, 395–411.
- HEFCE, 2018. *National Student Survey Results and Trends Analysis 2005-2013*. URL http://www.hefce.ac.uk/analysis/nsstrend/line/(accessed 3.6.18).
- HEFCE, 2015a. Differences in Degree Outcomes: The Effect of Subject and Student Characteristics (Issues Paper No. 2015/21). Higher Education Funding Council for England, Bristol.
- HEFCE, 2015b. *Differences in Employment Outcomes: Equality and Diversity Characteristics* (Issues Paper No. 2015/23). Higher Education Funding Council for England, Bristol.
- HEFCE, 2013a. *Higher Education and Beyond: Outcomes from Full-Time First Degree Study* (Issues Paper No. 2013/15). Higher Education Funding Council for England, Bristol.
- HEFCE, 2013b. Non-Continuation Rates at English HEIs: Trends for Entrants 2005-6 To 2010-11 (No. 2013/07). Higher Education Funding Council for England, Bristol.
- HEFCE, 2013c. Postgraduate education in England and Northern Ireland: Overview report 2013 (No. 2013/14) Higher Education Funding Council for England, Bristol.
- HEFCE, 2012a. *Widening Participation*. URL http://www.hefce.ac.uk/whatwedo/wp/(accessed 1.10.15).
- HEFCE, 2012b. Rates of qualification from postgraduate research degrees: Projected study outcomes of full-time students starting postgraduate research degrees in 2008-09 and 2009-10 (No. 2012/10). Higher Education Funding Council for England, Bristol.
- HEFCE, 2010. Student Ethnicity: Profile and Progression of Entrants to Full-Time, First Degree Study (No. 2010/13). Higher Education Funding Council for England, Bristol.
- Heleta, S., 2016. Decolonisation of higher education: Dismantling epistemic violence and Eurocentrism in South Africa. *Transformation in Higher Education*, 1, e1–e8.
- Helms, J.E., 2005. Stereotype threat might explain the Black-White test-score difference. *The American Psychologist*, 60, 269–70.
- Hernstein, R.J., Murray, C., 1994. *The Bell Curve: Intelligence and Class Structure in American Life*. Free Press.
- HESA, 2019. Who's Studying in HE? URL https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he (accessed 3.8.19).
- HESA, 2017. Table 1 HE students by HE provider, level of study, mode of study and domicile 2015/16. Higher Education Statistical Agency.
- HESA, 2016. Summary of UK Performance Indicators 2014/15. Higher Education Statistical Agency. URL https://www.hesa.ac.uk/data-and-analysis/performance-indicators/summary (accessed 1.13.17).
- Hewlett, S.A., 2013. Forget a Mentor, Find a Sponsor: The New Way to Fast-Track Your Career. Harvard Business School Publishing Corporation, Boston, MA.
- Hickling-Hudson, A., Matthews, J., Woods, A., 2004. Education, postcolonialism and disruptions, In: *Disrupting Preconceptions: Postcolonialism and Education*. Post Pressed Flaxton, Maleny, 1–16.
- Higher Education and Research Act. 2017.
- HM Treasury, 2015. Budget 2015. HM Treasury, London.

- HM Treasury, 2014. Autumn Statement 2014. HM Treasury, London
- Hodge, F.S., 2012. No Meaningful apology for American Indian unethical research abuses. *Ethics & Behavior*, 22, 431–444. https://doi.org/10.1080/10508422.2012.730788
- Holgate, P., 2015. Developing an inclusive curriculum of architecture for students with dyslexia. *Art, Design & Communication in Higher Education*, 14, 87–99. https://doi.org/10.1386/adch.14.1.87_1
- Hoodless, P., 2007. "Are You Just Helping?" The Perceptions and Experiences of Minority Ethnic Trainees on a One-Year Primary Initial Teacher Training Course. *Research in Education*, 72, 32–46.
- Hoodless, P., 2004. "Are you just helping?" The perceptions and experiences of minority ethnic trainees on a one-year primary Initial Teacher Training course. *Research in Education*, 72, 32–46.
- hooks, bell, 1984. *Feminist Theory: from Margins to Center*. South End Press, Boston, MA.
- hooks, bell, 1982. Ain't I a Woman: Black Women and Feminism. Pluto, London.
- Hopwood, N., Paulson, J., 2012. Bodies in narratives of doctoral students' learning and experience. *Studies in Higher Education*, 37, 667–681. https://doi.org/10.1080/03075079.2010.537320
- Hoskins, K., 2015. Researching female professors: the difficulties of representation, positionality and power in feminist research. *Gender & Education*, 27, 393–411. https://doi.org/10.1080/09540253.2015.1021301
- Housee, S., 2008. Should ethnicity matter when teaching about 'race' and racism in the classroom? *Race Ethnicity and Education*, 11, 415–428.
- Hughey, M.W., 2011. Backstage Discourse and the Reproduction of White Masculinities. *Sociological Quarterly*, 52, 132–153. https://doi.org/10.1111/j.1533-8525.2010.01196.x
- Hurtado, S., Cabrera, N.L., Lin, M.H., Arellano, L., Espinosa, L.L., 2009.

 Diversifying science: underrepresented student experiences in structured research programs. *Research in Higher Education*, 50, 189–214. https://doi.org/10.1007/s11162-008-9114-7
- Jackson, A.Y., 2003. Rhizovocality. *Qualitative Studies in Education*, 16, 693–710.
- Jancey, J., Burns, S., 2013. Institutional factors and the postgraduate student experience. *Quality Assurance in Education*, 21, 311–322. https://doi.org/10.1108/QAE-Nov-2011-0069
- Jennings, M.E., Lynn, M., 2005. The house that race built: Critical pedagogy, African-American education, and the re-conceptualization of a critical race pedagogy. *Educational Foundations*, 19, 15–32.
- Jensen, E., Wright, D., 2015. Critical response to Archer et al. (2015) "Science capital": A conceptual, methodological, and empirical argument for extending Bourdieusian notions of capital beyond the arts. *Science Education*, 99, 1143–1146. https://doi.org/10.1002/sce.21208
- Jessop, T., Williams, A., 2009. Equivocal tales about identity, racism and the curriculum. *Teaching in Higher Education*, 14, 95–106. https://doi.org/10.1080/13562510802602681
- Johnson, D., 2014. *Night Skies of Aboriginal Australia: A Noctuary*. Sydney University Press, Sydney.

- Johnson, D.R., 2012. Campus racial climate perceptions and overall sense of belonging among racially diverse women in STEM majors. *Journal of College Student Development*, 53, 336–346.
- Kachchaf, R., Ko, L., Hodari, A., Ong, M., 2015. Career-life balance for women of color: Experiences in science and engineering academia. *Journal of Diversity in Higher Education*, 8, 175–191.
- Kenway, P., Palmer, G., 2007. *Poverty Among Ethnic Groups: How and Why Does It Differ?* Joseph Rowntree Foundation, York.
- Kettley, N., 2007. The past, present and future of widening participation research. *British Journal of Sociology of Education*, 28, 333–347. https://doi.org/10.1080/01425690701252531
- Khan, M.S., Lakha, F., Tan, M.M.J., Singh, S.R., Quek, R.Y.C., Han, E., Tan, S.M., Haldane, V., Gea-Sánchez, M., Legido-Quigley, H., 2019. More talk than action: gender and ethnic diversity in leading public health universities. *The Lancet*, 393, 594–600. https://doi.org/10.1016/S0140-6736(18)32609-6
- Kiernan, C., 1999. Participation in research by people with learning disability: origins and issues. *British Journal of Learning Disabilities*, 27, 43–47. https://doi.org/10.1111/j.1468-3156.1999.tb00084.x
- Kirk, N., 1985. *The Growth of Working Class Reformism in mid-Victorian England.* Croom Helm, London.
- Kohli, R., Solórzano, D.G., 2012. Teachers, please learn our names!: Racial microagressions and the K-12 classroom. *Race Ethnicity and Education*, 15, 441–462.
- Kolano, L., 2016. Smartness as cultural wealth: an AsianCrit counterstory. *Race Ethnicity and Education*, 19, 1149–1163. https://doi.org/10.1080/13613324.2016.1168538
- Ladson-Billings, G., 1999. Preparing teachers for diverse student populations: A Critical Race Theory perspective. *Review of Research in Education*, 24, 211–247.
- Ladson-Billings, G., 1998. Just what is Critical Race Theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, 11, 7–24.
- Leathwood, C., Hutchings, M., Mansaray, A., 2011. Student Diversity and Success at Kingston University. An Investigation of the Progression and Attainment of Students from Ethnic Minority Backgrounds to Inform the Development of Teaching and Learning Strategy and Practice. Final Report. Institute for Policy Studies in Education, London Metropolitan University.
- Leggon, C.B., 2010. Diversifying science and engineering faculties: Intersections of race, ethnicity, and gender. *American Behavioral Scientist*, 53, 1013–1028. https://doi.org/10.1177/0002764209356236
- Leman, J., 2015. What do taught postgraduates want? The Postgraduate Taught Experience Survey 2015. Higher Education Academy.
- Leonardo, Z., Harris, A.P., 2013. Living with racism in education and society: Derrick Bell's ethical idealism and political pragmatism. *Race Ethnicity and Education*, 16, 470–488.
- LFHE, 2017. Sponsor Toolkit: The Diversifying Leadership Sponsor Programme. Leadership foundation for Higher Education, London.
- Ling, N., 2015. Attendance, attainment and engagement Does class attendance influence attainment? 8th HEIR Annual Conference, Paisley.

- Lipsedge, K., May, S., Ayoub, M., Rogers, D., 2015. Developing writing and speaking skills through interactive workshops. *EAIR 37th Annual Forum*, Krems, Austria.
- Ludvigsen, A., 2014. 'Bookshelfie": Book Ownership, Class and Families. *Discover Society*, 4.
- Lynn, M., Jennings, M.E., Hughes, S., 2013. Critical race pedagogy 2.0: Lessons from Derrick Bell. *Race Ethnicity and Education*, 16, 603–628. https://doi.org/10.1080/13613324.2013.817776
- Maisuria, A., 2012. A critical appraisal of Critical Race Theory (CRT): Limitations and opportunities, In: Bhopal, K., Preston, J. (Eds.), *Intersectionality and "Race" in Education*, Routledge, New York, 76–96.
- Malone, K.R., Barabino, G., 2009. Narrations of race in STEM research settings: Identity formation and its discontents. *Science Education*, 93, 485–510.
- Mangan, J., Hughes, A., Slack, K., 2010. Student finance, information and decision making. *Higher Education*, 60, 459–472. https://doi.org/10.1007/s10734-010-9309-7
- Mansell, W., Adams, R., Edwards, P., 2016. England schools: 10,000 pupils sidelined due to league-table pressures. *The Guardian*.
- Marshall, G., Jones, N., 2002. Does widening participation reduce standards of achievement in postgraduate radiography education? *Radiography*, 8, 133–137. https://doi.org/10.1053/radi.2002.0375
- Mason, D., 2000. *Race and Ethnicity in Modern Britain*, 2nd ed. Oxford University Press, Oxford.
- Massey, D.S., Owens, J., 2014. Mediators of stereotype threat among black college students. *Ethnic and Racial Studies*, 37, 557–575. https://doi.org/10.1080/01419870.2013.786110
- Matias, C.E., 2012. Who you callin' white?! A critical counter-story on colouring white identity. *Race Ethnicity and Education*, 16, 291–315.
- McCaig, C., 2011. Trajectories of higher education system differentiation: structural policy-making and the impact of tuition fees in England and Australia. *Journal of Education and Work*, 24, 7–25. https://doi.org/10.1080/13639080.2010.534772
- McCoy, D.L., Rodricks, D.J., 2015. Critical Race as a Methodology. *ASHE Higher Education Report*, 41, 34–56.
- McCulloch, A., 2014. Regional differences in university admissions in England. *Graduate Market Trends*, 4–7.
- McDuff, N., Tatam, J., Beacock, O., Ross, F., 2018. Closing the attainment gap for students from black and minority ethnic backgrounds through institutional change. *Widening Participation and Lifelong Learning* 20, 79–101. https://doi.org/10.5456/WPLL.20.1.79
- McInnis, C., James, R., Hartley, R., 2000. *Trends in the first year experience: in Australian universities*. Australian Department of Education, Training and Youth Affairs. Evaluations and Investigations Programme (DETYA), Canberra.
- McIntosh, P., 2003. White privilege and male privilege: A personal Account of Coming to See Correspondences Through Work in Women's Studies, In: Kimmel, M.S., Ferber, A.L. (Eds.), *Privilege: A Reader*. Basic Books, 147–160.
- McKay, J., Devlin, M., 2016. 'Low income doesn't mean stupid and destined for failure': challenging the deficit discourse around students from low SES

- backgrounds in higher education.' *International Journal of Inclusive Education* 20, 347–363. https://doi.org/10.1080/13603116.2015.1079273
- Meissner, F., Vertovec, S., 2015. Comparing super-diversity. *Ethnic and Racial Studies* 38, 541–555. https://doi.org/10.1080/01419870.2015.980295
- Mellors-Bourne, R., Hooley, T., Marriott, J., 2014. *Understanding how people choose to pursue taught postgraduate study* (Report to HEFCE by CRAC and ICeGS). HEFCE, Bristol.
- Merriam, S.B., Johnson-Bailey, J., Lee, M.-Y., Kee, Y., Ntseane, G., Muhamad, M., 2001. Power and positionality: negotiating insider/outsider status within and across cultures. *International Journal of Lifelong Education* 20, 405–416. https://doi.org/10.1080/02601370120490
- Merriam, S.B., Tisdell, E.J., 2015. *Qualitative Research: A Guide to Design and Implementation*, 4th ed. Jossey-Bass, San Francisco.
- Miller, P., 2016. 'White sanction', institutional, group and individual interaction in the promotion and progression of black and minority ethnic academics and teachers in England. *Power and Education* 8, 205–221.
- Mills, C., 2008. Reproduction and transformation of inequalities in schooling: the transformative potential of the theoretical constructs of Bourdieu. *British Journal of Sociology of Education* 29, 79–89. https://doi.org/10.1080/01425690701737481
- Mills, C.W., 1997. *The Racial Contract*. Cornell University Press, Ithaca, NY. Milner, H.R., 2007. Race, Culture, and Researcher Positionality: Working Through Dangers Seen, Unseen, and Unforeseen. *Educational Researcher* 36, 388–400.
- Minter, C., 2001. Some Flaws in the Common Theory of "Widening Participation." *Research in Post-Compulsory Education* 6, 245–259.
- Mirza, H.S., 2015. Respecting Difference: Widening Participation in Post-Race Times. In: Alexander, C., Arday, J. (Eds.), *Aiming Higher: Race, Inequality and Diversity in the Academy*. Runnymede, London.
- Mirza, H.S., 1997. Black women in education. In: Mirza, H.S. (Ed.), *Black British Feminism. Routledge*, London, 269–277.
- Modood, T., 2004a. Capitals, ethnic identity and educational qualifications. *Cultural Trends* 13, 87–105. https://doi.org/10.1080/0954896042000267170
- Moore, J., Dunworth, F., 2011. Review of Evidence from Aimhigher Area Partnerships of the Impact of Aimhigher. Higher Education Academy; Aimhigher.
- Moore, J., Sanders, J., Higham, L., 2013. *Literature review of research into widening participation to higher education*. Higher Education Funding Council for England, Bristol.
- Moore, K.S., 2008. Class formations: Competing forms of black middle-class identity. *Ethnicities* 8, 492–517. https://doi.org/10.1177/1468796808097075
- Moore, R., 2004. Education and society: issues and explanations in the sociology of education. Polity, Cambridge.
- Moran, L., 2016. Constructions of race: symbolic ethnic capital and the performance of youth identity in multicultural Australia. *Ethnic and Racial Studies* 39, 708–726. https://doi.org/10.1080/01419870.2015.1080375
- Morgan, M., Direito, I., 2016. *Widening and sustaining postgraduate taught* (*PGT*) *STEM study in the UK: a collaborative project*. HEFCE, Kingston University, Kingston.

- Morrice, L., 2013. Refugees in higher education: boundaries of belonging and recognition, stigma and exclusion. *International Journal of Lifelong Education* 32, 652–668. https://doi.org/10.1080/02601370.2012.761288
- Morrison, A., 2012. "If you're holding a degree in this country no-one's gonna ask no questions": Intercategorical intersectionality and BAME youth postcompulsory educational achievement in the UK, In: Bhopal, K., Preston, J. (Eds.), *Intersectionality and "Race" in Education*, Routledge, New York, 116–137.
- Mowjee, B., 2013. Are postgraduate students "rational choosers"? An investigation of motivation for graduate study amongst international students in England. *Research in Comparative and International Education*, 8, 193–213.
- Muijs, D., Bokhove, C., 2017. Postgraduate student satisfaction: A multilevel analysis of PTES data. *British Educational Research Journal*, 43, 904–930. https://doi.org/10.1002/berj.3294
- Museus, S.D., Saelua, N.A., 2014. Realizing the power of intersectionality research in higher education. In: Mitchell, D., Simmons, C.Y., Greyerbiehl, L.A. (Eds.), Intersectionality & Higher Education. Peter Lang, New York, 68–77.
- Naidoo, D., 2015. Understanding Non-Traditional PhD Students Habitus--Implications for PhD Programmes. *Teaching in Higher Education*, 20, 340–351.
- Naidoo, R., Shankar, A., Veer, E., 2011. The consumerist turn in higher education: Policy aspirations and outcomes. *Journal of Marketing Management*, 27, 1142–1162. https://doi.org/10.1080/0267257X.2011.609135
- Nazar, M., Kendall, K., Day, L., Nazar, H., 2015. Decolonising medical curricula through diversity education: Lessons from students. *Medical Teacher*, 37, 385–393. https://doi.org/10.3109/0142159X.2014.947938
- Noble, J., Davies, P., 2009. Cultural capital as an explanation of variation in participation in higher education. *British Journal of Sociology of Education*, 30, 591–605. https://doi.org/10.1080/01425690903101098
- Nursaw Associates, 2015. What do we know about the impact of financial support on access and student success? Office for Fair Access, Bristol.
- NUS, 2011. Race for Equality. National Union of Students, London.
- Oakley, A., 1981. Interviewing women: a contradiction in terms, in: Roberts, H. (Ed.), *Doing Feminist Research*. Routledge, London.
- O'Brien, L., Garcia, D., Adams, G., Villalobos, J. 4, Hammer, E., Gilbert, P., 2015. The threat of sexism in a STEM educational setting: the moderating impacts of ethnicity and legitimacy beliefs on test performance. *Social Psychology of Education*, 18, 667–684. https://doi.org/10.1007/s11218-015-9310-1
- O'Donnell, V.L., Tobbell, J., Lawthom, R., Zammit, M., 2009. Transition to postgraduate study Practice, participation and the widening participation agenda. *Active Learning in Higher Education*, 10, 26–40. https://doi.org/10.1177/1469787408100193
- OFFA, 2016. *Outcomes of access agreement monitoring for 2014-15* (No. 2016/04). Office for Fair Access, Bristol.
- OFFA, 2015. What do we know about the impact of financial support on access and student success? Office for Fair Access, Bristol.
- OfS, 2019. Regulatory notice 1: Access and participation plan guidance (No. OfS2019.05). Office for Students, Bristol.

- OfS, 2018a. Regulatory Notice 1: Access and participation plan guidance for 2019-20 (No. OfS2018.03). Office for Students, Bristol.
- OfS, 2018b. *Access and participation plan guidance for 2019-20* (Regulatory Notice No. OfS2018.03). Office for Students, Bristol.
- Ojanuga, D., 1993. The medical ethics of the "father of gynaecology", Dr J Marion Sims. *Journal of Medical Ethics*, 19, 28–31. https://doi.org/10.1136/jme.19.1.28
- Okolosie, L., Harker, J., Green, L., Dabiri, and E., 2015. Is it time to ditch the term 'black, Asian and minority ethnic' (BAME)? | Lola Okolosie, Joseph Harker, Leah Green, Emma Dabiri. *The Guardian*.
- Ong, M., 2005. Body Projects of Young Women of Color in Physics: Intersections of Gender, Race, and Science. *Social Problems*, 52, 593–617. https://doi.org/10.1525/sp.2005.52.4.593
- ONS, 2017. Overview of the UK population: July 2017. URL https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmi gration/populationestimates/articles/overviewoftheukpopulation/july2017 (accessed 11.12.17).
- Osei-Kofi, N., Torres, L.E., Lui, J., 2013. Practices of whiteness: racialization in college admissions viewbooks. Race Ethnicity and Education, 16, 386–405. https://doi.org/10.1080/13613324.2011.645572
- Park, S., 2009. The Hypersexuality of Race: Performing Asian/American Women on Screen and Scene (review). *Theatre Journal*, 61, 346–347. https://doi.org/10.1353/tj.0.0193
- Pezalla, A.E., Pettigrew, J., Miller-Day, M., 2012. Researching the researcher-as-instrument: an exercise in interviewer self-reflexivity. *Qualitative research:* QR, 12, 165–185. https://doi.org/10.1177/1487941111422107
- Phillips, J.C., Parent, M.C., Dozier, V.C., Jackson, P.L., 2016. Depth of discussion of multicultural identities in supervision and supervisory outcomes. *Counselling Psychology Quarterly,* 0, 1–23. https://doi.org/10.1080/09515070.2016.1169995
- Pilkington, A., 2013. The interacting dynamics of institutional racism in higher education. *Race Ethnicity and Education*, 16, 225–245.
- Pillow, W., 2003. Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education*, 16, 175–196. https://doi.org/10.1080/0951839032000060635
- Preston, J., Chadderton, C., 2012. Rediscovering 'Race Traitor': towards a Critical Race Theory informed public pedagogy. *Race Ethnicity and Education*, 15, 85–100. https://doi.org/10.1080/13613324.2012.638866
- Putman, R., 2005. *Social Capital: Measurement and Consequences*. Kennedy School of Government, Harvard University, Cambridge, MA.
- Puwar, Ni., 2004. *Space Invaders: Race, Gender and Bodies Out of Place*. Berg, Oxford and New York.
- Quinn, J., Thomas, L., Slack, K., Thexton, W., Noble, J., 2005. From life crisis to lifelong learning Rethinking working-class 'drop out' from higher education. John Rowntree Foundation, York.
- Rasera, E., Guanaes-Lorenzi, C., Corradi-Webster, C., 2016. Pesquisa como prática social: o pesquisador e os "outros" na produção do conhecimento. *Athenea Digital. Revista de pensamiento e investigación social*, 16, 325–347.
- Ratcliffe, P., 1994. "Race", Ethnicity and Nation: International Perspectives on Social Conflict. UCL Press, London.

- Rawls, J., 2001. *Justice as fairness: a restatement*. Belknap P. of Harvard UP, Cambridge, Mass.; London.
- Reay, D., 1998. Class Work: mothers involvement in their children's primary schooling. Routledge, London.
- Reay, D., Crozier, G., 2010. 'Fitting in' or 'standing out': working-class students in UK higher education. *British Educational Research Journal*, 36, 107–124. https://doi.org/10.1080/01411920902878925
- Reay, D., David, M., Ball, S., 2001. Making a Difference?: Institutional Habituses and Higher Education Choice. *Sociological Research Online*, 5
- Reiss, M., Hoyles, C., Mujtaba, T., Riazi-Farzad, B., Rodd, M., Simon, S., Stylianidou, F., 2011. Understanding participation rates in post-16 mathematics and physics: Conceptualising and operationalising the UPMAP project. *International Journal of Science and Mathematics Education*, 9, 273–302. https://doi.org/10.1007/s10763-011-9286-z
- Rhamie, J., 2012. Achievement and underachievement: the experiences of African Caribbeans. *Race Ethnicity and Education*, 15, 683–704. https://doi.org/10.1080/13613324.2011.624503
- Rhamie, J., Hallam, S., 2002. An Investigation into African-Caribbean Academic Success in the UK. *Race Ethnicity and Education*, 5, 151–170. https://doi.org/10.1080/13613320220139608
- Richardson, J.T.E., 2009. The role of ethnicity in the attainment and experiences of graduates in distance education. *Higher Education*, 58, 321–338. https://doi.org/10.1007/s10734-008-9196-3
- Riegle-Crumb, C., King, B., 2010. Questioning a White Male Advantage in STEM: Examining Disparities in College Major by Gender and Race/Ethnicity. *Educational Researcher*, 39, 656–664.
- Roberts, S., 2011. Traditional practice for non-traditional students? Examining the role of pedagogy in higher education retention. *Journal of Further and Higher Education*, 35, 183–199. https://doi.org/10.1080/0309877X.2010.540320
- Robinson, D., Walker, M., 2013. 'Working-Class' Education: Notions of Widening Participation in the Nineteenth and Twenty-First Centuries.' *Journal of Adult and Continuing Education*, 19, 3–23. https://doi.org/10.7227/JACE.19.2.2
- Robson, C., McCartan, K., 2015. *Real World Research*, 4th ed. John Wiley & Sons, Hoboken.
- Rodriguez, G.M., 2013. Power and Agency in Education: Exploring the Pedagogical Dimensions of Funds of Knowledge. *Review of Research in Education*, 37, 87–120.
- Roediger, D., 2005. Working Toward Whiteness: How America's Immigrants Became White: The Strange Journey from Ellis Island to the Suburbs. Basic Books, New York.
- Rollock, N., 2019. Staying Power: The career experiences and strategies of UK Black female professors. University and College Union, London.
- Rollock, N., 2012. The invisibility of race: intersectional reflections on the liminal space of alterity. *Race Ethnicity and Education*, 15, 65–84.
- Rollock, N., 2011. Unspoken rules of engagement: navigating racial microaggressions in the academic terrain. *International Journal of Qualitative Studies in Education*, 25, 517–532.
- Rollock, N., Gillborn, D., 2011. *Critical Race Theory (CRT)*. British Educational Research Association, URL: https://www.bera.ac.uk/wp-

- content/uploads/2014/03/Critical-Race-Theory-CRT-.pdf (accessed 11.12.17)
- Rollock, N., Gillborn, D., Vincent, C., Ball, S., 2011. The Public Identities of the Black Middle Classes: Managing Race in Public Spaces. *Sociology*, 45, 1078–1093. https://doi.org/10.1177/0038038511416167
- Rollock, N., Gillborn, D., Vincent, C., Ball, S.J., 2015. *The colour of class: the educational strategies of the Black middle classes*. Routledge, Abigdon.
- Royal Society, 2008. Exploring the relationship between socioeconomic status and participation and attainment in science education. London.
- Rushton, J.P., 1997. Race, Intelligence, And The Brain. *Personality and Individual Differences*, 23, 196–180.
- Russell Group, 2011. *Informed Choices: A Russell Group Guide to making Decisions about post-16 Education*. London: Russell Group. Russell Group, London.
- Rzepnikowska, A., 2019. Racism and xenophobia experienced by Polish migrants in the UK before and after Brexit vote. *Journal of Ethnic and Migration Studies*, 45, 61–77. https://doi.org/10.1080/1369183X.2018.1451308
- Sadeghi, H., Abedini, Z., Norouzi, M., 2013. Assessment of Relationship between Mental Health and Educational Success in the Students of Qom University of Medical Sciences. *Majallah-i Dānishgāh-i ʿUlūm-i Pizishkī-i Qum*, 7, 17–22.
- Said, E.W., 1979. Orientalism. Vintage, New York.
- Saini, A. 2019 Superior: The Return of Race Science. 4th Estate, London.
- Samuelson, C.C., Litzler, E., 2016. Community Cultural Wealth: An Assets-Based Approach to Persistence of Engineering Students of Color. *Journal of Engineering Education*, 105, 93–117. https://doi.org/10.1002/jee.20110
- Schmitt, C., Witte, M.D., 2018. "You are special": othering in biographies of "GDR children from Namibia." *Ethnic and Racial Studies*, 41, 1352–1369. https://doi.org/10.1080/01419870.2017.1287417
- Schofield, C., Dismore, H., 2010. Predictors of retention and achievement of higher education students within a further education context. *Journal of Further and Higher Education*, 34, 207–221. https://doi.org/10.1080/03098771003695478
- Shah, B., Dwyer, C., Modood, T., 2010. Explaining Educational Achievement and Career Aspirations among Young British Pakistanis: Mobilizing 'Ethnic Capital'? *Sociology*, 44, 1109–1127. https://doi.org/10.1177/0038038510381606
- Silverman, D., 1997. *Qualitative Research: theory, method and practice.* Sage, London.
- Singh, G., 2018. The Black and Minority Ethnic (BME) Student Attainment Gap: What is it, why does it exist and what can be done to overcome it? SOAS, University of London, London.
- Singh, G., 2009. Black and minority ethnic (BME) students' participation in higher education: improving retention and success: A synthesis of research evidence. HEA, London.
- Smart, S., Rahman, J., 2008. Bangladeshi girls choosing science, technology, engineering and maths: An exploration of factors that affect Bangladeshi girls' achievement in, engagement with, and aspirations in STEM subject areas: research conducted in the London Borough of Tower Hamlets 2007-2008. Executive summary. CfBT Education Trust, Reading:

- Smeding, A., Darnon, C., Souchal, C., Toczek-Capelle, M.-C., Butera, F., 2013. Reducing the socio-economic status achievement gap at University by promoting mastery-oriented assessment. PloS One, 8, e71678. https://doi.org/10.1371/journal.pone.0071678
- SMF, 2017. On the course for success? Student retention at university. Social Market Foundation, London.
- Smith, H.J., 2016. Britishness as racist nativism: a case of the unnamed 'other.' *Journal of Education for Teaching*, 42, 298–313. https://doi.org/10.1080/02607476.2016.1184461
- Smith, J., 2002. Learning Styles: Fashion Fad or Lever for Change? The Application of Learning Style Theory to Inclusive Curriculum Delivery. *Innovations in Education and Teaching International*, 39, 63–70.
- Smith, J.A., 1995. Semi-Structured Interviewing and Qualitative Analysis, in: Rethinking Methods in Psychology. SAGE Publications Ltd, London, 10–26. https://doi.org/10.4135/9781446221792.n2
- Smith, W.A., 2017. Racial battle fatigue: The long-term effects of racial microaggressions on African American boys and men. Michigan State University Press, Chicago.
- Snyder, C.R., 2014. A Woman's Place: Women of Colour Navigating Doctoral Education in South Africa. *International Journal of Multicultural Education*, 16, 15–35.
- Solórzano, D.G., Yosso, T.J., 2015. Critical Race Methodology: Counter-Storytelling as an Analytical Framework for Educational Research. In: Taylor, E., Gillborn, D., Ladson-Billings, G. (Eds.), *Foundations of Critical Race Theory in Education*. Routledge.
- Solórzano, D.G., Yosso, T.J., 2000. Toward a critical race theory of Chicana and Chcano education. In: Tejeda, C., Martinez, C., Leonardo, Z. (Eds.), *Demarcating the Border of Chicana(o)/Latina(o) Education*. Hampton Press, Cresskill, NJ, 35–65.
- Song, M., Parker, D., 1995. Commonality, difference and the dynamics of disclosure in in-depth interviewing. *Sociology*, 29, 241–256.
- Spearing, R., 2014. Facilitating the transition to postgraduate attainment: The experience of one postgraduate, pre-registration physiotherapy programme. *Assessment & Evaluation in Higher Education*, 39, 89–101.
- Stahl, G., 2012. Aspiration and a good life among white working-class boys in London. *Journal of Ethnographic & Qualitative Research*, 7, 8–19.
- Stefancic, J., Delgado, R. (Eds.), 2013. *Critical Race Theory: The Cutting Edge.* Temple University Press, Philadelphia.
- Stein, S., 2018. National exceptionalism in the 'EduCanada' brand: unpacking the ethics of internationalization marketing in Canada. *Discourse: Studies in the Cultural Politics of Education*, 39, 461–477. https://doi.org/10.1080/01596306.2016.1276884
- Stevens, P.A.J., 2007. Researching race/ethnicity and educational inequality in english secondary schools: A critical review of the research literature between 1980 and 2005. *Review of Educational Research*, 77, 147–185. https://doi.org/10.3102/003465430301671
- Stevenson, J., 2012. Black and minority ethnic student degree retention and attainment. HEA and HEFCE, London.
- Stockfelt, S., 2018. We the minority-of-minorities: a narrative inquiry of black female academics in the United Kingdom. *British Journal of Sociology of Education*, 0, 1–18. https://doi.org/10.1080/01425692.2018.1454297

- Stovall, D., 2013. 14 souls, 19 days and 1600 dreams: engaging critical race praxis while living on the 'edge' of race. Discourse: *Studies in the Cultural Politics of Education*, 34, 562–578. https://doi.org/10.1080/01596306.2013.822625
- Stovall, D., 2005. A challenge to traditional theory: Critical race theory, African-American community organizers, and education. *Discourse: Studies in the Cultural Politics of Education*, 26, 95–108. https://doi.org/10.1080/01596300500040912
- Strand, S., 2011. The White British–Black Caribbean achievement gap: tests, tiers and teacher expectations. *British Educational Research Journal*, 38, 75–101.
- Strand, S., 2010. Do some schools narrow the gap? Differential school effectiveness by ethnicity, gender, poverty, and prior achievement. *School Effectiveness and School Improvement*, 21, 289–314. https://doi.org/10.1080/09243451003732651
- Strand, S., 2007. *Minority Ethnic Pupils in the Longitudinal Study of Young People in England (LSYPE)*. Department for Children, Schools and Families, London.
- Strayhorn, T.L., 2011. Undergraduate research participation and STEM graduate degree aspirations among students of color. *New Directions for Institutional Research*, 85–93. https://doi.org/10.1002/ir.364
- Stuart, M., Lido, C., Morgan, J., Solomon, L., May, S., 2011. The impact of engagement with extracurricular activities on the student experience and graduate outcomes for widening participation populations. *Active Learning in Higher Education*, 12, 203–215. https://doi.org/10.1177/1469787411415081
- Sue, D.W., Capodilupo, C.M., Holder, A.M.B., 2008. Racial microaggressions in the life experience of Black Americans. *Professional Psychology: Research and Practice*, 39, 329–336.
- Syed, T., 2015. Who Are People of Color? Odyssey Online. URL http://theodysseyonline.com/brandeis/who-are-people-of-color/213128 (accessed 2.27.19).
- Tatlow, P., 2015. Participation of BME students in UK higher education. In: Alexander, C., Arday, J. (Eds.), *Aiming Higher: Race, Inequality and Diversity in the Academy*. Runnymede, London.
- The Royal Society, 2014. A picture of the UK scientific workforce: Diversity data analysis for the Royal Society. The Royal Society, London.
- Thomas, L., 2012. What works? Student retention and success change programme: Phase 2. Higher Education Academy.
- Thomas, L., 2011. Do pre-entry interventions such as "Aimhigher" impact on student retention and success? A review of the literature. *Higher Education Quarterly*, 65, 230–250. https://doi.org/10.1111/j.1468-2273.2010.00481.x
- Thomas, L., Hill, M., O'Mahony, J., Yorke, M., 2017. Supporting student success: strategies for institutional change. What works? Student Retention & Success programme. Final Report. Paul Hamlyn Foundation, Higher Education Academy, Action on Access, London.
- Thompson, D., Tomlin, C., 2013. Recruiting minority ethnic students on to initial teacher training courses. *Widening Participation and Lifelong Learning*, 15, 47–65. https://doi.org/10.5456/WPLL.15.3.47
- Tinto, V., 1975. Dropouts from higher education: A theoretical synthesis of recent literature. *Review of Educational Research*, 45, 89–125.

- Tobbell, J., O'Donnell, V.L., 2013. Transition to postgraduate study: postgraduate ecological systems and identity. *Cambridge Journal of Education*, 43, 123–138. https://doi.org/10.1080/0305764X.2012.749215
- Tonkaboni, F., Yousefy, A., Keshtiaray, N., 2013. Description and recognition the concept of social capital in higher education system. *International Education Studies*, 6, p40. https://doi.org/10.5539/ies.v6n9p40
- Tope, D., Pickett, J.T., Cobb, R.J., Dirlam, J., 2014. Othering Obama: Racial attitudes and dubious beliefs about the nation's first black president. *Sociological Perspectives*, 57, 450–469.
- Turnbull, S., 2018. *A Guide to UK League Tables in Higher Education* (No. 101). Higher Education Policy Institute, Oxford.
- Turner, G., 2015. *PRES 2015: The research student journey*. Higher Education Academy.
- UCAS, 2019. End of cycle report 2018: Patterns of Equality in England. UCAS, Cheltenham.
- UCAS, 2016. End of Cycle Report. 2016. UCAS, Cheltenham.
- Usher, T., Baldwin, S., Munro, M., Pollard, E., Sumption, F., 2010. The Role of Finance in the Decision-Making of Higher Education Applicants and Students: Findings from the Going into Higher Education Research. (BIS Research Paper No.9). Department for Business, Innovation and Research, London.
- Vanner, C., 2015. Positionality at the Center: Constructing an Epistemological and Methodological Approach for a Western Feminist Doctoral Candidate Conducting Research in the Postcolonial. *International Journal of Qualitative Methods*, 14, 1–12. https://doi.org/10.1177/1609406915618094
- Wakeling, P., 2016. *Measuring Doctoral Student Diversity Socio-Economic Background*. Research Councils UK, York.
- Wakeling, P., 2009. Are ethnic minorities underrepresented in UK postgraduate study? *Higher Education Quarterly*, 63, 86–111.
- Wakeling, P., 2007. White faces, black faces: Is British sociology a white discipline? *Sociology*, 41, 945–960. https://doi.org/10.1177/0038038507080447
- Wallace, D., 2017. Reading 'race' in Bourdieu? Examining black cultural capital among black Caribbean youth in south London. *Sociology*, 51, 907–923. https://doi.org/10.1177/0038038516643478
- Wallace, J., 1999. The colour blindspot. *Times Higher Education*.
- Warikoo, N., 2016. The Diversity Bargain: And Other Dilemmas of Race, Admissions, and Meritocracy at Elite Universities. The University of Chicago Press, Chicago.
- Warikoo, N.K., Fuhr, C., 2014. Legitimating status: perceptions of meritocracy and inequality among undergraduates at an elite British university. *British Educational Research Journal*, 40, 699–717. https://doi.org/10.1002/berj.3108
- Warren, S., 2007a. Migration, race and education: evidence-based policy or institutional racism? *Race Ethnicity and Education*, 10, 367–385.
- West, A., 2012. Formative evaluation of the transition to postgraduate study for counselling and psychotherapy training: Students' perceptions of assignments and academic writing. *Counselling & Psychotherapy Research*, 12, 128–135. https://doi.org/10.1080/14733145.2011.604425

- Wijeyesinghe, C.L., Jones, S.R., 2014. Intersectionality, Identity, and Systems of Power and Inequality. In: Mitchell, D., Simmons, C.Y., Greyerbiehl, L.A. (Eds.), *Intersectionality & Higher Education*. Peter Lang, New York.
- Wilkins, C., Lall, R., 2011. "You've got to be tough and I'm trying": Black and minority ethnic student teachers' experiences of initial teacher education. *Race Ethnicity and Education*, 14, 365–386. https://doi.org/10.1080/13613324.2010.543390
- Willemse, K., 2014. "Everything I told you was true": The biographic narrative as a method of critical feminist knowledge production. *Women's Studies International Forum*, 43, 38–49. https://doi.org/10.1016/j.wsif.2014.02.005
- Wood, M., Hales, J., Purdon, S., Sejersen, T., Hayllar, O., 2009. *A test for racial discrimination in recruitment practice in British cities: Research Summary.* (No. 607). Department for Work and Pensions, London.
- Wright, C., Standen, P., Patel, T., 2010. *Black Youth Matters: Transitions from School to Success*. Routledge, New York.
- Yesufu, S., 2013. Discriminatory use of police stop-and-search powers in London, UK. *International Journal of Police Science & Management*, 15, 281–293. https://doi.org/10.1350/ijps.2013.15.4.318
- Yosso, T.J., 2005. Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education*, 8, 69–91. https://doi.org/10.1080/1361332052000341006
- Yosso, T.J., 2002. Critical Race Media Literacy: Challenging Deficit Discourse about Chicanas/os. *Journal of Popular Film & Television*, 30, 52.
- Youdell, D., 2003. Identity traps or how black students fail: The Interactions between biographical, sub-cultural, and learner identities. *British Journal of Sociology of Education*, 24, 3–20. http://dx.doi.org.elibrary.ioe.ac.uk/10.1080/0142569032000043579
- Young, M., 1994. The Rise of the Meritocracy. Transaction Publishers.
- Zamudio, M.M., Russell, C., Rios, F.A., Bridgeman, J.L., 2011a. *Critical race theory matters: education and ideology*. Routledge, New York; London.
- Zimdars, A., 2010. Fairness and undergraduate admission: a qualitative exploration of admissions choices at the University of Oxford. *Oxford Review of Education*, 36, 307–323.
 - https://doi.org/10.1080/03054981003732286

Appendices

Appendix 1

Sample letter inviting students to participate in interviews – phase 1

If you are

:

- A PhD/EdD student or a masters student with fairly defined plans to go on to do a PhD/EdD in a STEM (Science, Technology, Engineering, Maths) field for example:
- Chemistry
- Computer/Information Technology
- Engineering
- Geosciences
- Life Sciences
- Biology
- Mathematical Sciences
- o Physics
- Or Science, Technology and Maths Education
- From one of the following ethnic minorities:
- British-Caribbean,
- o British-African,
- British-Pakistani,
- o British-Bangladeshi
- mixed-race ethnicity of any of the above and White

...then we would like to hear from you!

[American university name] and [UK university name] are conducting research into experiences of postgraduate STEM students from ethnic minorities. You will be expected to take part in an individual interview in 2014, and a follow up interview and a focus group in 2015.

The project aims to influence university and wider policy strategies that American and English urban doctoral universities might undertake to promote greater participation by underrepresented groups. Research spanning the USA and the UK will help understand the data used by university executives and public policymakers when initiating new policies, programmes, or legislation. The research findings will be disseminated to government and academic executives and will result in multiplier effect that may broadly enhance STEM policies and programmes.

If you would like to participate in this research – please contact **Dominik Jackson-Cole** e-mail: [e-mail address] as soon as possible.

Sample letter inviting universities to participation in the research - phase 2

I'm a graduate researcher at the University of East London (UEL) investigating the success factors of Black and Minority Ethnic (BME) students in Postgraduate STEM (Science, Technology, Engineering and Maths) courses and I would like to request that your university joins the project. This timely research will contribute to furthering the understanding of Widening Participation in Postgraduate (PG) education and your PG student population in general. Its focus on STEM subjects can also lead to wider benefits of addressing shortages in the supply of diverse home-educated STEM workforce.

What has already been done?

The project is in its second phase. The first phase was conducted in 2014 and was a qualitative study of five English universities (three Russell Group institutions). Over 50 interviews were conducted with students and staff, including senior management and vice-chancellors of the universities. A paper with initial findings was presented in April 2015 at AERA – the biggest educational conference in the USA, and further papers are in the pipeline. The survey to follow now aims to test the findings on a wider scale.

Why XXX?

Your university was chosen because its significant number of BME students in Postgraduate education (according to HESA 2012 data) and provision of STEM subjects.

What is required?

An online survey (copy of questions attached) should be sent to ALL home PG students at XXX. The survey will take 5-10 minutes to complete. The survey will allow for a comparison of educational success factors for different groups of PG students (.e.g. White vs BME, STEM vs non-STEM, males vs females, etc.).

Preferably, the survey can be sent directly to students' email inboxes as a stand-alone email (text with suggested recruitment information attached) or as part of a newsletter to all PG students (or both methods). From previous experience, appointing an admin person to help with this task is the most efficient way to administer the survey. The arrangements are very flexible. However, they require the buy-in from senior staff members, which is where your support is invaluable.

What to do next?

Please respond to this email and indicate if you agree for XXX to take part in the research. I require this in order to receive an ethical approval from UEL to conduct the study. I will not conduct any research without the ethical approval from UEL nor an agreement from your institution.

If you have any further questions please do not hesitate to contact me. I look forward to hearing from you.

Kind regards, Dom

Dominik Jackson-Cole

PhD Researcher Cass School of Education/Continuum University of East London

Supervisors: Dr Charlotte Chadderton (on sabbatical leave until September 2016, c.chadderton@uel.ac.uk),

Professor John Storan (<u>i.storan@uel.ac.uk</u>), Dr Karina Berzins (<u>k.e.berzins@uel.ac.uk</u>)

Sample letter inviting universities to continue participation in phase 2

Dear [name],

As you may remember in 2014 [university name] participated in a National Science Foundation research project on Black and Minority Ethnic Students in Postgraduate Education. Unfortunately, the project was prematurely terminated by the American partner, Penn State University, early last year. I have, however, managed to secure a fully-funded position at the University of East London (UEL) to continue the research, and I'm contacting you to arrange the follow up data collection. Please note that Dr Beverly Lindsay is no longer involved in this project.

A reminder of what has already been done?

The first phase was conducted in 2014 and was a qualitative study of five English universities (three Russell Group institutions). Over 50 interviews were conducted with students and staff, including senior management and vice-chancellors of the universities. A paper with initial findings was presented in April 2015 at AERA – the biggest educational conference in the USA, and further papers are in the pipeline. The second phase consists of a PG student survey, which aims to test the initial findings on a wider scale, and follow up interviews with your students (some of whom might have graduated).

What is required?

An online survey (copy of questions attached) should be sent to ALL home PG students at [university name]. The survey will take 5-10 minutes to complete. The survey will allow for a comparison of educational success factors for different groups of PG students (.e.g. White vs BME, STEM vs non-STEM, males vs females, etc.). Preferably, the survey can be sent directly to students' email inboxes as a stand-alone email (text with suggested recruitment information attached) or as part of a newsletter to all PG students (or both methods). From previous experience, appointing an admin person to help with this task is the most efficient way to administer the survey. The arrangements are very flexible. However, they require the buy-in from senior staff members, which is where your support is invaluable.

I will be contacting the students/alumni myself. No staff interviews will be required.

What to do next?

Please respond to this email and indicate if you agree for XXX to take part in the research. I require this in order to receive an ethical approval from UEL to conduct the study. I will not conduct any research without the ethical approval from UEL nor an agreement from your institution.

If you have any further questions please do not hesitate to contact me. I look forward to hearing from you.

Kind regards, Dom

Dominik Jackson-Cole
PhD Researcher
Cass School of Education/Continuum

University of East London

Supervisors:

Dr Charlotte Chadderton (on sabbatical leave until September 2016, c.chadderton@uel.ac.uk),

Professor John Storan (j.storan@uel.ac.uk),

Dr Karina Berzins (k.e.berzins@uel.ac.uk)

Initial student interviews questions - phase 1

- 1. How would you describe your family unit while you attended primaryelementary/secondary-high school?
- 2. How many books approximately did you have at home?
- 3. What was the profession/occupation of your parents/guardians during secondary/high school? For what type of organisation did they work?
- 4. How long have your parents/grandparents resided in England? What were their occupations in their country of origin?
- 5. How would you describe your residential neighbourhood(s) during primary and secondary/high school?
- 6. From what type of high/secondary school did you graduate? Name? Location?
- 7. What, if any, advice did your teachers or others provide in preparation for GCSE? For A levels?
- 8. While at secondary school/sixth form/college did you participate in any programmes aimed at promoting access to university? Can you describe it? Was it specific to STEM?
- 9. What was the demographic make-up of your undergraduate programme and what is it now? Has this had any impact on your perception of the course before applying or during it?
- 10. What influenced your decision to study a STEM subject at UG level?
- 11. What were the influences for taking up a postgraduate STEM programme?
- 12. Who were the major influences in secondary school on students' courses of study? Were the influences primarily from individuals (family, teachers, other professionals)? What was their position? Demographic background?
- 13. Can you describe your application process, including an interview for your postgraduate course? What topics were formally covered in your selection interview for graduate STEM program? What questions did you ask and/or what comments did you share? In hindsight what do you think about your interview experience?
- 14. What challenges did you encounter while pursuing your undergraduate degree? And in your current graduate degree? How are/were they handled?
- 15. What support systems (official university ones, e.g. student services, personal tutors, counsellors, etc. and un-official, like, family and friends, peers,

- university staff with no primary pastoral care duties) have you used/accessed while doing your UG and PG course? What type of help would be best for you? Is there something you would change about your PG course to make sure you complete it successfully and within the given time frame?
- 16. Can you describe how your course is designed? Are there any aspects that you like, dislike, would change, drop, enhance? Is there anything about the course design that you think should be exposed more to potential students?
- 17. What were your expectations of the course and institution based on your research prior to coming here (e.g. prospectus, website, campus visit) versus the reality while on course?
- 18. What career(s) do you plan to pursue after earning your graduate degree? Why? Where? Do you foresee any challenges in pursuing this career?
- 19. To what extent, if any, will your study and completion of a PhD in STEM affect your current and/or future domestic status, e.g., spouse, partner, children?

 What educational and professional levels do you think s/he will have or has?
- 20. Any other comments you have about the situation and/or experiences of ethnic minorities in PG STEM courses? What could be done to attract more BME students to PG STEM courses?

Staff interview questions - phase 1

- 1. What factors influenced your decision to enter your particular field and profession?
- 2. What criteria help you determine whether a student will be admitted to your graduate program?
- 3. What are your university and/or programme policies regarding criteria for entrance and completion?
- 4. Beyond the advertised criteria, what do you look for in applicants? What makes a successful applicant?
- 5. Which universities do you recruit from?
- 6. What would you say are the different demographic groups doing PG STEM courses? How do you/your colleagues perceive these groups of students? Are some groups perceived as more problematic, or conversely more successful than others?
- 7. What general factors do you envision as contributing to success (or lack thereof) of BME students ('home' Black Caribbean, Black African, Asian Pakistani, and Asian Bangladeshi) in your programme? Your Institution?
- 8. What can be done to widening participation of BME students in PG STEM?

Follow up student interviews - phase 2

- 1. Starting interview with self-disclosure of researcher identities and motivations
- 2. Discussion of the latest educational experiences what has changed since we last spoke, have you had any reflections on your time at university since, in particular on the level of race/ethnic relations? Would you change anything about your course?
- Discussion of the impact of identities on educational progression, and the impact of diversity (or lack of it) within childhood neighbourhoods on success in life and education.
- 4. What constitutes success and do you feel successful?
- 5. Exploration of further reflections on individual issues raised in the first interview (individual to each interviewee)
- 6. Has the recent events around Brexit campaign, the referendum results and spike in hate crimes had any effect on you?
- 7. Has doing this interview two years back changed anything? Made you more aware of race issues around you?

Student survey questions - phase 2

First, we would like to get the basic information about you – so that we can tailor the survey to your circumstances.

1. Please indicate your age (tick one)

18-20

21-24

25-30

31-34

35-40

40+

2. Were you born in the UK?

Yes

Nο

3. If you were not born in the UK, how old were you when you moved here:

0-5

6-10

11-15

16-20

21+ (if answer 21+ - NOT ELIGIBLE TO CONTINUE WITH THE SURVEY)

4. Please indicate your gender identity (Cis-means identifying with the gender you were assigned at birth, in other words – not transgender) (dropdown list)

Cis-Female (= traditionally referred to as female)

Cis-Male (= traditionally referred to as male)

Trans-female (MTF)

Trans-male (FTM)

Other, non binary

5. Please indicate your ethnic identity (HESA classification):

White

White - Scottish

Irish Traveller

Gypsy or Traveller

Other White background

Black or Black British - Caribbean

Black or Black British - African

Other Black background

Asian or Asian British - Indian

Asian or Asian British - Pakistani

Asian or Asian British - Bangladeshi

Chinese

Other Asian background

Mixed - White and Black Caribbean

Mixed - White and Black African

Mixed - White and Asian

Other mixed background

Arab

Other ethnic background

- 6. Which University are you studying at currently? (dropdown list)
 - a) [University of Benefit]
 - b) [University of Knowledge]
 - c) [University of Labour]
 - d) [University of Merit]
 - e) [University of Education]
 - f) [University of Warrant]
- 7. Are you studying full or part time?

Full time

Part time

- 8. Which broad area does your course fall under? (HESA JACS codes, this will be in alphabetic order, drop down menu) (Dropdown list)
 - a) Medicine & Dentistry
 - b) Subjects Allied to Medicine
 - c) Biological Sciences
 - d) Veterinary Sciences
 - e) Agriculture & Related Subjects
 - f) Physical Science
 - g) Mathematical Science
 - h) Computer Science
 - i) Engineering & Technology
 - j) Architecture, Building & Planning
 - k) Social, Economic & Political Studies
 - I) Law
 - m) Business & Administrative Studies
 - n) Librarianship & Information Science
 - o) Languages
 - p) Humanities
 - q) Creative Arts & Design
 - r) Education
 - s) Combined
- 9. What type of course are you doing?

Taught masters (MA, MSc, etc.) Research Masters (MRes, MPhil) PhD Professional doctorate (EdD, DChem, etc.) Other (e.g. PGCS, PGDip, PGCert, etc.)

QUESTIONS TO ALL

Now, I would like to find out about your family background, neighbourhood you grew up and early education experiences

To begin with, let's concentrate on your immediate family members - parents/guardians and siblings. Only include parents/guardians who were present in your life when growing up.

10. Thinking about the education of your immediate family members, please choose the option which describes it best:

One of my parents/guardians has a university degree Both my parents/guardians have a university degree My sibling(s) were the first in my family to go to university I was the first in my immediate family to go to university

11. Thinking about the professional careers of your immediate family, please choose all that apply:

At least one of my parents/guardians has or had professional job(s) (i.e. job which usually requires a university degree)
At least one of my siblings has or had a professional job
All/most of my siblings have a professional job
My siblings are too young to work
I don't have siblings

- 12. Thinking about your home/family environment during your SECONDARY school years (including middle school and sixth form/college), please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - I had many books at home
 - I used library often
 - I had access to computer with internet
 - I used computer for educational purposes
 - My parents/guardians owned our house/flat

Now I'd like to find out about your experiences of schooling.

- 13. Thinking about your SECONDARY school please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - There were many students who came from ethnically diverse backgrounds
 - Students were representative of the neighbourhood where I lived

- Students were well behaved
- Students generally were achieving good educational results
- I was a highly achieving student (usually getting As and/or Bs)
- A significant majority of teachers could be racialised as 'White'
- I was taught by more female teachers
- School provided extra-curricular activities that I took part in
- School provided information, advice and guidance about further study options that I took advantage of
- 14. In terms of admissions policy your SECONDARY school was (choose one):

It was a state funded selective school
It was a comprehensive school
It was a private/independent school

Now I would like to find out more about the neighbourhood you grew up in. If you lived in more than one neighbourhood during your SECONDARY (including 16-18 education) school – please provide responses thinking about the neighbourhood that you believe had the most influence on your personal development. Think about the most immediate neighbourhood rather than the entire town/city, unless you lived in a small community (e.g. village) and can think of it as a whole.

- 15. Thinking about your local area/neighbourhood where you lived in during your SECONDARY school years, please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - There were many people who came from diverse ethnic backgrounds
 - There were many people who originated from diverse countries
 - Most people living in the area arrived in the country within previous 10 years.
 - There were many people who had diverse religious believes
 - There was one dominant group (e.g. white Christians, Asian Muslims, etc.)
 - It was a predominantly 'White' neighbourhood
 - There was a spirit of community
 - I knew my neighbours well
 - Most adults had professional jobs (jobs which usually require a degree)
 - Most adults were in employment
 - There was a mix of people from different socio-economic backgrounds
 - There was a problem with drugs in my area
 - There were many other social problems (alcoholism, domestic violence, etc.)
 - Over the years the neighbourhood became more diverse
 - Over the years the neighbourhood became LESS diverse

Now let's turn to thinking about the development of interest in the broad area of your current studies, e.g. broadly understood sciences, humanities, arts, social science, psychology, etc.

16. Please choose which best describes when your interest developed. I have been interested in this area since I can remember

My interest developed during primary school
My interest developed during secondary school
My interest developed during A-levels/equivalent
My interest developed during undergraduate study/after (e.g. I had a change of career)

- 17. Thinking about influences in the development of your interest in your area, please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - My family had a strong influence on the development of my interests
 - At least one of my parents/guardians had education or occupation which is within the same broad interest area as mine
 - There is one moment in particular that stands out as the deciding for developing my interests in the area.
 - I gradually grew fond of the area I was studying
 - My school put particular emphasis on the area that I ended up being interested in
 - There was one (or a few) influential teacher(s) who helped me develop my interest
 - I had a role model who was an expert in the area of my interest (can be a teacher, family member, celebrity, other)
 - The said role model was of the same/similar ethnicity as I am
 - The said role model was of the same gender as I am

Connected to the development of your interests is your progression into the subject area, which the next section will concentrate on.

- 18. Thinking about decision to study for your undergraduate degree, please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - I received good information, advice and guidance on the range of CAREERS associated within my interest area
 - I received good information, advice and guidance to help me choose my COURSE
 - I attended at least one university open day
 - My family influenced and encouraged me to choose my undergraduate degree course I ended up studying

(QUESTION ONLY FOR STEM STUDENTS – if ticked option a-j in question 8)

19. If you're studying within the area of STEM (Science Technology Engineering and Mathematics) have you ever considered studying medicine

Yes – I wanted to study medicine and I am/was studying it

Yes - I wanted to study medicine but didn't end up studying it

No – but my parents wanted me to study it

No – I didn't want to study it and my parents didn't encourage me to do it either

N/A – I'm not studying a STEM subject

(QUESTION TO ALL STUDENTS)

- 20. Thinking about your time studying for an UNDERGRADUATE degree please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - I was in the gender majority on my course
 - There was a lot of ethnic diversity on my course
 - I was in the ethnic majority on my course
 - There was a lot of ethnic diversity at my university
 - I was in the ethnic majority at my university
 - A significant majority of lecturers were female
 - A significant majority of lecturers were White
 - I was personally encouraged by at least one lecturer to progress to postgraduate study
 - My closest university friends were mostly from the same or similar ethnic background as me
 - I received good information, advice and guidance about possible career options upon graduation
 - Overall I enjoyed the academic side of studying
 - Overall I enjoyed the social side of studying
 - Overall I felt I belonged to the university community

(QUESTION ONLY FOR PGR STUDENTS)

21. Did you do postgraduate degree before starting your doctoral studies?

No

Taught masters (MA, MSc, etc.)
Research Masters (MRes, MPhil)
Other (e.g. PGCS, PGDip, PGCert, etc.)

(QUESTION VARIATION DEPENDING ON ANSWER TO QUESTION 9)

Now, let's turn to your postgraduate education. First – let's talk about your master's degree (or sub-master's qualifications like PGCert/PGDip/PGCE/etc. if you are not doing/do not have a master's degree)

22. Please indicate what was your motivation for doing your master's:

I didn't know what to do after undergraduate study
I wanted my CV to stand out /have better career option
I needed it for my chosen career

Working after graduation helped me realise what I needed further development
I was really interested in the topic
My parents/guardians expected me to do it
Other, please specify

(QUESTION VARIATION DEPENDING ON ANSWER TO QUESTION 9)

- 23. Thinking about your time studying for your master's degree (or sub-masters qualifications like PGCert/PGDip/PGCE/etc. if you are not doing/do not have a master's degree) please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - I am/was in the gender majority on my course
 - There is/was a lot of ethnic diversity among students on my course
 - I am/was in the ethnic majority on my course
 - There is/was a lot of ethnic diversity among students at my university
 - I am/was in the ethnic majority at my university
 - A significant majority of lecturers are/were female
 - A significant majority of lecturers are/were White
 - My closest university friends are/were from the same or similar ethnic background as me
 - I received good information, advice and guidance about possible career options upon graduation
 - Overall I enjoy(ed) the academic side of studying
 - Overall I enjoy(ed) the social side of studying
 - Overall I feel/felt I belong(ed) to the university community

(QUESTION VARIATION DEPENDING ON ANSWER TO QUESTION 9)

24. How are/were you funding your masters/sub-masters studies (including fees and maintenance). Please rate from 1 to 6 where 1 is the main source of funding and to 6 (the east used source of funding, or put 0 were not applicable. Scholarship (from university or elsewhere)

Salary
Own savings
Commercial loan
Support from parents/guardians
Other, please specify

(QUESTIONS FOR PGR STUDENTS ONLY)

25. Please tell us about your motivation to take up the research at doctoral level (you can choose more than one option):

I was really passionate about the topic and I wanted to research it more I was encouraged by a lecturer to do it There was funding in the area that interested me so I took the opportunity Other, please specify

- 26. Thinking about your time studying for a doctorate please rate to what extent you agree with the following statements (Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree)
 - There are many British doctoral students in my school/faculty who are not White
 - I am in the ethnic majority among doctoral students in my school/faculty
 - I'm in a significant gender majority among doctoral students in my school/faculty
 - A significant majority of lecturers are White
 - I had good information, advice and guidance about possible career options upon graduation
 - I often spend social time ("hang out") with other doctoral students from my school/faculty
 - My closest university friends are from the same or similar ethnic background as me
 - Overall I am enjoying the academic challenge
 - Overall I think the course needs more structure (classes, deadlines, etc.)
 - Overall I am enjoying the social side of studying
 - Overall I feel I belong to the university community
- 27. How are you funding your doctoral studies (including fees and maintenance)? Please rate from 1 to 6 where 1 is the main source of funding and to 6 (the east used source of funding, or put 0 were not applicable.

Scholarship (from university or elsewhere)
Salary
Own savings
Commercial loan
Support from parents/guardians
Other, please specify

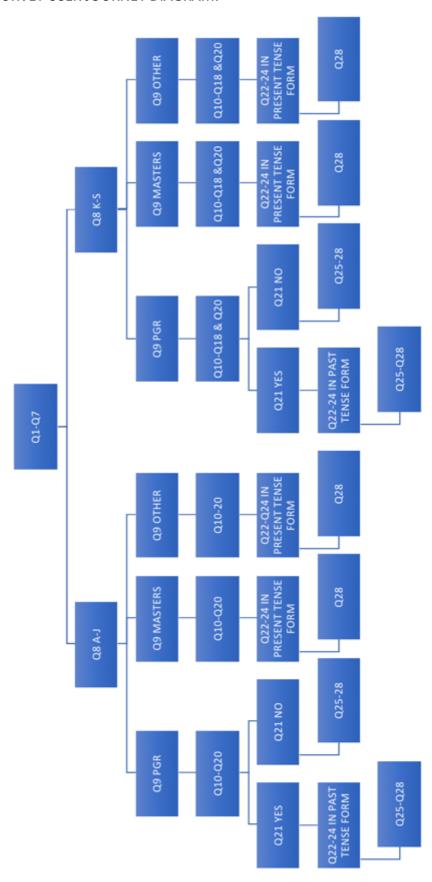
(QUESTION TO ALL)

28. Thinking about your entire educational journey do you feel (choose one):

My experiences of education have been overall positive I feel I have been disadvantaged in my educational experiences, because (please specify why and at which level, do you think it was an individual event or a systemic issue, etc.)

Thank you!

SURVEY USER JOURNEY DIAGRAM:



Ethics approvals – from UEL, from previous institution, and a confirmation of the change of project title

EXTERNAL AND STRATEGIC DEVELOPMENT SERVICES

uel.ac.uk/ga

Quality Assurance and Enhancement



31 March 2016

Dear Dominik

| Project Title: | An Exploration of the Factors Contributing to the Success of Black and Minority Ethnic Students in Postgraduate STEM courses in England |
|----------------------------|---|
| Principal Investigator: | Dr Charlotte Chadderton |
| Researcher: | Dominik Jackson-Cole |
| Reference Number: | UREC 1516 48 |

I am writing to confirm the outcome of your application to the University Research Ethics Committee (UREC), which was considered by UREC on Wednesday 20th January 2016.

The decision made by members of the Committee is Approved. The Committee's response is based on the protocol described in the application form and supporting documentation. Your study has received ethical approval from the date of this letter.

Should you wish to make any changes in connection with your research project, this must be reported immediately to UREC. A Notification of Amendment form should be submitted for approval, accompanied by any additional or amended documents: http://www.uel.ac.uk/wwwmedia/schools/graduate/documents/Notification-of-Amendment-to-Approved-Ethics-App-150115.doc

Any adverse events that occur in connection with this research project must be reported immediately to UREC.

Approved Research Site

Email: r.carter@uel.ac.uk

I am pleased to confirm that the approval of the proposed research applies to the following research site.

| Research Site | Principal Investigator / Local Collaborator | | |
|-------------------------------------|---|--|--|
| UEL, Skype and online questionnaire | Dr Charlotte Chadderton | | |









EXTERNAL AND STRATEGIC DEVELOPMENT SERVICES

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Quality Assurance and Enhancement



Approved Documents

The final list of documents reviewed and approved by the Committee is as follows:

| Document | Version | Date |
|---|---------|-----------------|
| UREC application form | 2.0 | 23 March 2016 |
| Participant information sheet - interviews | 2.0 | 23 March 2016 |
| Participant information/consent screen - survey | 2.0 | 23 March 2016 |
| Consent form | 2.0 | 23 March 2016 |
| Institute of Education ethics approval | 1.0 | 23 March 2016 |
| Survey questionnaire | 2.0 | 23 March 2016 |
| Recruitment advertisement | 2.0 | 23 March 2016 |
| Grant protocol questions | 1.0 | 04 January 2016 |
| Interview topic guide | 1.0 | 04 January 2016 |
| Gatekeeper permission from: | 1.0 | 23 March 2016 |

Approval is given on the understanding that the <u>UEL Code of Practice in Research</u> is adhered to.

The University will periodically audit a random sample of applications for ethical approval, to ensure that the research study is conducted in compliance with the consent given by the ethics Committee and to the highest standards of rigour and integrity.

Please note, it is your responsibility to retain this letter for your records.

With the Committee's best wishes for the success of this project.

Yours sincerely,

Rosalind Eccles University Research Ethics Committee (UREC) UREC Servicing Officer

Docklands Campus, University Way, London E16 2RD
Tel: +44 (0)20 8223 3322 Fax: +44 (0)20 8223 3394 MINICOM 020 8223 2853
Email: r.carter@uel.ac.uk







Ms Hazel Croft
Faculty of Children & Learning
Dean of Faculty: Professor Richard Andrews



Mr Dominik Jackson-Cole c/o Dept. of Curriculum, Pedagogy & Assessment

20 Bedford Way London WC1H OAL Te Fa. Email info@ioe.ac.uk

1 May 2014

Dear Mr Jackson-Cole

Ethics approval

Project title: A comparative study of STEM graduate education between the US and England: emerging and continuing patterns for select minority groups

I am pleased to formally confirm that ethics approval has been granted by the Institute of Education for the above research project. This approval is effective from 24 March 2014.

I wish you every success with this project.

Yours sincerely

+++++++

Hazel Croft

Research Student Administrator

On behalf of the Faculty of Children & Learning Research Ethics Committee

cc: Professor Michael Reiss IOE Research Ethics office

Change project title - Mr Dominik Jackson-Cole

ResearchUEL

Thu 6/27/2019 4:10 PM

Inbox

To:Dominik JACKSON-COLE

ResearchUEL

Change project title - Mr Dominik Jackson-Cole

The Cass Research Degrees Sub-Committee on behalf of the Impact and Innovation Committee has considered your request. The decision is:

Approved

Your new thesis title is confirmed as follows:

Old thesis title: An exploration of the factors contributing to the success of Black and Minority Ethnic students in Postgraduate Stem Courses in England

New thesis title: Navigating Toward Success: Black and Minority Ethnic Students In Postgraduate Science, Technology, Engineering And Mathematics Courses In England

Your registration period remains unchanged.

Change project title - Mr Dominik Jackson-Cole

Informed consent form – phase 2

Participant Information sheet and informed consent form: In-depth interviews

Research purpose: The purpose of this PhD research is to find out what are the factors behind the success of certain groups of students in postgraduate education. It has a potential to improve the understanding of postgraduate students and policies impacting their admissions and successful completion.

Project title: An exploration of the success factors among different groups of students in postgraduate education in England

Principal investigator and first supervisor: Dr Charlotte Chadderton, c.chadderton@uel.ac.uk

Main researcher: Dominik Jackson-Cole, d.jackson-cole@uel.ac.uk

Second supervisor: Prof John Storan, <u>i.storan@uel.ac.uk</u>
Third supervisor: Dr Karina Berzins, <u>k.e.berzins@uel.ac.uk</u>

Research Sponsor and approval: PhD Excellence Scholarship, University of East London, Cass School of Education and Continuum. The research has received approval from the University Research Ethics Committee. The research has also got the approval of your university. This research forms part of my PhD thesis, which began as an NSF funded project at the UCL Institute of Education. I am now continuing the research at UEL and have obtained the necessary ethical approvals and Intellectual Property rights to use these data.

Your involvement: You are asked to participate in an in-depth interview exploring your experiences of postgraduate education, and impact of various life factors on your success in higher education. The interviews will be audio-recorded and will take between 45 and 60 minutes. There are no risks involved with the interviews. You are asked to participate in this follow up research as you have previously been interviewed for the NSF funded project exploring the experiences of Black and Minority students in Postgraduate STEM education. This research now continues as a separate project in the form of a PhD research.

Confidentiality/anonymity: Your participation in this research is confidential. For the purposes of publications or presentations from the research, no personally identifiable information will be shared. Your name will be changed to your chosen name and other names (schools, neighbourhoods, etc.) will not be disclosed. Your university name will be changed. However, in the event of disclosure which puts legal obligations on researchers (e.g. disclosure of imminent harm to self and/or others) or other legal obligations - your confidentiality may be limited.

Use of data: The data will be stored on a password protected computer and password protected cloud drive. It will be held for up to 10 years after the completion of the

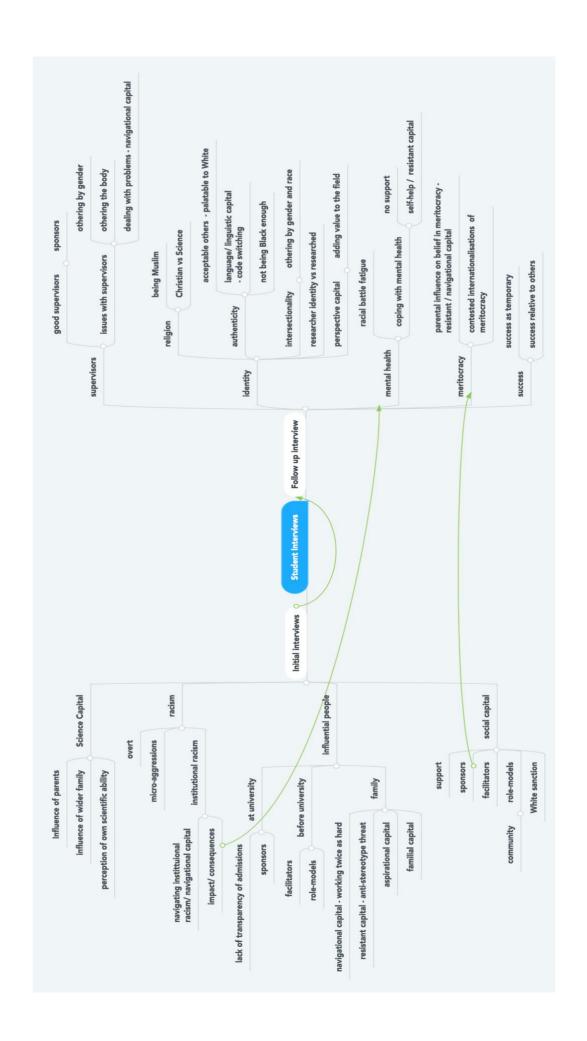
project after which they will be destroyed, in accordance with the University's Data Protection Policy. Anonymised quotes may be used in publications associated with this research, e.g. PhD thesis, peer-reviewed journal articles, conference presentations, etc.

Participation: Your involvement in the project is voluntary and you are free to withdraw consent and your data without further explanations up to the stage of data analysis (before 31st December 2016). Your participation in and/or withdrawal from the research will have no impact on assessment /treatment /service-use or support you receive at your university. Your data may be used for other research projects. If you have any concerns about the conduct of the investigator, researcher(s) or any other aspect of this research project, they should contact researchethics@uel.ac.uk.

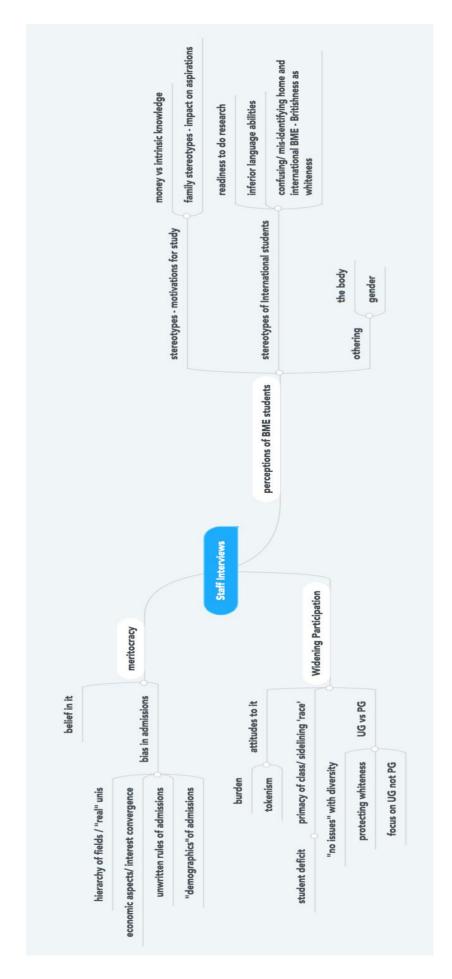
I confirm that:

| document) I have rece I agree to | ears old d and understood this information sheet and informed consent form (one eived a copy of this information sheet/consent form to take home take part in the research, my data to be used and published in an anonymised form. |
|-----------------------------------|---|
| <u>Participant</u> | |
| Date: | |
| Signature: | |
| NAME: | |
| Researcher | |
| Date: | |
| Signature: | |
| NAME: | |

Student interview coding schema

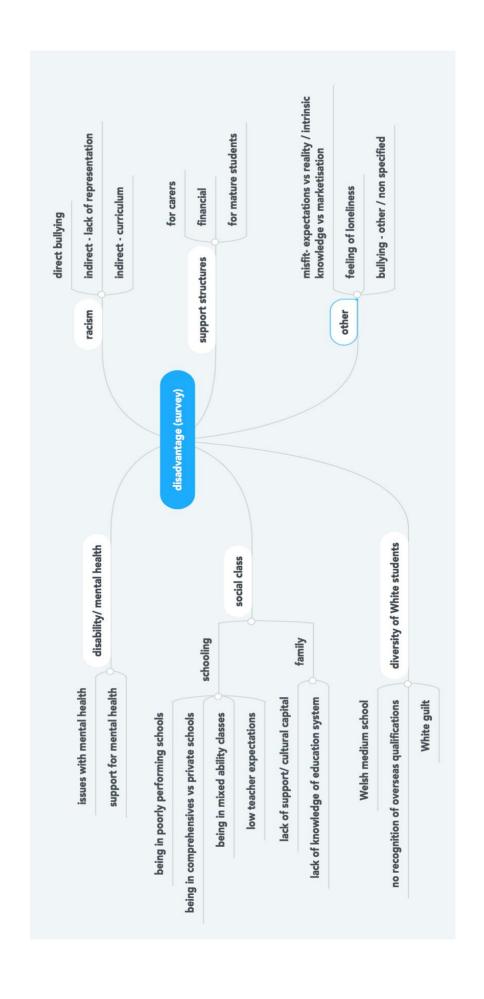


Staff interview coding scheme



Survey coding schema – final question:

"I feel I have been disadvantaged in my educational experiences, because (please specify why and at which level, do you think it was an individual event or a systemic issue, etc.)"



Interview codes mapped onto themes

| Themes | Second and third level codes |
|--|---|
| WP – lack of intersectionality | Class vs 'race' |
| | Class AND 'race' |
| Undergraduate focus | ignoring data – protection of whiteness |
| | No issues at PG |
| Student deficit | |
| Protecting whiteness through ineffective | WP as burden |
| policy and practice | |
| | Tokenism |
| Meritocracy as whiteness | Hierarchy of institutional fields |
| | Lack of transparency of admissions |
| | Unwritten rules of admissions |
| | Contested internalisation of whiteness |
| Othering as whiteness | Othering BME bodies |
| | Othering by gender |
| | Acceptable others |
| | Othering students' motivations - money |
| Economic aspects | Interest convergence – international |
| | students |
| | Inferior stereotypes of international |
| | students |
| | Britishness as whiteness |
| Whiteness of organisational structures | No Support for invisible conditions |
| | no support for Carers |
| | white privilege |
| Impact of whiteness | Damage to Mental health |
| | Stalling progress |
| Science capital | Influence of family |
| | Perception of scientific abilities |
| Familial capital | |
| Aspirational capital | Influence of family |

| Resistant capital | Influence of family – anti-stereotype | |
|----------------------|---|--|
| | threat | |
| Social capital | Role models – aspirations | |
| | Facilitators | |
| | Sponsors | |
| | White sanction | |
| Navigational capital | Dealing with problematic supervisors | |
| | Authenticity | |
| | Parental influence – working twice as | |
| | hard | |
| Linguistic capital | Authenticity | |
| | Intersectionality | |
| Perspective capital | Adding value to the field – more than white researcher | |
| | Adding value to the field – perspective others don't have | |

Survey participants – additional figures

Graph 1. Students by ethnicity, % represents the percentage of all students in the survey.

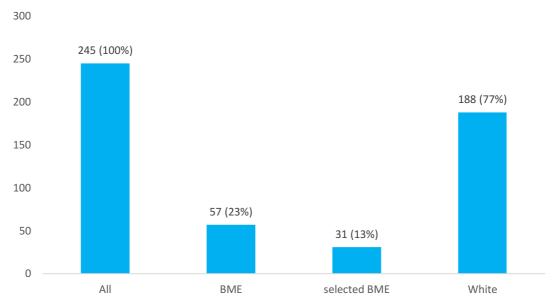


Figure 2. Students by course level and ethnicity group, % represents the percentage of students from a particular ethnic group in a given course level.

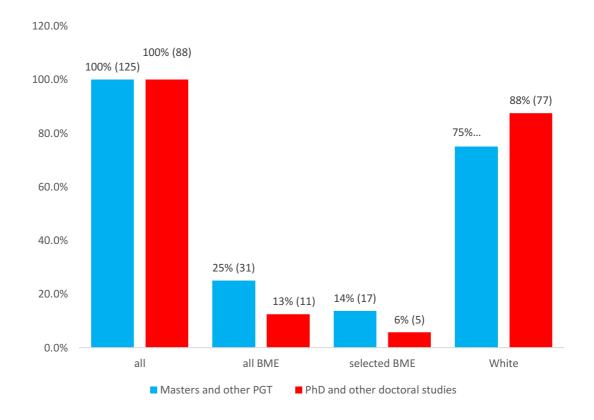


Figure 3. Students by type of institution, course level and ethnicity group, % indicates the percentage of students in a particular type of university for a given ethnicity group at a particular course level.

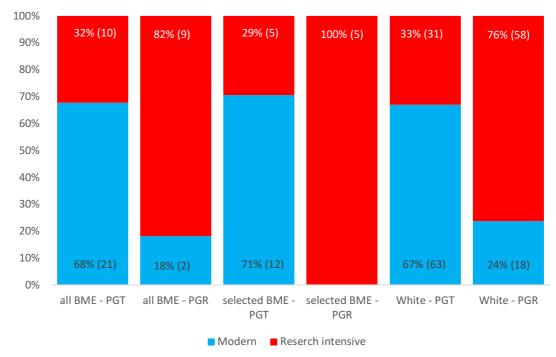


Figure 4. Students, by age and ethnicity group, % indicates the percentage of students in a particular age category within the ethnicity group.



Figure 5. Students with parents with a higher education degree, by ethnicity group, % indicates the percentage of students from a particular ethnicity group.

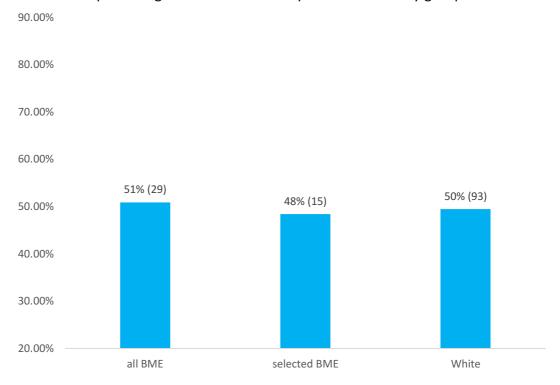


Figure 6. Students with parents in a professional job, by ethnicity group, % indicates the percentage of students from a particular ethnicity group who met the criterion

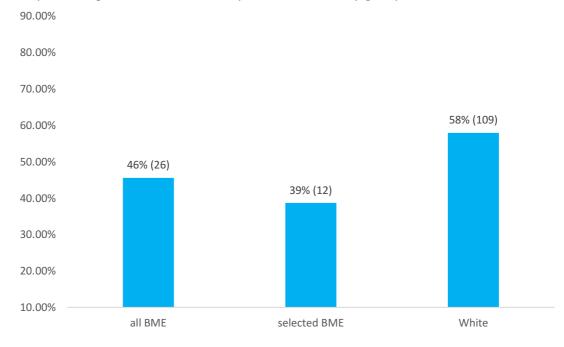


Table 1. Students by discipline and ethnicity group, % represents proportion within ethnicity group

| Academic discipline | All BME (50) | Selected BME (25) | White (178) |
|---------------------|--------------|-------------------|-------------|
| STEM | 43% | 44% | 44% |
| Non-STEM | 57% | 56% | 56% |

Table 2. Students who indicated that (1) their parents owned the house/flat they grew up in and (2) that they had many books at home when growing up, by ethnicity group.

| Question/statement | All BME (57) | Selected BME (31) | White (188) |
|---|-----------------|----------------------|----------------|
| Parents owned the house/flat I grew up in | 68% (39) | 61% (19) | 85% (160) |
| I had many books at home | 75% (43) | 77% (24) | 77% (144) |