

Femininity, academic discipline and achievement: Women undergraduates' accounts whilst studying either a STEM or arts/humanities discipline at a high-performing British university

Submitted by Lauren Jessica Stentiford, to the University of Exeter as a thesis for the degree of Doctor of Philosophy in Education in September 2016.

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Abstract

In the academic year 1996/1997, the number of women undergraduates enrolled on degree courses at UK universities for the first time in history surpassed the number of men (Dyhouse, 2006). Year-on-year, statistics continue to indicate that women outnumber men in higher education (HE). Feminist scholars have noted that, as a consequence, women's participation in HE has in recent years been constructed as an unequivocal 'success story', with women widely regarded as both outnumbering and outperforming men (Dyhouse, 2006; Leathwood and Read, 2009). This thesis seeks to trouble the notion that women really are the educational 'winners' by virtue of their gains at the point of access by highlighting some enduring gender inequalities within HE – that is, women's uneven experiences of the cultures and structures of HE by gender, class, ethnicity and *discipline*.

Using a qualitative case study design, this thesis seeks to explore the everyday 'lived' experience of a small number of women undergraduates studying either a science, technology, engineering or mathematical (STEM) discipline or arts/humanities discipline at one high-performing British university. Using a combination of focus group interviews and 14 longitudinal case studies of individual women (comprising participant-kept diaries, in-depth interviews and email interviews), this study seeks to provide a detailed understanding of women's lives both inside and outside of their course and their negotiations of academic achievement, disentangling some of the complex processes involved in identifying with, and specializing in a discipline over time. In this study, a 'patchwork' theoretical approach has been adopted in order to conceptualise women's identities, incorporating insights from feminist post-structural theory, new material feminisms and Becky Francis' (2012) concept of gender monoglossia and heteroglossia as re-worked from Bakhtin (1981, 1987).

This study indicates that women's gender and academic identities are intricately interwoven and often complex, contradictory and precarious – with women differently taking up and discarding dominant discourses of the 'ideal' and 'successful' university student in line with their distinct classed, ethnic and 'aged' backgrounds. This study also highlights the role that academic disciplines play in shaping women's lived university experience both inside and outside of formalized learning contexts. In particular, the data suggests that the discourses of academic success open to the women were uneven, and powerfully shaped by the science/arts divide. Yet this study also highlights how the high-performing university was constructed by many women as a positive and freeing space, offering up a variety of discourses of student success.

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Contents

Title Page	1
Abstract	2
Acknowledgements	3
Contents	4
List of Figures and Tables	6
Chapter 1 – Introduction	7
Overview	
Women students and ‘choice’ of discipline	
The research problem	
Women’s academic achievement in the high-performing university	
The research	
Research questions	
Some key terms, definitions and omissions	
The structure of this thesis	
Chapter 2 – Literature Review	17
Introduction	
a) Women’s experiences in formalised learning contexts in HE	
a) i. STEM	
a) ii. Arts/humanities	
b) Women’s wider university experience	
c) High academic achievement	
Conclusion	
Chapter 3 – Theorising Gender and Identity	48
Introduction	
Biological explanations of gender	
Sex-role socialisation theory	
Social constructionist theory	
Postmodernism and post-structuralism	
Accounting for the body: New material feminisms	
Researching gender in education: Multiple masculinities and femininities	
Gender monoglossia and heteroglossia	
Conclusion	
Chapter 4 – Methodology	74
Introduction	
A case study research design	
Introducing the case – Marlton University	
Research methods	
Ethics	
Data analysis	

Writing and representation
Conclusion

Chapter 5 – Life in the University Classroom: Women Students’ Accounts of their Experiences in Formalised Learning Spaces.....111

Introduction
a) The STEM students – engineering and physics
b) The arts/humanities students – anthropology, English and modern languages
STEM and arts/humanities: Two opposing ‘gendered’ classroom cultures? Discussion
Conclusion

Chapter 6 – Life Outside the University Classroom: Women’s Repertoires of ‘Student Success’.....187

Introduction
a) Personal networks – friendship, love and family relations
b) Extra-curricular activities, part-time work and work experience
Conclusion

Chapter 7 – Femininity, Academic Achievement and the Dichotomous Science/Arts Cultures.....228

Introduction
a) Women’s perceptions of the five disciplines – who can be a ‘high achiever’?
b) Facilitating ‘high achievement’ in STEM and arts/humanities disciplines at Marilton University
Conclusion

Chapter 8 – Conclusion.....279

Theorising gender in the high-performing university – the diversity and complexity of women’s lived experience
Women in science/arts fields – the significance of academic disciplines
Place and space – moving beyond the confines of the university classroom
Academic achievement in the high-performing university
Women students’ resistance and agency
Using gender monoglossia and heteroglossia to theorise women students’ gender identities
Representing women’s lives – recognising the importance of time
Implications for policy and practice
Final conclusions, key contributions and future avenues for research

Appendices.....297

References.....341

List of Figures and Tables

Figures

Chapter 4

Figure 4.1 – Embedded single case study design applied to my case, adapted from Yin (2009: 46).....77

Tables

Chapter 4

Table 4.1 – Case study participants.....91

Table 4.2 – Data collected for the 14 case study participants.....100

Chapter 7

Table 7.1 – Background data on the ‘high-achieving’ women.....247

Table 7.2 – Background data on the women aspiring for a 2:1.....259

Appendix 1

Table A1.1 – Percentage of HE students by subject area, mode of study, sex and domicile 2014/15 (Higher Education Statistics Agency, 2016).....298

Appendix 2

Table A2.1 – Percentage of HE students by subject area, mode of study, gender and domicile 2011/12 (Higher Education Statistics Agency, 2013)....299

Appendix 8

Table A8.1 – Focus group participants and their disciplines.....316

Chapter 1

Introduction

‘The mass participation of women has literally changed the face of Higher Education, yet no one has really considered the full implications of this shift. It is either taken as a threat of female takeover, an unproblematic sign of equality of opportunity, or as insufficient to challenge the university as a male bastion. Yet the meaning of and potential impact of this female incursion demands to be interrogated.’

(Quinn, 2003: 2-3)

Overview

Whereas in the early 20th century higher education (HE) had been the preserve of the male wealthy elite, towards the end of the century, participation rates were dramatically increasing across a wider social spectrum (Dyhouse, 1995, 2006; Delamont, 2006; Leathwood and Read, 2009). Following the introduction of means-tested grants for tuition fees in 1960 (Anderson, 1960) and the publication of the Robbins Report in 1963 which advocated the principle that all those with sufficient ability should be given the opportunity to attend university, a policy context was created that enabled HE to rapidly expand (Reay et al., 2005). Indeed, from 1960 onwards, a greater proportion of individuals – and particularly those from the middle-classes – were attending university than ever before (Ross, 2003). Dyhouse (2006) conveys the sheer magnitude of such change when she notes that whilst approximately 50,000 undergraduate students were studying in 30 British universities in 1939, by the turn of the 21st century, this figure had risen to 1.5 million students studying in 166 universities – transforming both the scale and structure of HE, as well as the nature of student experience.

Whilst an increasing emphasis placed upon ‘widening participation’ during the 1960s-70s aimed to improve equity at the point of access for working-class and ethnic minority students, the expansion of HE also served to transform women’s participation rates (Quinn, 2003; Dyhouse, 2006). Reay et al. (2005) observe

that whilst in 1975-6 the ratio of female to male students was 0.46:1, by 1999-2000 this had reversed to 1.20:1. As such, the traditional and historical contours that had previously shaped HE were beginning to shift. Whilst explanations for the dramatic increase in women's participation in HE have been wide ranging, Blackburn and Jarman (1993) assert that women's changing expectations and anticipated social roles in light of second-wave feminist campaigning¹, an increased range of subjects on offer in universities, and improved labour market opportunities have all had an significant impact on women's aspirations.

Today, statistics continue to indicate that women outnumber men in HE, with figures recently released by UCAS (2015) showing that the 'gender gap' in favour of women has widened to 66,840 students, in comparison with a gap of 34,035 students in 2007. Dyhouse (2006: x) claims that, as a consequence, women's participation in HE has in recent years been constructed as an unequivocal 'success story':

'The story of women's entry into higher education, once a historical narrative of intrepid pioneers facing near-insurmountable odds, can undoubtedly be constructed as a success story, 'a battle won'.

Yet, as Quinn's quote which opens this chapter purports, there are two sides to this story. A number of feminist scholars have pointed out that ever since women's rate of participation in HE has matched and subsequently outstripped men's, questions have been raised in popular debate about the 'feminization' of HE² (Dyhouse, 2006; Leathwood and Read, 2009; Morley, 2011; David, 2011). Concerns have been expressed that the number of women studying in British universities has led to the development of a 'feminine culture' in academic institutions that has not only eroded the status of HE, but has also served to alienate men (e.g. see The Independent, 2009; HEPI, 2009, 2016). Indeed, the chief executive of the Universities and Colleges Admissions Service (UCAS)

¹ 'Second-wave' feminism emerged as a social and political movement in the West in the 1960s-1970s, and focused on bringing about gender equality as enshrined in law. Second-wave feminist campaigners sought to draw attention to public and private issues affecting women such as family relations, sexism in the workplace, domestic violence, rape, reproductive rights, etc. (Jackson and Scott, 2002).

² These debates which emerged in the late 1990s appeared to mirror those concurrently taking place at the level of compulsory education relating to the perceived 'feminization' of schools and the 'underachievement' of schoolboys (e.g. see Epstein et al., 1998; Lucey and Walkerdine, 2000; Francis and Skelton, 2005).

Mary Curnock Cook has recently voiced her anxieties about young women's educational gains at the seeming expense of 'poor white boys':

'Girls are doing better throughout primary, secondary and higher education than boys; poor white boys are the most disadvantaged group in entry to higher education and the gap is getting wider. But despite the evidence, despite press coverage, there has been a deafening policy silence on the issue...Has the women's movement now become so normalised that we cannot conceive of needing to take positive action to secure equal educational outcomes for boys?'

(The Telegraph, 2016: para. 15-17)

As well as identifying and deconstructing the misogynist narrative or 'moral panic' about the feminization of HE (Leathwood and Read, 2009: 18), feminist scholars have also sought to problematize the notion that equality at the point of access really does equate to women's unequivocal educational gain. These scholars argue that celebratory discourses of women outnumbering men at university serve to obscure persistent gender inequalities *within* HE – that is, students' uneven experiences of the culture and structures of HE by gender, class and ethnicity (e.g. Tett, 2000; Reay et al., 2005; Archer and Leathwood, 2003; Mirza, 2006; Archer, 2007; Skelton, 2007; David, 2011; Hoskins, 2012; Burke, 2013; Phipps and Young, 2013). Academics have also drawn attention to current statistics which demonstrate that women students are not necessarily able to convert their academic success into employment success, with women graduates having been found to earn less on average than their male counterparts and to obtain less prestigious positions (Elias and Purcell, 2004; Smetherham, 2006; Wilton and Purcell, 2010).

Women students and 'choice' of discipline

Whilst women have more recently been constructed as monopolising the university space and harming the prospects of young men (Burman, 2005; Leathwood and Read, 2009; Morley, 2011), there remains one key area of HE where UK governments have acknowledged enduring gender inequalities and have sought to commission research and develop policies in order to bring about change: women's under-representation in science, technology,

engineering and mathematical disciplines (STEM) (Rees, 2001; Delamont, 2006).

Current statistics indicate that choice of degree in HE remains strongly stratified by gender, with women significantly under-represented in many 'high status' STEM disciplines (see HESA, 2016, Appendix 1). This is a trend that has persisted for many decades, with feminist researchers first identifying girls' and young women's under-representation in STEM as a problem at all levels of the education system in the late 1970s-1980s (Weiner, 1994). Whilst in this early period girls were seen to be 'failing' to match the academic performance of boys (see Spender, 1982), since the late 1990s, statistics indicate that girls and young women now either match or outperform boys in STEM at GCSE, A-level and degree level (Younger and Warrington, 1996; Francis, 2000a; Francis and Skelton, 2005; Machin and McNally, 2005). Yet despite women's increased attainment in STEM, subject choice remains strongly 'gender stereotypical' in post-compulsory education, with women tending to avoid STEM disciplines and instead favouring arts, humanities and social science disciplines.

The research problem

Grounded in the science/arts dichotomy, this study aims to add to the HE literature by exploring in considerable depth the experiences of a small number of women studying for a degree in either a STEM discipline or an arts/humanities discipline at one British university. In the past, a great deal of research attention has been paid to the lower levels of schooling, with feminist academics seeking to understand how and why girls and boys identify with different subjects in the primary and secondary school (e.g. Kelly, 1987; Letts, 2001; Carlone, 2004; Francis, 2000a; Gilbert, 2001; Cervoni and Iverson, 2011; Archer et al., 2012, 2013). Considerably less attention has been paid to examining the experiences of women in the university – that is, those women who have already specialised in a discipline and (at least on the surface) appear to retain a positive learner identity in that discipline. This is an important omission, as insights might be gained regarding how women who *do* pursue STEM and arts/humanities disciplines to a high level construct their gendered and academic subjectivities in practice. This study also aims to add to the literature by asking women in HE to retrospectively reflect upon their past

schooling experiences, so that we can understand some of the complex processes involved in identifying with, and specializing in a discipline over time. This is something that has not previously been investigated.

Of the studies that do exist in relation to women students' experiences in HE, researchers have tended to focus their attention upon exploring women's marginalisation in 'hard' STEM disciplines. This is likely due to the historical under-representation of women in such high status fields. However it is also the case that, in recent years, successive UK governments have placed an increasing emphasis on the value of STEM as they have recognised that the science and engineering industries play a vital role in boosting the national economy. Governments have therefore been keen to increase take-up in STEM in order to remedy a 'skills shortage' that is believed to pose a threat to economic growth (e.g. Greenfield et al., 2002; DfE, 2011). Because it has been recognised that the science and engineering industries represent good employment prospects for future generations of students, researchers have felt it a matter of social justice that both genders are adequately represented in STEM. As a consequence, academics have largely sought to examine the sexist classroom practices and curricula in HE STEM departments which create a supposedly 'chilly climate' for women (Hall and Sandler, 1982; Lewis, 1995; Erwin and Maurutto, 1998; Janz and Pyke, 2000; Allan and Madden, 2006) – see Chapter 2 for further discussion.

Whilst it is important that we continue to explore the experiences of women in STEM, a relentless focus on these academic fields has left the experiences of women studying arts and humanities disciplines – where women are heavily concentrated – relatively under-researched and unproblematized. This study seeks to address this gap in the literature by shining a light on how women create and sustain their gendered and academic subjectivities in female-dominated fields. Thus, we might gain insights into potential differences across women arts/humanities students' and women STEM students' university experience.

Women's academic achievement in the high-performing university

Whilst a key focus of this study is on exploring the multiple lived realities of women studying STEM and arts/humanities disciplines, this study is also interested in examining the experiences and identities of women studying in a specific educational context – the high-performing university. The reason for doing so is that, in recent years, there seems to exist a widely held belief that girls and young women are the educational 'winners'; that they have reversed their fortunes and no longer experience the problems they once encountered in pre-second wave feminist times (Walkerdine et al., 2001; Harris, 2004; Walkerdine and Ringrose, 2006; Renold and Allan, 2006; Skelton et al., 2010). Indeed, girls today are often thought of as being a generation of 'effortless' achievers who can perform smartness without struggle (Raby and Pomerantz, 2015). And as noted above, it is young women in particular who are regarded as being the main beneficiaries of the expansion of HE, with media reports highlighting how women now not only make up the majority of the undergraduate student body, but also 'outperform' men and obtain better degrees on average than their male counterparts (e.g. The Telegraph, 2009; BBC, 2016).

Feminist researchers are, however, beginning to question the notion that young women really are the educational winners in late modern society. A growing body of research exists which suggests that high achievement can be problematic for girls in primary and secondary schools as 'achievement' can be constructed as incompatible with popular and culturally 'acceptable' hetero-normative feminine subjectivities – causing girls stress and anxiety as they attempt to traverse two conflicting subject positions (e.g. Lucey and Reay, 2000; Walkerdine et al., 2001; Ali, 2003; Allan, 2010a; Ringrose, 2007; Skelton et al., 2010). These scholars also argue that media-fuelled 'celebratory discourses' of girls' success are problematic as they serve to mask persistent structural inequalities in girls' achievement along the lines of class and 'race' (e.g. Gillborn and Mirza, 2000; Plummer, 2000; Lucey, 2001; Francis and Skelton, 2005; Walkerdine and Ringrose, 2006). This study seeks to add to this body of literature by exploring these issues in relation to a relatively under-researched educational context – HE.

This study also aims to focus on 'high-achieving' women because, historically, researchers working in the field of the sociology of education have tended to focus their attention upon examining the identities and experiences of under-achieving students as opposed to high-achieving students (see Walkerdine et al., 2001; Delamont, 2000; Mendick and Francis, 2012). Whilst research on under-achievement is important and provides educational researchers with insights into the experiences of marginalised groups, it has left the experiences of high-achieving students relatively under-researched and unproblematized (Francis, 2009; Skelton et al., 2010; Allan, 2010a). Francis (2009: 647) states that this is an important omission, given that analyses of high-achieving students 'may provide insights and have implications for the understanding of underachievement'. Whilst there is a small but growing body of literature which examines the identities of high-achieving girls and boys in primary and secondary schools (e.g. Renold and Allan, 2006; Allan, 2010a; Skelton et al., 2010; Francis et al., 2012; Raby and Pomerantz, 2015), very little research exists which attempts to understand how women studying in the university negotiate high-achieving subject positions. This study seeks to address this gap in the literature by providing a deeper understanding of how women construct their academic subjectivities in an educational space that is defined as being for 'high-achievers'.

The research

Utilising a qualitative case study research design, this project is concerned with exploring the everyday 'lived' experience of a small number of women undergraduate students studying either a STEM or arts/humanities discipline at one high-performing British university. A particular focus will be placed upon examining how discourses of gender, class, 'race', age, discipline and academic achievement intertwine in order to produce feminine subjectivities – with women drawing upon these discourses in multifarious ways in different spaces, times and contexts in order to frame their university experience.

Research questions

In light of the research problem outlined above, the questions I developed which guide this present study are as follows:

Main research question:

How do women negotiate their experiences of gender and achievement in a STEM or arts/humanities discipline at one high-performing British university?

Sub-questions:

- How do they negotiate their academic identities alongside their gender identities as women?
- How is gender and achievement negotiated in relation to the disciplinary area?
- What are their experiences and perceptions of high achievement in this context?

Some key terms, definitions and omissions

At this early stage, it is important to explain some of the key terms that will be used throughout this thesis. I have chosen to structure this project in accordance with the science/arts divide because it appears to maintain a powerful hegemony in popular discourse today, with the two academic fields commonly constructed as being conflicting, oppositional and 'gendered' (Francis, 2000a). In this thesis, I use the expression 'science/arts' interchangeably with the more specific (and dichotomous) terms 'STEM and arts/humanities' which I use to refer to my participants' chosen fields of study. It should be noted that, in reality, no clear boundaries exist which designate academic disciplines as either STEM or arts/humanities. As such, this dichotomy will be used as a heuristic device in order to facilitate detailed theoretical analysis. A definition of the disciplines that I have (artificially) subsumed under these two categories for the purpose of this study can be found in my Methodology chapter (Chapter 4).

I also use the terms 'subjects' and 'disciplines' throughout this thesis. Although both refer to the same entity – that is, bodies of academic knowledge that are taught in educational institutions – in this project, I use the term 'subjects' when speaking about bodies of knowledge taught in schools, and 'disciplines' when referring to bodies of knowledge taught in universities. I also use the term 'pupils' when referring to girls and boys in compulsory schooling and 'students' when referring to women and men studying in the university.

Having now outlined some of the key terms that will be used in this thesis, it is important to make clear what this study seeks to address and omit.

Unfortunately, there is insufficient space in this thesis to provide the reader with a detailed discussion of the history of women's participation in HE, or of historical developments in feminist research into the 'subject choices' made by boys and girls in compulsory education since the 1970s/80s– both of which provide a useful context to this present study (for an overview of these issues, see Delamont, 1989, 2006; Dyhouse, 1995, 2006; Weiner, 1994; Francis and Skelton, 2005, 2009). There is also insufficient space here to outline in significant depth the HE policy context which frames women's present university experiences, including an evaluation of recent governments' approaches to 'widening participation', gender equality concerns, and the prioritisation and funding of STEM and arts/humanities disciplines in HE. This is hopefully something that I can address in future publications. Rather, this study focuses attention on women's 'lived' university experience both inside and outside of formalised learning contexts, and their negotiations of high academic achievement. This thesis therefore seeks to 'speak' to these two bodies of the educational literature.

The structure of this thesis

The remaining chapters of this thesis are organised as follows. Chapter 2 reviews the key bodies of literature which inform and guide this present study. Chapter 3 elucidates the theoretical perspective that I have adopted in this thesis which provides a conceptual framework for understanding how women's gender and academic identities – or subjectivities – are constructed in practice. Chapter 4 provides an outline and justification of my chosen research methodology and methods, and discusses the practicalities and processes of

the research. Chapters 5, 6 and 7 move on to introduce the empirical data. Chapter 5 interrogates how the women students in this study narrated their accounts of their (gendered) experiences whilst studying in formalised learning contexts in the high-performing university. Chapter 6 then explores the women's experiences of 'student life' outside of the university 'classroom', paying particular attention to the nature of the women's personal networks (e.g. friendship, love and family relations), and their negotiations of extra-curricular activities and part-time employment. Chapter 7 explores how the women experienced and negotiated academic achievement in an educational space that is demarcated as being for 'high-achievers'. Finally, Chapter 8 draws together some of the key threads that run through this thesis to discuss in greater depth, considers the implications of the findings in relation to HE policy and practice, and highlights some future avenues for research.

Chapter 2

Literature Review

Introduction

This chapter reviews some of the key bodies of literature which inform and guide this present study, pointing to gaps in the literature and highlighting where this study intends to make a contribution to knowledge. This study is focused upon exploring three different facets of women's lived university experience, in order to provide a holistic account of women's student lives: a) women's experiences in formalised learning contexts and spaces; b) women's experiences outside of the university classroom; and c) women's negotiations of (high) academic achievement. As such, this chapter is split into three sections and interrogates each of these bodies of literature in turn.

a) Women's experiences in formalised learning contexts in HE

Over the past few decades, a growing body of feminist literature has emerged that has sought to explore women's experiences in formalised learning spaces in HE (e.g. the lecture theatre, the seminar room, the laboratory, the workshop) in an attempt to document women's experiences of marginalisation and discrimination (Phipps and Young, 2013). As noted in Chapter 1, the focus of these studies has tended to be upon women's experiences in male-dominated STEM disciplines – although some studies do exist pertaining to women's experiences in arts/humanities disciplines. The first part of this chapter seeks to explore how researchers have previously conceptualised and approached the study of gender-power relations in STEM classrooms, before moving on to review the arts/humanities literature.

a) i. STEM

Women's experiences on STEM courses in HE

This section draws together some of the research that has been conducted by academics examining women's experiences in HE across a range of 'hard'

STEM disciplines including mathematics, physics, chemistry, ICT and engineering. Rather than take each discipline in turn and examine its associated body of literature, this section will fuse together the literature across the various STEM disciplines in order to avoid any repetition of findings.

Early research studies: The 'chilly climate' of STEM

Before moving on to explore more recent research, it is important to place contemporary research in context and understand the historical work which precedes and informs it. One of the most significant findings generated from liberal feminist studies conducted in the 1980s and 1990s was that HE STEM departments seemed to be dominated by a 'masculine culture' that served to disadvantage many women students. In 1982, Hall and Sandler famously coined the term 'chilly climate' in order to describe the 'atmosphere' of STEM university classrooms. They observed that the cumulative effect of numerous micro-practices that seem inconsequential when taken alone served to erode women's confidence, ultimately leading to their marginalisation in STEM disciplines. In particular, Hall and Sandler noted that women were often disadvantaged due to faculty members' differential treatment of students by gender, observing that lecturers often ignored, interrupted or singled out women students, called on men more often than women for answers to questions, and focused on women's appearance rather than their academic accomplishments. In fact, Hall and Sandler (1984) later expanded the concept of the chilly climate to include the campus environment beyond the classroom, therefore incorporating women students' interactions with other students, their access to support, financial aid, lab and field work and careers advice.

In the decades since Hall and Sandler's chilly climate thesis was first proposed, empirical studies have produced conflicting results with some studies providing support (e.g. Banks, 1988; Whitt et al., 1999; Janz and Pyke, 2000; Maranto and Griffin, 2011; Greene et al., 2010; Crombie et al., 2003), and others questioning the strength of the evidence base on which claims of a 'chilly climate' rest (e.g. Constantinople et al., 1988; Cornelius et al., 1990; Drew and Work, 1998). Allan and Madden (2006) recently proposed that such contradictory results can perhaps be attributed to the different conceptual frameworks and methods used by researchers, as they note that qualitative

methods which give participants a 'voice' tend to provide clearer evidence of a chilly climate than quantitative methods allow.

The masculine bias of STEM curricula in HE

In the late 1980s and early 1990s, another body of feminist research emerged that sought to provide an alternative explanation for the absence of women in STEM at post-compulsory level. A number of scholars examined STEM curricula in universities and argued that they contained a male bias that served to exclude women. Beder (1989) found that engineering curricula often placed a heavy emphasis on technical, scientific and mathematical principles and ignored the social, political and environmental context in which the discipline exists, serving to 'put off' those students who are more concerned with social relations – which Beder argued were all too often women. Similarly, Rogers (1995) and Burton (1995) asserted that the presentation of mathematics in the university curriculum as a complete and static body of knowledge was disempowering for students (and particularly women) as it emphasised the epistemic distance between the authoritative 'expert' teacher and the 'novice' student, serving to silence students' ownership of their mathematical skill and their confidence in their ability.

In a similar vein, Bagilhole and Goode (1998) asserted that male academics were the ones who defined what was taught in universities and how knowledge was taught, serving to marginalize women – particularly in 'old' universities where questions relating to pedagogy and epistemology were rarely questioned. Bagilhole and Goode found that lecturing staff in STEM tended to have outdated views regarding the education of women students and rather than seek to update their curricula and teaching methods to take into account women's 'preferences', lecturers believed that their courses should remain the same to help equip women for the realities of the workplace. In particular, Bagilhole and Goode noted that STEM lecturers tended to adopt authoritarian teaching styles which focused largely on imparting 'facts' to students, supposedly neglecting students' pastoral/emotional 'needs' (p.456).

Concomitant to this growing body of research questioning STEM curricula in HE, numerous writers working within the fields of women's studies and the

philosophy of science began to question the epistemological objectivity of science itself, highlighting the cultural and gendered biases of science as an academic discipline (e.g. Haraway, 1991; Harding, 1986; Fox Keller, 1985; Longino, 1990; Code, 1991). Whilst liberal feminists tended to imply that women lacked the necessary skills, aptitudes, motivations and educational environments required for success in STEM disciplines³, these radical, socialist and Marxist-inspired feminists sought to shift what they saw as ‘blame’ away from women and instead critiqued the ways in which STEM disciplines were framed within educational institutions (Gilbert, 2001). Whilst such feminist critiques of science were complex and diverse, many scholars felt that science was based upon a positivist and objectivist rationality – a product of the Enlightenment which set up the binary opposites of male/female, rational/emotion, objective/subjective – and thus science-based epistemologies were inherently anti-feminist (Gilbert, 2001). Whilst such feminist critiques of science epistemology have themselves been criticised by various scholars and female scientists who note, for example, that not all women are bound together and share a common experience (Hale, 1991; Patai, 1991; Wolf, 1996), such critiques did help to highlight the notion that academic disciplines and bodies of knowledge are not neutral, but contain biases that can potentially disadvantage certain groups.

Summary

Historical research into the ‘chilly climate’ of STEM and feminist critiques of scientific knowledge highlighted the fact that women could be disadvantaged whilst studying STEM at university for a number of structural reasons, including poor quality of teaching, an uncomfortable classroom atmosphere and biased curriculum design – challenging the sovereignty of the existing educational structures that shaped students’ learning experience. This was an important breakthrough at a time when there was a relative dearth of gender-based research relating to HE (see Bagilhole and Goode, 1998; David, 2004; Delamont, 2006).

³ Liberal feminist work often rested upon the premise that girls/women tended not to pursue STEM as they ‘lacked’ things such as confidence, female role models, female teaching staff and female-friendly teaching methods (e.g. Kelly, 1987; Whyte, 1985; Smail, 1985).

However, since the late 1990s to early 2000s, liberal and radical feminist explanations of women's alienation from STEM have been increasingly questioned by those working from a social constructionist and post-structural position. Hughes (2001: 277), for example, challenges the assumption that there is a direct link between 'discriminatory practices and pedagogies in science education and the nature of the curriculum', pointing out that not all girls/women are put off from studying STEM because of its masculine image, and likewise not all male students are attracted to STEM. Indeed, it has been observed that both African-Caribbean girls and British-Chinese girls can often favour more 'masculine' STEM subjects (Mirza, 1992; Francis and Archer, 2005a). Hughes (2001) consequently argues that by focusing solely on gender, liberal and radical feminist researchers tended to underestimate the complexity of student identities which are, in reality, constructed along the intersection of one's gender, class, ethnicity, sexual orientation, religion and geographical locale. Hughes also notes that it is problematic to assume that the situation could be remedied if STEM curricula were redesigned and pedagogies 'feminized' because such thinking serves to inscribe gender binaries onto biological ones, thus creating a male/female divide. As such, Hughes argues that structural researchers run the risk of 'essentialism and oversimplification' (p.276).

In response, a new body of work has emerged that has approached the study of students' gendered experiences whilst studying STEM in a different way. Rather than assume that students' gender identities are dichotomous and fixed, gender has been understood as dynamic, fluid and multiple, and as constantly being constructed and reconstructed by individuals over time and by place and space (Davies, 1998). In this way, researchers working from a social constructionist or post-structural position have added complexity to the ways in which 'gender' and 'science' have previously been theorised, opening the concepts up and leaving room for human agency and resistance (Henwood and Miller, 2001: 238). In this next section, this body of literature will be examined in greater depth.

More recent explorations of women's experiences in STEM

Many social constructionist and post-structural scholars have sought to examine students' 'social identities' as learners in STEM, emphasising the importance of examining the micro-level ways in which students construct their gender identities and academic identities in practice, and how these identities are bound up with the exercise of power (e.g. Medick, 2005a; Cervoni and Iverson, 2011; Archer et al., 2012). Indeed, social constructionist and post-structural researchers often seek to explore and document how women position themselves within male dominated domains, how women are positioned by others, and how women negotiate their identities as either insiders or outsiders in STEM (Stepulevage and Plumeridge, 1998, Markwick, 2006). In fact, these researchers suggest that some women's interest in STEM may wane as they progress through education due to a mismatch between the available gender identities open to women whilst studying STEM, and culturally acceptable versions of femininity in wider society (Archer et al. 2010; Boe et al. 2011; Taconis and Kessels 2009; DeWitt et al., 2013).

Belonging or not belonging in STEM

Many post-structural researchers have sought to understand how contemporary constructions of the 'self' lead to a sense of 'belonging' or 'not belonging' in STEM disciplines, and how educational sites are implicated in this process (Walker, 2001).

Belonging in STEM

A number of researchers have observed that some women manage to gain a sense of belonging in STEM disciplines by constructing their gender identities within the dominant masculinised discourse that frames STEM (Markwick, 2006). These women appear to reject traditionally feminine traits and behaviours and construct a more 'masculine' identity. For example, Henwood (1998) conducted an ethnographic study of women's learning experiences whilst studying on an engineering course at a further education (FE) college, and observed that many of the women students and female staff members

sought to present themselves as though they were naturally more masculine than feminine. For example, Sue (one of the college's applied science lecturers) presented herself in interview as being a 'bit of a tomboy', stating: 'No man wants to be bothered with a woman who's going to be fussing about, getting tired and so on' (p. 41). As such, Sue believed that a 'traditional' feminine identity was incompatible with the identity of an applied scientist, and consequently distanced herself from normative femininity.

More recently, Powell et al. (2009: 420) conducted in-depth interviews with women undergraduates studying engineering and found that some went as far as to adopt an 'anti-woman' stance, actively condemning 'feminine tactics' (e.g. crying) and claiming to prefer the company of men. Many of the young women also stated that they sought to 'act like one of the boys' and 'give them as good as they get' in order to demonstrate that they did not need any special treatment (p.418). Walker (2001) similarly noted that all of the women engineering undergraduates in her qualitative study constructed themselves as being 'different' from other girls, consequently inverting the passivity of traditional femininity and presenting themselves as being strong, confident women. For example, several of the women in Walker's study described how they had become louder, more rude (e.g. burping in public), and heavier drinkers – something which they attributed to constantly being in the presence of male peers (also see Gill et al., 2008; Danielsson, 2012).

Other researchers have noted how university structures and practices are implicated in perpetuating contradictory discourses that work to constrict the range of identities open to women in STEM. Brink and Stobbe (2009) conducted an ethnographic study within the earth sciences department of a Dutch university and observed that many of the older students realised that in order to be taken seriously within their discipline, they needed to become 'one of the boys' and make themselves invisible as a woman (p.459). The authors noted that these women would dress in a stereotypically male fashion, adopt masculine behaviours and actively disassociate themselves from 'other' women who sought to conform to feminine norms – those who they perceived to be 'girly-girls' (p.460). Indeed, the women showed disdain for many first-year students for investing in their appearance (e.g. wearing make-up, having long

nails, wearing skirts) and for, in their opinion, wasting time and being more concerned with social affairs. Brink and Stobbe assert that this division between 'suitable girls' and 'unsuitable girls' was produced in the everyday practices of the university department. They argued that because the department was male-dominated high up in the decision-making hierarchy, it discursively reinforced gender stereotypes about earth science that many women (and men) students found it easier to consent to than dissent to (i.e. that the earth scientist is 'a strong, no-nonsense tough-man who is interested in nature and can 'roll up his sleeves'' (p.460)).

Problems/dilemmas

Masculine performances of femininity amongst women studying STEM have been well documented and do seem to be a construction of identity that enables some women to feel comfortable in a 'masculinised' learning environment. However, Henwood (1998) asserts that whilst such configurations of identity appear on the surface to challenge stereotypical assumptions regarding women being the weaker sex, they instead reinforce that very discourse as they infer that traditionally feminine identities are of lesser value and status than masculine ones. Furthermore, Powell et al. (2009) point out that such configurations of gender might help a minority of women to succeed, but do not serve to challenge the existing masculine culture of STEM that seems to alienate so many women.

Not belonging in STEM

Some researchers have documented how other women respond to STEM's masculinized discourse in alternative ways, often counter-identifying with, and consequently rejecting dominant positions.

Hyper-femininity

Thomas (1990) found that some women undergraduates in STEM deal with the tension of being in the distinct gender minority by positioning themselves as more feminine, trying to reconcile STEM's masculine discourse with that of hetero-normative femininity. Thomas noted how one first-year physics student in her study found it helpful to portray herself as the stereotypical

technologically inexperienced 'helpless female', thus asking her male peers for assistance with work. Thomas notes that such a coping strategy was not employed deliberately or deviously by the student in question, but simply helped her to 'fit in' whilst studying by breaking the ice and initiating social contact, consequently alleviating her sense of loneliness and isolation. Powell et al. (2011) similarly found that some of the women engineering undergraduates in their study would actively seek out help from the laboratory technicians in order to gain access to lab equipment more quickly – supposedly manipulating their lecturers' perceptions of women as passive and weak to their advantage. Leathwood (2006a) suggests that such performances of gender are employed by some women as they are more compatible with traditionally feminine constructions of identity. However, scholars such as Weiner (1994), Seymour (1995) and Powell et al. (2009) do caution that such behaviour is often counterproductive as it serves to perpetuate a discourse of 'difference' that relegates women to the margins, and does not necessarily facilitate respect towards women.

Women's 'invisibility'

Rodd and Bartholomew (2006) observed that some women seek to make themselves 'invisible' in STEM in order to resist hegemonic STEM discourses and retain some sense of a 'normative' feminine identity. Rodd and Bartholomew conducted an ethnographic study in a university mathematics department in England and noted how some high-achieving women undergraduates sought to make themselves invisible whilst studying in class, so as not to draw attention to themselves and highlight their difference. The authors conducted a period of classroom observation and noted that the majority of the women students in their study were very reluctant to engage with the lecturer and answer questions, unlike many of the male students who would frequently interject with their thoughts and opinions. The authors noted that, as a result, the lecturer built up a 'pally' relationship with the male students, creating a lads' environment in which the young women found it all the more difficult to participate.

In a similar way, Herzig (2004) observed that the women mathematics graduate students in her study felt invisible – although these women felt that this ‘invisibility’ had been forced upon them by faculty staff. These students felt that the mathematics department in which they studied was overwhelmingly male-dominated and consequently felt as if they did not ‘fit in’. These women believed that their male professors/supervisors were unfriendly, uncaring and unapproachable, generating feelings of anxiety as the women felt that they did not understand their work and were falling behind. Herzig noted that these women tended not to challenge their tutors’ behaviour or actively seek help but resigned themselves to their situation, resulting in two of the women leaving their programme before completing.

The woman STEM student as ‘special’

Rodd and Bartholomew (2006) note that whereas some of the women in their study sought to produce ‘invisible’ identities, other successful mathematics undergraduates (i.e. those who got a 1st) drew upon the discourse that they were unique and ‘special’. These women felt that they had been marked out by their teachers and parents at a young age as being good at high-status mathematics and were therefore superior to their female peers. This resonates with the work of Mendick (2005a), Epstein et al. (2010), Moreau et al. (2010) and DeWitt et al. (2013) who have found that young people today – both boys *and* girls – are increasingly able to re-negotiate and reject the stereotypical and often alienating image of the old, white, male scientist/mathematician, instead drawing upon the ‘populist’/media-driven discourse that individuals who pursue STEM are unique, special or ‘geniuses’.

Whilst such studies highlight the increased agency of young people in negotiating hegemonic STEM discourse, Archer et al. (2010) and DeWitt et al. (2013) do caution that ‘racialized’ and classed discourses of femininity affect the extent to which girls and young women are able to re-work the alienating image of STEM. These scholars assert that STEM disciplines are often strongly inscribed as ‘geeky’, ‘nerdy’ and ‘asexual’ – identities which may sit more easily with white middle-class and certain ethnic minority girls than white working-class girls who often embark upon embodied practices around ‘glamour’ and hyper-sexuality (see Hey, 1997; Skeggs, 1997; Archer et al., 2007).

What these studies indicate, then, is that ‘successful’ STEM identities are not available to all girls/young women equally, which is problematic. Furthermore, the discursive association between STEM and ‘uniqueness’ or ‘specialness’ also runs the risk of contributing to the notion that those who are good at STEM are ‘different’ and possess an innate ability that not everyone has – reinforcing the idea that STEM is not for the ‘mass’ (Mendick, 2005b).

Balancing STEM identities with hetero-femininity

Other researchers have documented how some women are able to engage relatively successfully in STEM by combining the study of a discipline inscribed as masculine with a convincing performance of hetero-femininity in their wider social lives. Mendick (2005a) conducted an ethnographic study in a London FE college and noted how one female African-Caribbean student, Toni, was attracted to mathematics precisely because it is inscribed as masculine and is widely perceived to be a high-status and difficult subject. However, Mendick noted that whilst Toni recognised the value of studying mathematics in order to acquire ‘male’ power, she had to mitigate her gender transgression by engaging in traditionally feminine pursuits in order to be accepted within her peer group, such as investing a great deal of time and energy in dressing in a fashionable way. Although Toni resented having to do this and found it tiresome, she understood the socio-cultural importance of colluding in femininity, and the potential hazards that social stigmatisation and unpopularity might bring about.

This strongly parallels the work of Brickhouse and Potter (2001). These authors noted how one African-American schoolgirl in their American study, Ruby, felt compelled to deploy certain hyper-feminine embodied capitals (Bourdieu, 1986) in order to balance her participation in a competitive computer programming course. Brickhouse and Potter observed that Ruby sought to dress fashionably and took part in modelling and cheerleading in order to achieve popularity amongst her peers. However, the authors note that such a balancing act was not easy for Ruby and proved to be a continuous and pressurised struggle.

Although it must be noted that these studies were conducted with students of a slightly younger age than undergraduates, what this body of research indicates is that girls and young women can encounter difficulties if they wish to pursue a STEM discipline and retain a hetero-normative feminine identity. This often

requires that young women live out 'double lives', trying to balance different identities in different spatial contexts (Brickhouse and Potter, 2001). Recent research does indicate that undergraduate students can feel under less pressure to avoid social stigmatisation given the supposedly 'grown-up', diverse and tolerant nature of university campuses, and the specialist academic 'communities of practice' (Lave and Wenger, 1991) that make up the social milieu (e.g. Mendick and Francis, 2012). However this currently remains under-researched, and is something on which this present study seeks to shed greater light.

Summary

The literature reviewed above demonstrates that, over recent decades, a shift has occurred in how feminist researchers have sought to conceptualise and investigate women's participation in STEM in HE, moving away from an analysis of the social and educational structures which serve to alienate women, and towards a focus on women's gender identities and agentic negotiations of STEM discourse. Drawing on the findings of more recent social constructionist and post-structural-inspired studies, it appears that women construct a range of different feminine-masculine identities and adopt various strategies in order to produce successful STEM identities. However, such strategies are not easily performed by women and often require a delicate balancing act, potentially resulting in feelings of pressure, anxiety and stress (Carlone, 2003; Mendick, 2005a; Brickhouse and Potter, 2001).

Such studies make an important contribution in adding complexity to our understanding of gender and in highlighting the differences *between* women's experiences in STEM. However, what is arguably missing from the literature is a full appreciation of the fluidity and multiplicity of women's gender and academic identities in different academic and non-academic 'out-of-classroom' spaces, and how these experiences combine in order to shape women's student subjectivities in a holistic way. This is something that this present study seeks to focus on in greater depth.

a) **ii. Arts/humanities**

Women's experiences on arts/humanities courses in HE

In comparison with the expansive body of research dedicated to exploring women's experiences in STEM, relatively little exists which specifically examines women's experiences whilst studying arts/humanities courses in HE. This is perhaps because women's engagement in arts/humanities disciplines at post-compulsory level has remained relatively high over the past few decades, and therefore these disciplines have been relatively unproblematized by researchers⁴ (Thomas, 1990). Indeed, women are widely perceived to have made great advancements in these academic fields, reversing the historical trend in the early 1900s where women were effectively excluded from participating in HE (see Dyhouse, 1995, 2006; Delamont, 1989, 2006)⁵.

Yet it appears that HE researchers are beginning to recognise that gender inequality and the under-representation of women are not issues solely confined to STEM disciplines, as has long been assumed. Recent statistics indicate that whilst the majority of arts/humanities disciplines are dominated by women at undergraduate level, at postgraduate level and in the academy, this trend sharply reverses in a number of academic fields (Leathwood and Read, 2009). For example, Guest et al. (2013) note that whilst 60.1% of undergraduate students studying for a degree in theology or religious studies (TRS) in the UK are women, only 39.1% of TRS postgraduates are female – and in some institutions this figure drops as low as 29.6% (e.g. Aberdeen, Durham, Nottingham and St Andrew's). Beebee and Saul (2011) observe a similar trend in philosophy; they note that only 35% of philosophy PhD students are female, and that approximately 24% of permanent post-holders in UK philosophy departments are women.

⁴ Although it must be noted that women's increased participation in HE in arts/humanities disciplines represents the bigger picture, and that concerns have continued to be expressed about women's academic attainment in these disciplines at Oxbridge in light of an apparent 'gender gap' in 1sts awarded in favour of men at these institutions (e.g. Martin, 1997; Leman, 1999; Mann, 2001; Surtees et al., 2002).

⁵ This lack of interest seems to have been compounded by the fact that media commentators and educational policy-makers have largely been concerned with highlighting and investigating boys' and young men's supposed 'under-achievement' in recent decades. This has meant that issues relating to girls' and young women's educational experience have fallen down the agenda (see Epstein et al., 1998; Francis and Skelton, 2005; Leathwood and Read, 2009).

The following section draws together research that has been conducted by academics examining women's experiences in HE across a range of arts/humanities disciplines – including English, RE, philosophy and history. As before, rather than take each discipline in turn and examine its associated body of literature, this section aims to fuse together the literature across various arts/humanities disciplines in order to avoid repetition of findings.

How are women studying arts/humanities disciplines positioned by others?

A number of researchers have found that women students are often positioned by their male and female peers and teaching staff in ways that do not necessarily advantage women or facilitate their educational success. Thomas (1990), for example, explored the experiences of English students at two UK universities and found that the women undergraduates in her study were often criticised by their male lecturers for being overly 'sweet' and 'unassuming', and for simply reporting on ideas from books rather than developing their own opinions (p.142). In contrast, the male English students were both praised and remembered for being aggressive, argumentative, competitive in seminars, self-confident, opinionated and better able to demonstrate their individuality in essays. Similarly, Burke (2013) and Francis et al. (2014) found that the men and women undergraduate students in their studies often constructed women students as being hard-working and conformist, whilst men were frequently interpreted as lacking focus and being lazy.

This links with the work of scholars writing about pupils' achievement in the primary and secondary school (e.g. Warrington and Younger, 2000; Jones and Myhill, 2004; Francis and Skelton, 2005; Archer, 2008; Jackson and Nyström, 2015; Paule, 2015). These scholars argue that teachers often have gender stereotypical expectations of pupils' academic achievement and tend to view (white, middle-class) boys as being less hard-working but 'naturally gifted', and girls as performing through diligence as opposed to talent. Francis and Skelton (2005) claim that diligence has thus become pathologized as inadequately masculine, with pupils who display excessive conformity and diligence looked upon in a negative light.

These findings relating to students' perceived academic abilities also correspond with studies conducted by Martin (1997) and Francis et al. (2001,

2003), who discovered that lecturers often interpret arts/humanities students' work in gender stereotypical ways. Francis et al. (2003) noted that whilst there are in fact many similarities between men and women undergraduates' writing, lecturers tend to hold a view of men's writing as being self-confident, bold and focused, whereas women's writing is thought to lack confidence and be indecisive. Whilst most assignments are blind marked in universities today, such interpretations have implications for student gender-power relations in the university, meaning that women can be constructed as being less naturally gifted than men.

Leathwood and Read (2009) also note that whilst different disciplines and institutions vary, HE itself appears to be characterised by a 'masculine culture' that privileges certain 'discourses of knowledge, communication and practice' (p.128), which they argue make it difficult for women and students from certain class and ethnic backgrounds to position themselves successfully. Indeed, Acker and Webber (2006: 486) argue that modern universities prize values and styles associated with men such as 'competitiveness, success, individualism, hierarchy and assertiveness' – traits that women might find it harder to appropriate than other groups for fear of breaking gendered social 'norms'.

Linking with this work, Beebee (2013) observes that philosophy seminars can be aggressive and confrontational rather than supportive and collaborative, as students are required to orally defend their arguments. However, this can be problematic for women because those who engage in overly competitive and aggressive behaviours tend to be constructed as being 'bitchy' or 'manipulative' (Francis, 2000b). Leathwood and Read (2009) add further complexity as they note that the traits of competitiveness and assertiveness are not only gendered but also classed and racialized. For instance, in white majority culture, African-Caribbean and working-class girls/women are often perceived as being more competitive and aggressive, but such behaviours tend to be seen at the expense of their 'femininity' (Hill Collins, 1990; Jackson, 2006; Gillborn and Youdell, 2000). In contrast, Asian women are often constructed as being 'too' passive and quiet (Pyke and Johnson, 2003). As such, the masculine cultures, practices and pedagogies perpetuated by universities seem to result in many women having to adopt precarious identities in order to succeed academically, which seem largely incompatible with culturally 'acceptable' feminine

subjectivities.

The woman arts/humanities student as anxious and under-confident

Other researchers have found that despite seeming to be in an advantageous position, women on female-dominated degree courses can experience intense pressure to succeed due to the high expectations placed upon them by themselves and their families, in light of wider discourses of women's unequivocal educational success (Harris, 2004; Walkerdine and Ringrose, 2006). Thomas (1990) discovered that many of the women English undergraduates in her sample lacked confidence and had difficulties with their self-image, with many participants expressing a particularly strong dislike of seminars in which group discussions took place. These young women felt intimidated by more vocal students who they viewed as being intellectually superior. Thomas also found that, in interview, the young women would often vastly underrate their academic ability and their self-worth (e.g. 'I feel I'm a bit of a waste...I just feel a bit of a disappointment, really' Vera, 3rd year, p.158). This echoes the findings of more recent studies conducted by scholars examining the experiences of younger girls in compulsory education, who observe that girls can suffer intense academic pressures that can lead to anxiety and stress disorders (Walkerdine et al., 2001; Renold and Allan, 2006; Jackson, 2006; Evans et al., 2004).

The woman arts/humanities student as 'undervalued'

What also emerges from the literature is that some women who study for an arts/humanities degree can struggle to feel 'valued' as a student. Whilst Thomas (1990) found that the female English undergraduates in her study liked the personal, creative and emotive content of their course and stressed the importance of choosing to study English because they believed it would lead to a job with social responsibility, the young women also expressed a clear unease at being thought of by others as 'un-ambitious' or even 'irrational' for holding these views, given the high status and pay rewards associated with STEM careers. As such, choosing to study a traditionally 'feminine' discipline was not entirely unproblematic for the women as they realised that the careers to which they aspired are those that are often undervalued in society (Leathwood, 2006).

This links with research conducted by scholars such as Becher and Trowler (2001) and Nuemann et al. (2002) who argue that a knowledge hierarchy exists in wider society which affords certain academic fields higher status and greater respect than others. In fact, scholars have long observed that a set of hierarchical dichotomies exist around academic disciplines, which feminist academics believe function to legitimate male superiority (Robson et al., 2004). This dichotomy positions 'masculine' STEM against 'feminine' arts/humanities. However this dichotomy is also often articulated through the binaries of difficult/easy and superior/inferior, with arts/humanities disciplines tending to be constructed as less demanding and less important than STEM disciplines (Thomas, 1990; Francis, 2000a; Francis and Skelton, 2005). Thomas' (1990) study thus indicates that some women studying arts/humanities disciplines may find it difficult to resist the hegemonic discourses that inscribe disciplines with value and may internalise feelings of inferiority, eroding women's confidence and self-worth.

Summary

Although comparatively little research has been conducted that documents women's experiences on arts/humanities courses in HE, the research that does exist suggests that women do not have an 'easy ride' as is commonly assumed in media accounts (Leathwood and Read, 2009). As such, it can be observed that gender inequalities remain pertinent in arts/humanities disciplines as well as STEM. Such insights are important, but what the literature tells us less about is how *different* women undergraduates construct their gendered and academic identities in practice, in response to hegemonic discourses which inscribe their disciplines as 'feminine' and 'inferior' (i.e. class, ethnicity, age). Such insights would provide us with a better idea as to the impact of disciplinary context on women students' formation of identity in HE – something that this present study seeks to develop.

b) Women's wider university experience

The 'classroom' has tended to be the exclusive focus of the majority of studies that have sought to understand how gender impacts upon students'

experiences whilst studying science/arts disciplines in higher education institutions (HEIs). However, I would argue that in order to understand women's 'student' and 'disciplinary' identities in a holistic way, we need to broaden the analytical lens and consider how women also negotiate their experiences of university life outside of the classroom. Indeed, we must appreciate that the university social 'space' provides an important backdrop against which students' gendered and academic identities are both created and sustained, with students constantly moving in and out of different identity positionings across different spatial and temporal contexts (Quinn, 2003; Reay et al., 2009). In this next section, the literature relating to women's wider experiences of university life will be explored, with particular attention being paid to the impact of friendship/peer cultures, extra-curricular activities, part-time work, and campus cultures.

The importance of friendship in the university

Educational researchers working with younger pupils in primary and secondary schools have found that peer cultures and friendship groups strongly affect the quality of pupils' subjective educational experience, and play an important part in determining whether pupils feel happy and comfortable whilst at school (Willis, 1977; Mac an Ghail, 1994; Hey, 1997; Reay, 2001; Renold, 2005; Francis et al., 2010; Ringrose, 2008; Currie et al., 2007). It has also been noted that peer cultures can help to either facilitate or impede pupils' academic achievement, providing an important space in which young people negotiate their academic identities – a space in which pupils work to accommodate or resist particular educational stereotypes such as the 'boffin', the 'geek', the 'good/bad pupil' etc. (Youdell, 2006a; DeWitt et al., 2013).

Whilst the literature pertaining to the earlier phases of schooling suggests that pupils' friendship groups are often hierarchical, complex and precarious and that pupils must adhere to certain peer-group/cultural 'norms' in order to gain social acceptance (Hey; 1997; Simmons, 2003; Ringrose, 2008; Currie et al., 2007), studies suggest that the dynamic of friendship to some extent changes once students enter the realm of the university. It must be said that relatively few qualitative studies exist which investigate how friendship relations are

managed in the university (see Brooks, 2007), however the literature that does exist does furnish us with some insights.

Brooks (2007) conducted a small number of in-depth interviews with middle-class undergraduates studying in nine different British universities and found that these students believed that the quality of their friendships had improved significantly since they were at school and college. These students stated that their relationships had become more mature, serious and equal; deeper relationships which the students said were forged through living in closer proximity to their friends (i.e. in halls of residence or shared housing). These students also stressed the critical importance of having close friends to provide them with emotional support to help them through particularly difficult or stressful periods of study – support that was previously provided by their families.

Finn (2015) similarly found that the young women undergraduates in her study claimed friendship to be of central importance in their student lives, and as being a key component in determining their happiness and wellbeing. For many, the university offered up the opportunity to meet people from different walks of life, with the women distancing themselves from their 'home' friendships so that they might construct a more independent future identity. And in fact, Brooks (2007) found that the women in her study stated that they felt increasingly free to express their 'alternative' lifestyles at university (e.g. choosing not to drink) without fear of social ostracism, as they felt that the university campus was a relatively diverse and accepting space.

However, it should be noted that whilst such studies paint a rosy picture of the state of friendship in the university, peer relations remain incredibly complex and the impact of individuals' class and ethnic identities should not be underestimated. A number of researchers have noted that working-class students can struggle to integrate socially within 'elite' universities due to the apparent disconnect between students' working-class 'habitus'⁶ and the middle-class 'institutional habitus' of the university (Bourdieu and Passeron, 1977;

⁶ Bourdieu (1993, 1998) defines 'habitus' as a set of embodied and mental attitudes/dispositions which link one's agentic practice with capital (economic, social and cultural) and field (the structures of a world).

Reay et al., 2010)⁷. Indeed, researchers have found that working-class students are more likely to choose to remain in the parental home whilst studying and maintain 'home' friendships not solely due to financial concerns, but also to minimise the risk to their 'self' when moving into a middle-class world in which they can feel a 'fish out of water' (e.g. Archer, 2003; Read et al., 2003; Aries and Seider, 2005; Reay et al., 2009; Reay et al., 2010; Finn, 2015). As such, these researchers caution that working-class students can find it difficult to fully integrate within the university, limiting their access to, and acquisition of dominant cultural and social capital – potentially impacting upon working-class students' future aspirations and life courses.

As we have seen above, a small body of literature exists which seeks to examine how friendship enables students to integrate into university life and construct relatively 'successful' and fulfilling student subjectivities – affecting one's psychological wellbeing whilst studying (Brooks, 2007; Reay et al., 2009; Finn, 2015). However, what seems to be missing from the literature is a consideration of how gender is implicated in the formation of students' friendship networks, and how students negotiate peer relations whilst going about their day-to-day university lives. In particular, we know little about how women across different disciplines embark on social relationships (e.g. whether strong friendship bonds are forged whilst students are inside or outside of the classroom) and the impact that such friendships have upon students' negotiations of 'successful' student subjectivities.

Extra-curricular activities

Another key aspect of university life that plays an important part in helping students to learn non-academic skills and feel 'successful' are extra-curricular activities (Moreau and Leathwood, 2006a; Stevenson and Clegg, 2011; Stuart et al. 2011; Greenbank, 2015). 'Extra-curricular activities' (ECAs) is a relatively broad term but might generally be defined as any activity engaged in by

⁷ Reay et al. (2010) define 'institutional habitus' as a complex interweaving of: 'the academic status of an HEI (its position in the university hierarchy)...curriculum [on] offer, organisational practices, and less tangible, but equally important, cultural and expressive characteristics [including] expectations, conduct, character and manners' (p.109).

students that does not form part of the formal university curriculum. Such activities might include sports, hobbies, participation in student societies, volunteering, caring responsibilities and part-time work (Stevenson and Clegg, 2011). Yorke and Knight (2006) note that, in light of the evolving massification of HE in the UK, an increasing emphasis is now being placed on the value of ECAs by both the government and HEIs who have realised that employers are now looking to differentiate between students in ways other than their academic credentials. Indeed, a number of academics have noted that a discourse of student 'employability' has emerged in recent decades which has placed students under increased pressure to take part in ECAs in order to furnish themselves with desirable 'soft skills' needed for success in the competitive job market (Brown, 2005; Moreau and Leathwood, 2006a; Tomlinson, 2012).

However, Stevenson and Clegg (2011) argue that whilst ECAs are a site in which students might accumulate important cultural goods or 'capital', engagement in ECAs is gendered, classed and racialized, and not every individual has equal access to opportunities. For example, Stevenson and Clegg (2011) noted that many of the women undergraduate students in their study seemed to be at a disadvantage when it came to developing an 'employable' identity, often downplaying their engagement in activities undertaken outside the curriculum – particularly those activities that are perceived to be 'feminine' and thus de-valued in wider society, such as caring responsibilities and arts/crafts. They noted that the women were also less likely than men to construct a narrative in which they positioned themselves as being a pro-active 'self-starter', and as someone who was actively seeking to become as skilled and employable as possible. The authors argue that this is a cause for concern because recent pedagogical interventions (e.g. Personal Development Planning) and policy initiatives designed to increase student employability are based upon the implicit assumption that students are autonomous, independent and self-authoring individuals, and are able to imagine their future 'selves' and plan accordingly.

Stevenson and Clegg's (2011) observation that there are gendered differences in how ECAs are taken up and valued by students is important, however I would argue that complexity could be added to our understanding of the HE landscape. Indeed, what seems to be missing from the literature is a

consideration of how women across different disciplines seek to acquire extra skills in order to make themselves employable. Tchibozo (2007) notes that graduates who participate in ECAs are at an advantage when it comes to gaining employment, and are also more likely to obtain a job with higher status and a better wage. However, it is likely that participation levels will differ across different disciplinary areas. For example, many STEM degree programmes are highly specialist and are designed with particular careers in mind (e.g. nuclear physics, astrophysics, aerospace engineering, biochemistry), meaning that STEM students are more likely to have a clearly defined career goal to work towards (Smith and Cooke, 2010). Such disciplines also often place a greater emphasis on work-related skills and encourage students to gain laboratory or industry experience via internships (Lubben et al. 2010). In contrast, arts/humanities disciplines (in which more women are concentrated) are often more abstract and less explicitly tied to the labour market (Kent, 2012), and research has shown that arts/humanities undergraduates are less likely to have a clear career path in mind when studying for their degree (Smith and Cooke, 2010). This future uncertainty will likely have an impact upon the types of ECAs that these undergraduates seek to participate in, and how students set about creating a successful 'employable' self.

University campus cultures – 'laddism'

Whilst not a core focus of this study, it is also important to draw attention to a related body of literature on 'laddish' campus cultures that has emerged in recent years, in order to provide the necessary background in which to contextualise women students' current HE experiences. Over the past 3-4 years, there has been a growing media interest in laddish behaviours in HE contexts, with numerous articles reporting on the problems that women currently face on university campuses in the UK (The Guardian, 2013; The Telegraph, 2014; The Sunday Times, 2015). Events reported on have been wide-ranging and include: women being verbally abused by 'lads' on nights out; women being sexually harassed in nightclubs; derogatory student society initiation ceremonies; sexualised theme parties such as 'pimps and hos' and

'geeks and sluts'; 'rape banter'; 'slut drops'⁸; and the emergence of misogynist student websites such as UniLad. In light of these concerning findings, the National Union of Students (NUS) commissioned a report into 'lad culture' which was published in 2013⁹, highlighting women's everyday experiences of sexism, misogyny and harassment on UK university campuses. Since then, a number of universities have sought to tackle laddish campus cultures by attempting to change students' attitudes and 'clamp down' on inappropriate behaviours. For example, in 2013 Oxford University introduced a series of Good Lad workshops for society leaders aimed at exploring issues of masculinity, consent and peer pressure. A number of student unions throughout the country have also set up campaigns to challenge laddish campus cultures and regulate student activities.

A small number of researchers have conducted studies in an attempt to examine the phenomenon of laddish campus cultures, and to trace the impact that such behaviours have upon women (and men) students (e.g. Dempster, 2011; Phipps and Young, 2013, 2015; Jackson et al., 2015). The majority of these studies have located laddish behaviours as existing outside of formalised learning contexts, for example in halls of residence, at student society meets and on 'nights out'. There is one notable exception, however, with Jackson et al. (2015) recently examining laddish behaviours in the lecture theatre of a sports science degree at a post-1992 institution. Definitions of 'laddish' behaviour can vary somewhat within this body of work. Whilst Phipps and Young's (2013) participants identified a more extreme version of laddism on campus, involving homophobic, misogynist and rape supportive attitudes, Jackson et al. (2015) found that the students in their study generally thought of 'lads' as being 'loud and attention-seeking, confident, into sport, popular, jokers, often heavy drinkers and sexually promiscuous' (p.303). Jackson et al. argue that this version of 'lad' parallels comments made by pupils in secondary schools, who similarly define laddish boys as being popular, good-looking, sporty, jokers, and as holding anti-work attitudes (Jackson, 2006).

What these studies indicate is that laddism can and does exist in a variety of strengths and forms on UK university campuses, which can have a detrimental

⁸ 'Slutdrops' refers to the practice whereby male students offer to drop women home after a night out, but leave them stranded miles away.

⁹ This report was authored by Alison Phipps and Isabel Young (2013).

effect upon students' identities and experiences. However, this is not to say that all campuses are dominated by laddish cultures. Rather, as Phipps and Young (2013: 25) assert:

'Contemporary 'lad culture', then, can be understood as one of a variety of masculinities and cultures in UK university communities, which men and women may move into and out of, but which may shape their identities and attitudes and frame their experience of university life.'

c) High academic achievement

As this study is also concerned with exploring the experiences and identities of 'high achieving' women students, in this section, I will seek to examine the literature on gender and academic achievement. This section begins by assessing how academic achievement has previously been conceptualised, defined and problematized by academics and educational policy-makers investigating matters of achievement in both compulsory and post-compulsory education. Attention will then be turned to the empirical literature pertaining to femininity, achievement and student experience in HE.

Defining 'high achievement'

On the surface, 'high achievement' might be thought of as being a relatively objective and straightforward concept; according to UK educational policy discourse, high achievement is expressed through academic credentials and therefore those students who perform at the highest level in official assessments (i.e. coursework and exams) are deemed to be 'high-achievers' (Francis and Skelton, 2005; Renold and Allan, 2006; Skelton et al., 2010). It is consequently assumed that those students who perform well in official assessments 'sail through' education and experience relatively few problems, as evidenced by their high grades (Renold and Allan, 2006). However, such thinking serves to 'fix' the academic identities of high-achievers and fails to appreciate the work that goes into producing high achievement in association with intersecting (and sometimes contradictory) discourses of gender, class and ethnicity (Youdell, 2006a; Archer, 2008). Indeed, since the early 2000s, educational researchers have begun to realise that high achievement is not an

unproblematic and objective measure, as different expectations are demanded of students according to their social background. Thus, some students are better able to see themselves as successful, and be seen as successful by others (Walkerdine et al., 2001; Jones and Myhill, 2004; Renold and Allan, 2006; Youdell, 2006b; Archer, 2008).

In particular, feminist researchers have observed that it is girls rather than boys who are expected to perform at the highest level in late-modern society, with young girls constructed as being the 'new' signifier of bourgeois upward mobility in post-feminist times (Harris, 2004; Walkerdine, 2003; Ringrose, 2012). And academics such as Reay (2001), Walkerdine et al. (2001), Power et al. (2003) and Allan (2010a) note that it is middle-class girls in particular who are expected to perform at the highest level by educational professionals, their parents, *and* girls themselves – where anything other than the 'top' grade is considered to be a 'failure'. Conversely, expectations of working-class girls' success have been found to be lower where, for example, a pass grade might be considered a great achievement (Walkerdine et al., 2001).

Scholars have also observed that different demands are placed upon students in relation to their ethnic background. Researchers have found that whereas African-Caribbean students are often expected to achieve less highly by educational professionals (Mirza, 1992; Gillborn and Youdell, 2000; Youdell, 2003; Archer, 2008), students of Chinese heritage are expected to perform at the highest level – particularly in maths and science-based subjects (Francis and Archer, 2005a; Gates and Guo, 2014). Archer (2008: 103) asserts that such dominant discursive constructions of students' success seem to foreshadow or 'narrow' the space in which students can negotiate or experience success.

As a consequence, a number of academics have sought to contest the 'official' definition of high achievement adopted by recent governments which is based solely upon pupils' attainment in formal assessments. Indeed, Francis and Skelton (2005) assert that achievement should be thought of in a more holistic way, based on social justice objectives. They maintain that achievement should encompass wider issues such as students' social competence, their active citizenship, and the extent to which they 'engage with each other and school culture' (p.2). In a similar vein, Allan (2010a) argues that a definition of

achievement should incorporate whether pupils feel that they can 'own' their success for themselves.

Other academics writing specifically in relation to HE have also questioned the extent to which high achievement in exams and formal assessments is important in the university and can be used as an accurate measure of students' success (e.g. Archer et al., 2003; Morley and Aynsley, 2007; Tomlinson, 2008). These scholars have reflected on whether success at this stage should instead be defined by graduate outcome, seeing as governments have increasingly sought to emphasise the links between HE and the labour market in recent times (e.g. DfES, 2003; BIS, 2011). Indeed, Smetherham (2006) has found that students with a 1st are not necessarily at an advantage in the labour market, which calls into question the intrinsic value of a good degree. Smetherham surveyed 846 students studying at 8 HEIs in the UK and found that whilst students with a 1st seemed to have an initial positional advantage in the labour market, students' employment success was in fact largely dependent on their educational biographies and gender. In particular, Smetherham observed that men with a 1st fared significantly better than their female counterparts in terms of income, occupational position and training.

Femininity and high achievement

The research that has been conducted into matters of femininity and high achievement has mostly taken place in the earlier levels of the education system – particularly the primary and secondary school. It is important to examine this literature in greater depth as insights gained at this level of schooling provide a relevant background to HE¹⁰. This body of research suggests that high achievement can be problematic for girls and young women as it can be incompatible with popular feminine subjectivities, thus becoming a barrier to success.

Feminist academics assert that educational establishments demand high expectations of girls regardless of their social background – that is, determination, drive, singularity and a focus on intellectual rather than social

¹⁰ These findings might also translate to HE given that the majority of students are still relatively young when they enter university (usually in their late teens to early twenties).

pursuits (Walkerdine et al., 2001; Renold and Allan, 2006; Skelton et al., 2010). However, this lies in tension with the dominant notion of acceptable femininity that pervades Western society which requires girls be more passive and accommodating, more concerned with social relations, and more concerned with producing a heterosexual 'desirable' image. As a consequence, Skelton et al. (2010) assert that girls must constantly embark upon a precarious balancing act and attempt to reconcile 'cleverness' with 'popularity', otherwise girls run the risk of being labelled a 'swot', 'boffin' or 'geek'. These pejorative labels signify (often) undesirable subject positions: positions which are of low social status and can result in bullying, social ostracism and exclusion (Martino, 1999; Renold, 2001; Francis, 2009; Skelton et al., 2010).

Educational researchers have found that schoolgirls who achieve highly invest in the production of feminine identities in different ways – complexly negotiated alongside dominant discourses of class, ethnicity, age and sexuality (Renold and Allan, 2006). For example, academics have noted that some girls manage to produce relatively successful high-achieving identities by attempting to 'balance out' their high achievement with the performance of hyper-feminine identities. Allan (2010a) found that several of the upper/middle-class white girls in her ethnographic study set in an elite private school managed to combine high-achieving identities with 'girly girl' subjectivities in order to gain popularity amongst their peers, i.e. cleverness, prettiness, sensible behaviour and a desire to please. Similarly, Francis (2009) found that the working-class girls in her study set in a state secondary school sought to counter-balance their achievement with the performance of a more boisterous, yet still traditionally feminine subjectivity. These girls engaged in conventionally 'feminine' behaviours (e.g. dressing in a fashionable way, making themselves physically attractive), yet also sought to be humorous in class in order to achieve popularity amongst their working-class peers. However, both Allan and Francis observed that these girls sought not to take overt pride in their achievements or flaunt their 'cleverness' for fear of being labelled a boffin and socially ostracised. In fact, Francis noted that the working-class girls in her study prioritised the pursuit of popularity over high achievement when the two aims conflicted – suggesting that high-achieving and feminine identities are relatively incompatible.

Yet researchers have observed that not all girls are able to strike a careful balance between 'doing girl' and 'doing high achievement' – particularly those girls who are 'less able to draw on aesthetic embodied resources than their popular, academically successful female classmates' (Skelton et al., 2010: 291). Indeed, Hey (1997), Renold (2001) and Skelton et al. (2010) observe that many girls who are not necessarily the most popular students seek to 'manage' their high achievement by seeking not to stand out in any way, such as by disguising over-eager attitudes towards schoolwork and dressing neither overly fashionably or unfashionably. According to Skelton et al. (2010: 189), these girls tend to 'position themselves within the boundaries of conventional femininities', thus downplaying their achievements and investing their energies in their peer/friendship group.

Other researchers have documented the painful schooling experiences of those girls who are unable – or unwilling – to perform normative feminine identities but wish to achieve highly. Renold and Allan (2006) documented the experience of Nyla, a high-achieving Welsh-Pakistani girl, who found it difficult to both 'do girl' and 'do success' in a Welsh primary school. Renold and Allan observed that Nyla saw femininity and high achievement as being antithetical and thus came to reject the trappings of traditional femininity, instead producing an ambivalent or asexual femininity. As a result, Nyla distanced herself from the other girls in her class sought to avoid friendship, imposing social isolation upon herself. Similarly, Renold (2001) observed how a group of white middle-class girls in her ethnographic study set in a primary school were labelled 'square' and socially ostracised by their peers due to their lack of interest in traditionally feminine pursuits (e.g. fashion and popular culture) and public displays of academic competence.

Yet, in contrast, Renold and Allan (2006) and Pomerantz and Raby (2015) have observed that some girls are now able to produce their success through a post-feminist discourse of 'power', therefore taking overt pride in their achievements and success. Renold and Allan observed how another girl in their study – Libby – was able to produce a hybrid 'supergirl'/'have it all' identity by investing in hyper-feminine behaviours whilst also expressing confidence in her academic ability. However, the authors note that whilst such an identity was powerful as it

disrupted masculine and feminine behavioural 'norms', it was not a desirable subject position for the majority of the girls as such positioning was relatively precarious. Indeed, the authors assert that the success of such identities is largely dependent on external factors such as girls' class and ethnic backgrounds and perceived 'popularity'. Moreover, other researchers have also noted that girls who display excessively assertive behaviours and openly celebrate their achievements must tread a careful line otherwise they risk being labelled as 'pushy', 'arrogant' or 'boastful' by both their peers and educational professionals (Reay, 2001; Skelton et al., 2010).

What the literature outlined above indicates is that, whilst high achievement is produced in a variety of ways by girls in compulsory education, 'success' is by no means effortlessly produced by girls across all class and ethnic backgrounds. In fact, a growing body of literature highlights the increasing 'fear of failure' felt by many girls (and boys) in schools today in light of the relentless policy focus on testing and credentialism (Jackson, 2006; 2010), with scholars suggesting that, in extreme cases, such pressures and anxieties may lead to destructive behaviours such as self-harming and eating disorders (e.g. Evans et al., 2004; Walkerdine et al., 2001, Ali, 2003; Lucey and Reay, 2000).

High achievement in the university

Whilst a growing body of literature seeks to examine the experiences and identities of high-achieving girls and boys in compulsory education, relatively little has been written about high achievement at university. At the level of HE, academic success is often seen as being unproblematic and students – both men and women – are simply assumed to be successful high-achievers by virtue of the fact that they have met certain academic requirements in order to gain entry into a university. Of course, in reality, this picture is complicated by the fact that different institutions carry with them different levels of 'prestige', and demand widely varying grades as entry requirements.

Leathwood and Read (2009) assert that, in the UK, the HE sector is stratified along three lines. They observe that certain 'elite' universities tend to be the most highly regarded, as evidenced by their position at the top of many national

and international university league tables¹¹. These universities are widely renowned for their academic focus and demanding admissions requirements. However, these elite universities are often set in contrast with pre-1992 universities and post-1992 universities – the latter of which are often discursively framed as being less academically rigorous (Archer et al., 2003). These institutions were awarded university status following the introduction of the Higher and Further Education Act 1992, are mainly former polytechnics¹² and, as a consequence, do not have the academic history and research remit of long established universities (Ross, 2003). It must therefore be noted that ‘high achievement’ in HE is not a uniform and objective measure, but that different institutions have different benchmarks of, or criteria for success.

Drawing on the work of Bourdieu (1984), academics such as Reay et al. (2010) and Smetherham (2006) have claimed that different universities have different ‘institutional habituses’ and ‘institutional capitals’ based upon their academic status and place within the university hierarchy, which confer differing levels of (classed) prestige upon their students and alumni. As such, these scholars argue that students must make themselves intelligible as achievers through a complex constellation of university-based discourses which frame the formation of students’ academic identities

It must also be acknowledged that, in the realm of HE, whilst students might have gained entry into a ‘good’ university, not all students will go on to obtain top grades whilst studying and be classified as ‘high-achievers’ – despite the fact that they might have been classed as a high-achiever at primary school, secondary school and sixth form/college. Thus, the university represents a distinctive educational space where one’s achievement is re/negotiated in light of past educational experiences (Jackson, 2003). This again highlights the fluid,

¹¹ These are the University of Oxford, the University of Cambridge, and 22 other ‘research-intensive’ Russell Group universities.

¹² ‘Polytechnics’ were public sector educational institutions where students could study for a degree, although these degrees were awarded by a central body – the Council for National Academic Awards (Leathwood and Read, 2009). Polytechnics were often populated by working-class students and usually focused on more vocational courses (Ross, 2003). The 1992 Higher and Further Education Act was intended to remove the ‘binary divide’ between these institutions and autonomous universities (see Ross, 2003), however researchers such as Leathwood and O’Connell (2003) argue that this move was undertaken by the government in order to provide a suitable home for working-class, ethnic minority and female students during the rapid expansion of HE that took place in the 1990s.

changeable and potentially fragile nature of achieving student identities (Youdell, 2006a; Renold and Allan, 2006).

Summary

What the body of work reviewed above serves to highlight is the constructed nature of gender and academic achievement. Whilst policy discourse sees achievement in the sole terms of students' attainment in formal examinations, in recent years, educational sociologists have problematized this narrow definition. Youdell (2006b), for example, asserts that 'achieving' student identities bring together a wide range of discursive resources/positionings including attainment, effort and confidence – which is why one may be able to attain but still not be recognised as an achiever (also see Skelton and Francis, 2002 and Allan, 2010b). This present study seeks to add to the literature by exploring the ways in which high-achieving women undergraduates work to un/successfully produce high achievement alongside intelligible femininities (Butler, 2004), set against the backdrop of STEM and arts/humanities disciplines.

Conclusion

In this chapter, I have sought to critically assess the three bodies of literature which inform this present study. In doing so, I have sought to draw attention to the areas of the HE literature that are currently under-researched, thus refining the focus of this present study. In the next chapter, I will go on to outline the theoretical framework which underpins this present study, and clarify how gender and identity will be both understood and conceptualised in this project.

Chapter 3

Theorising Gender and Identity

Introduction

The aim of this chapter is to outline the theoretical lens which provides a conceptual framework for understanding how women's gender and academic identities – or subjectivities – are constructed in practice. In this study, a 'patchwork' approach has been adopted, incorporating elements of feminist post-structural theory, new material feminisms and Becky Francis' (2012) concept of gender monoglossia and heteroglossia, as adapted from the work of Bakhtin (1981, 1987). However, before I go on to expand upon this theoretical approach in greater depth, it is important to locate these ideas within the historical developments in thinking about gender that have occurred within sociological and educational research over the past few decades.

Biological explanations of gender

A 'common-sense' view of gender prevails in Western society which sees sex as marking a distinct biological and 'natural' difference between men and women – both physically and genetically (Francis and Skelton, 2005). Such biological differences are thought to be responsible for the differences in behaviour between men and women, and therefore sex is believed to *cause* gender. Whilst dominating popular discourse, such biological explanations of gender are also currently supported by many scientists, socio-biologists and evolutionary psychologists. For example, some scientists believe that variations in the behaviour of men and women can be attributed to hormone and brain difference (e.g. Gray and Buffery, 1971; Sherry and Hampson, 1997; Gurian 2002). These researchers suggest that the levels of progesterone and oestrogen produced by women and the levels of testosterone and other androgens produced by men influence one's behaviour, personality and emotional disposition. This is said to explain why women are 'naturally' more passive and caring, whilst men are 'naturally' more aggressive and competitive (Archer and Lloyd, 2002).

Criticisms of biological explanations

Whilst biological explanations of gender difference underpinned some early sociological research (e.g. Murdock, 1949; Parsons, 1955) and continue to inform some psychologically-oriented educational studies into pupils' curriculum interests and academic aptitudes, since the late 1970s¹³, second-wave feminist academics have launched extensive critiques against biological and essentialist accounts of gender (e.g. Oakley, 1972; Kessler and McKenna, 1978; Stanley, 1984; West and Zimmerman, 1987; Davies, 1989; Butler, 1990; Delphy, 1993; Fausto-Sterling, 1993). One of the earliest and most comprehensive critiques was that put forward by Liz Stanley (1984). Stanley argued that sex does not 'produce' gender because gender is far more complex and unstable than it appears on the surface, and pointed to three pieces of evidence in support of her claims. First, Stanley argued that gender has no biological base because it is variously constructed and interpreted by individuals across different cultures. Second, Stanley noted that gender ideals or 'norms' change both over time and within particular cultures (e.g. women's social and economic roles changed with the introduction of capitalism in England). Finally, Stanley highlighted that gender is not monolithic in the present as there are various cases of 'intersexuality' whereby a person's biological sex characteristics and gender do not match.

Sex-role socialisation theory

In response to the perceived problems with biological determinist explanations of gender, in the early 1970s, second-wave feminists from a variety of theoretical positions (e.g. black feminism, Marxist feminism, liberal feminism, radical feminism) sought to provide an alternative account of how individuals become 'gendered' (Jackson and Scott, 2002). Whilst many second-wave feminists did not entirely reject biological explanations of gender and emphasised the interrelationship between 'nature' and 'nurture' (e.g. Oakley,

¹³ Critiques of biological determinism actually date from the first wave of feminism in the early 1900s (e.g. de Beauvoir, 1949; Mead, 1935, 1950; Klein, 1946; Komarovsky 1946), however these critiques were elaborated upon extensively during the second wave of feminism in the late 1960s to early 1970s.

1981), such theorists were keen to complicate the notion that biology or 'sex' determined social roles and aptitudes.

Sex-role socialisation theorists drew upon existing sociological and psychological work and proposed that humans are born 'blank slates' or 'empty vessels' who shortly after birth are taught social norms, values and behaviours to help them to integrate into the social world (see MacNaughton, 2003).

According to the sex-role socialisation model of gendered behaviour, gender stereotypes are thought to be instilled in individuals at an early age through the process of socialisation – i.e. children are thought to be socialised into their sex-role by an adult (usually a parent) in an 'osmosis-like' process whereby the child passively and uncritically absorbs gendered messages that create and maintain gender difference. Moreover, these gendered messages are thought to be reinforced by a range of wider external social influences such as one's peers, teachers, the media etc. (MacNaughton, 2001). As such, adherents of this theory proposed that girls and boys learn to be 'feminine' and 'masculine' via the approval they gain for displaying 'appropriately' gendered behaviours such as gentleness, helpfulness and caring in girls, and assertiveness, competitiveness and physicality in boys (Oakley, 1972; Sharpe, 1976; Seidler, 1989).

Criticisms of sex-role socialisation theory

Whilst sex-role socialisation theory dominated much second-wave liberal and radical feminist educational research in the 1970s and 1980s – with adherents exploring gender-power relations amongst children and teachers in a variety of educational settings – criticisms began to emerge in the late 1970s (Francis et al., 2012). Some feminist scholars grew increasingly dissatisfied with the reproductive and generative nature of sex-role theory. These academics were concerned that the 'top down' socialisation model was overly deterministic and presented individuals as being passive and entirely determined by society (e.g. Anyon, 1983; Davies, 1989; Riddell, 1989; Thorne, 1993). Indeed, Stanley and Wise (1983) claimed that the socialisation model was non-reflexive as it was unable to explain why some individuals do not conform to dominant gender ideals (e.g. gay and lesbian people, 'effeminate' men, career women). Connell (1995) also asserted that sex-role theory was unable to sufficiently grasp

matters of power and material inequality, and missed the complexities involved in the production of masculine and feminine identities. In particular, Connell challenged sex role theory for under-theorising power relations *between* women and *between* men, as well as between women and men – something which Connell felt was critical for understanding the inconsistencies and nuances apparent in gender identities.

Social constructionist theory

In light of the perceived limitations of sex-role theory, many feminist researchers have since turned towards less deterministic accounts of gender. Social constructionist accounts of gender emerged in the late 1980s, as feminist scholars increasingly began to question the notion that gender identities are stable and fixed (Francis et al., 2012). In line with sex-role theorists, social constructionists also believe that gender identities and meanings are constructed through social interaction and that gender is developed in line with social expectations. However, social constructionism differs from sex-role theory because it is less rigid and is less concerned with the direct reproduction of roles. Indeed, Francis and Skelton (2005: 28) assert that social constructionists today are more concerned with ‘difference, contradiction and change’, and attend to the nuances of local, micro-scale gender interactions.

Whilst social constructionists hold a number of views in common – that individuals construct their own versions of reality, that language influences the way in which individuals see the world, and that objective social facts do not exist (Burr, 2003) – it must be noted that social constructionist approaches are highly diffuse and that proponents often hold different opinions, making the theory very difficult to concretely define (Lynch, 2001). For example, some social constructionists believe that men and women are biologically different and that this has an impact upon the ways in which others interact with them and the expectations that are placed upon them. As such, these researchers believe that whilst individuals are biologically sexed, gender differences in behaviour and experience are socially produced (see Francis and Skelton, 2005). However, other social constructionists take a more radical approach to

the sex/gender divide and assert that biological sex is itself a social construction (e.g. Kessler and McKenna, 1978; Butler, 1990).

Criticisms of social constructionist theory

Whilst social constructionist approaches have remained relatively popular amongst educational researchers investigating the significance of gender in educational contexts (e.g. Hearn, 1987; Connell, 1995; Barrett, 2001; Messner and Sabo, 1990; Francis, 2000b), various postmodern and post-structural theorists have questioned some of the assumptions upon which social constructionism rests. Whitehead et al. (2013) argue that the theory is based on a conception of gender identity that is informed by macro-scale ideology – that of patriarchy and hegemony whereby the power system in society is seen to serve the interests of men. However, Whitehead et al. argue that this model of power does not provide a persuasive understanding of the complex identity work undertaken by individuals in order to bring their ‘self’ into being. Whitehead et al. state that, in line with sex-role theory, social constructionists tend to imply that an oppressive regime is effectively ‘forced’ upon individuals, leaving little room for agency. Some scholars also argue that in many constructionist accounts, ‘sex’ remains under-theorised and gender is thought simply to rest upon some natural difference – risking reverting back to biological and essentialist explanations of gender (Stanley, 1984; Hawkesworth, 1997).

Postmodernism and post-structuralism

In response to the limitations identified in social constructionist accounts of gender, feminist researchers have continued to seek an increasingly nuanced understanding of gender identity, with many researchers in more recent decades turning to the theories of postmodernism and post-structuralism. These theories – which call into question the Enlightenment principles of rationalism, universalism, ‘truth’ and ‘reality’ – have enabled researchers to appreciate the multiplicity and difference between individuals, whilst also offering an opportunity to deconstruct and challenge gender-power relations (Weedon, 1997; St. Pierre, 2000; Youdell, 2006a). Such theories are also useful as they move away from a wholly repressive notion of power (i.e. that power is

negative, fixed, hierarchical and upholds the patriarchal order) and instead recognise that power is fluid, mobile and potentially productive (Foucault, 1980). In the sections that follow, I will begin by briefly outlining what is meant by the term 'post-structuralism' – a particularly influential strand of postmodernism – before going on to examine how post-structural ideas have been appropriated by feminist academics and educational researchers in order to understand how gender identities (or gendered subjectivities) are created. This is important, as these ideas underpin the way in which gender is conceptualised in this project. Michel Foucault's work on discourse and power and Judith Butler's work on performativity and intelligibility have proved central in feminist post-structural theorisations of gender and identity, and so will be discussed at some length. However, before I commence, it is important to clarify some of the key terms that I will use in this thesis.

As alluded to above, the notion of 'identity' is of central importance in post-structural theory. Whereas humanist discourse presupposes that the individual has a unified, fixed and coherent core, post-structuralism rails against any notion of stable self, instead proposing that identity is precarious, contradictory and always in flux, re/constituted in discourse as we give voice to our experience (Weedon, 1997; St. Pierre, 2000). In order to mark this important break in thinking, some post-structuralists have advocated the use of new language. In particular, many post-structural scholars have sought to use the term 'subjectivity' in place of 'identity' in order to more accurately signify 'the conscious and unconscious thoughts and emotions of the individual, her sense of herself and her ways of understanding her relation to the world'. (Weedon, 1997: 32). In this thesis, I will use both the terms 'subjectivity' and 'identity' interchangeably, favouring subjectivity, but also retaining the terms identity/identities when grammatically appropriate in order to retain textual flow, and when referring to the work of theorists who have also retained these terms. However, it should be noted that when I do refer to identity/identities, I am doing so in line with post-structural notions of a fluid and multiple, rather than stable and fixed 'self'.

Post-structuralism and subjectivity

It is difficult to provide a definitive overview of post-structuralism as different academics use post-structural ideas in different ways and for various purposes (Weedon, 1997). Indeed, Gavey (1989: 460) asserts that the term 'post-structuralism' is relatively broad as it refers to:

'...a loose collection of theoretical positions, influenced by, for example, post-Saussurean linguistics, Marxism...psychoanalysis...feminism, the "new French feminists" (Kristeva, Cixous, Irigaray) and the work of Derrida, Bathes and Foucault.'

However, post-structuralism is generally seen as a response to structuralism – a school of thought which saw society, culture and language as coherent systems that gave logic and meaning to the social world (Weedon, 1997). In contrast to this, post-structuralism contends that reality is not unified, but instead consists of multiple and often contradictory facets that are subjectively interpreted by individuals (St. Pierre, 2000). Central to post-structuralism also lies the belief that subjectivities are not grounded in place and 'fixed' but are fluid constructions, and that individuals constantly position themselves within the socio-cultural discourses that exist in society (Walkerdine, 1989; Davies, 1989; Weedon, 1997). As such, in post-structuralism, subjecthood is not seen to be a problematic struggle between structure and agency¹⁴, but rather, structure and agency are thought to be 'seamlessly, simultaneously and irrevocably both' (Whitehead et al., 2013: 44).

Feminist post-structuralism and gender

Many of the theorists considered to be key post-structural 'thinkers' did not write explicitly or politically about gender and the formation of gendered subjectivities (e.g. Foucault, Derrida, Deleuze, Guattari). However, many feminist academics have since appropriated post-structural ideas in order to describe how the subject is constituted and how gender is experienced and performed. Francis and Skelton (2005) assert that post-structural thinking has taken root in feminist inquiry because some of the central tenets regarding power and discourse have

¹⁴ The 'structure/agency' debate is a classic sociological dilemma concerning the extent to which individuals are determined by social structures or are free and agentic individuals.

been able to explain the actions of those who resist or contradict hegemonic gender identities more effectively than theories such as sex-role socialisation. Post-structuralism also enables the deconstruction of gender itself, which is particularly useful to feminist academics. Rather than claiming that men's and women's identities derive from their biological make-up and are therefore 'natural', feminist post-structural theorists insist that 'maleness' and 'femaleness' are merely produced in and through discourse. As a consequence, post-structuralism offers the possibility of producing a counter-discourse as a means of challenging the existing order – one in which feminist interests are privileged (Weedon, 1997; Jones, 1993).

Some writers have, however, questioned the compatibility of post-structuralism and feminism. Youdell (2006a: 33) asserts that post-structural ideas have been charged with: 'relativism, self-indulgence, an evacuation of politics and a failure to take account of, speak to, and be useful in the real world'. This is problematic, as post-structuralism could be seen to undermine the political project of feminism which demands a unified resistance to male oppression (e.g. Francis, 1999; Assiter, 1996; Butler and Scott, 1992; Ramazanoglu and Holland, 2005). However, as Youdell (2006a) points out, post-structural thinkers do not seek to reject material conditions and political concerns, but instead recognise that structural understandings of the world are insufficient to explain the complexity of social life. As such, post-structural researchers move beyond structural understandings of gender as they reconfigure our understanding of history, power and knowledge, introducing the concept of the subject situated in, and constituted through discourse (Foucault, 1972, 1977).

A number of writers have identified several key features that are thought to be central to post-structural theorisations of the subject. These include: the fluidity and impermanence of language, discourse, the historically produced and shifting nature of subjectivity, power, performativity and intelligibility (e.g. Weedon, 1997; St. Pierre, 2000; Youdell, 2006b). In the following section, I will examine these key features in greater depth and consider how these concepts contribute to a feminist understanding of gendered subjectivity. These ideas represent the way in which gender will be conceptualised in this project.

Language and subjectivity

According to post-structuralism, language is of critical importance as it both produces and circulates the representations of reality that are presented to us (Weedon, 1997). Consequently, language is said to construct subjectivity by determining those discursive signifying practices that we take up (Butler, 1990). One of the key theorists drawn upon by post-structural writers is the structural linguist Ferdinand de Saussure (1974). Saussure asserted that language is not a stable and coherent system used by individuals in order to describe a universal and unchanging reality, but rather, is produced by language. Saussure theorised that we derive a shared meaning from the language we inherit which consists of chains of *signs*, where each sign is made up of a *signifier* (written or spoken word) and a *signified* (its concept or meaning). For example, the signifier 'woman' signifies the entity that is 'woman', but the signified refers to our mental impression of what 'woman' is. Yet, crucially, Saussure states that there is no logical connection between the signifier and signified, asserting that the meanings we attach to signifiers are arbitrary. Thus our mental impression of 'woman' might give rise particular associations (e.g. caring, nature, feminine, passive), yet according to Saussure, these qualities are not inherent within 'woman' but are subject to change across time and culture.

Whilst in agreement with Saussure that language produces rather than reflects reality, post-structuralists move beyond this understanding of sign, signifier and signified. Derrida (1967, 1973) critiques Saussure for 'fixing' the meaning of the sign and instead posits that language itself is contingent and open to multiple interpretations. According to Derrida, the 'I' who interprets signs and signifiers is inherently unstable, and thus there is no absolute meaning in language. Rather, individuals are in a constant process of *deconstruction*, trying to interpret language and its complex contradictions. Indeed, Derrida asserts that what is absent in language is as important as what is present, and therefore our subjectivity is created in recognition of what we are not as much as what we are. For example, Whitehead et al. (2013) assert that saying 'I am a woman' entails that one is not a man. This renders our sense of being in the present dynamic and uncertain – a process which Derrida terms *différance*. Feminist writers such as Cixous (1994), Irigaray (1985) and Kristeva (1986) have since developed these ideas in order to challenge the masculinist nature of language

that is said to produce both the individual and society, which ties that which is 'feminine' to the subordinate side of the hierarchical binaries which underpin language (e.g. man/woman, mind/body, rational/emotional).

Discourse

Whilst it is important to recognise the deconstructive meanings contained within language, we still require an understanding of how power dynamics operate within language in order to grasp how individuals might take up or resist specific gendered subjectivities. One of the most influential writers on this issue was the French theorist Michel Foucault (1977), who introduced the concept of *discourse*. Foucault introduced the concept of discourse as a means of understanding the relationship between 'language, social institutions, subjectivity and power' (Weedon, 1997:35). According to Foucault (1972, 1977, 1980), discourses are bodies of knowledge that are taken as 'truth' which give meaning to social life and offer individuals a range of modes for subjectivity. Weedon (1997) notes, for example, that our social structures are organised through various institutions and practices such as the law, the political system, the family, the media and the education system, which are in turn located in discursive fields. Within these discursive fields exist a number of competing discourses of meaning or 'truth', each carrying different weight or power. Weedon notes that hegemonic discourses work to maintain their status by portraying alternative and competing discourses as wrong or erroneous.

A critical aspect of Foucault's concept of discourse is the idea that even though discourses are taken to reflect 'truth', they actually *produce* truth. According to Foucault (1990), language (i.e. text and speech), images and gestures are all constituted by discourse as they repeat an inscribed system of meaning. However, these discursive practices also contribute to the ongoing constitution of discourse as they simultaneously inscribe a wider system of meaning. As such, Youdell (2006b) notes that discourse becomes circular: 'discursive practices constitute discourse at the same time as being constituted by discourse' (p. 35). This leads Hossain et al. (2013: 37, italics in original) to state that: 'The power of discourse is *both* oppressive, in setting limits on what can be, *and* productive, in offering us possibilities for being at all'.

Feminist academics have drawn upon Foucault's concept of discourse in order to explain the power dynamics involved in the constitution of gendered identities (e.g. Davies, 1989; Walkerdine, 1989; Weedon, 1997; St. Pierre, 2000; Youdell, 2006b). These academics observe that, in society, there exist a number of hegemonic discourses regarding gender; for example, the dominant discourse of femininity posits the female as being quiet, passive, caring, emotional and naturally different from the male. Consequently, a mother might reprimand their daughter for engaging in 'masculine' tomboy behaviours that do not conform to the discursive feminine ideal. These gendered discourses which exist 'both in written and oral forms and in the social practices of everyday life' (Weedon, 1997: 111) present a 'truth' about individuals that is regulatory inasmuch as it suggests that individuals should acknowledge the truth and act it out. However, according to Foucault (1977), whilst these discourses of truth are powerful as they persuade us to conform, they are not passively taken up by individuals – indeed, some individuals may come to modify or reject such discourses. Yet no subject resides outside of discourse and our subjectivity is always said to be informed by a particular constellation of discourses, such as those of class, race, gender, ability and sexuality (Youdell, 2006a).

According to Foucault (1977, 1990) hegemonic discourses are not, however, stable and inert even though they are commonly assumed to reflect some absolute truth. Rather, Foucault asserts that discourses are historically located and may change from one moment to another. In relation to gender, what it means to be 'masculine' or 'feminine' is not, then, rooted in biology or ideologically imposed upon us, but is 'discursively laid out before the subject through language, signs, symbols and practices', ready for the subject to take up in their own way (Whitehead et al., 2013: 50). Moreover, these dominant gender discourses are liable to change over time and across different cultures. However, the historicity of discursive practice means that some discourses are bound to dominate (Foucault, 1972).

Discourse and power

As noted above, Foucault (1977, 1980) asserted that whilst discourses of truth are powerful as they persuade us to conform, they are not taken up passively by individuals. This marks an important break in thinking, because in the sociology of education and the social sciences more widely, there has been a

tendency for researchers to conceive of power as something that is possessed and exerted over others (see Davies, 1989; Paechter, 2000; Youdell, 2006b). For example, Marxist and other liberal humanist theories rest on an *a priori*¹⁵ conceptualisation of power and intent whereby certain individuals or groups are believed to have a vested interest in maintaining their hegemonic dominance over others and are seen to exercise their power accordingly (Whitehead et al., 2013). However, Foucault offers us a new way for understanding power relations. Foucault asserts that power does not flow in a linear direction (as in a traditional hierarchy), but is multiple, fluid and constantly circulates among people:

‘Power is not something that is acquired, seized or shared, something that one holds on to or allows to slip away; power is exercised from innumerable points, in the interplay of nonegalitarian and mobile relations.’

(Foucault, 1990: 93-94)

As such, power is not something that is possessed and wielded over others but is embedded in the day-to-day interactions between individuals and in the practices of institutions (Jackson and Mazzei, 2012). Foucault consequently formulates a conception of power that is not simply prohibitive or repressive, but also productive:

‘What makes power hold good, what makes it accepted, is simply the fact that...it traverses and produces things, it induces pleasure, forms of knowledge, produces discourse.’

(Foucault, 1980: 199)

When transposed to the realm of gender subjectivity, Foucault’s conceptualisation of power suggests that whilst individuals are subject to a number of hegemonic gender discourses regarding masculine and feminine ‘ideals’ (disseminated through speech, text, social practices and social institutions), gendered subjectivities are actively negotiated by individuals

¹⁵ ‘A priori’ refers to knowledge that does not require evidence or empirical experience to justify or validate its substantive claim, but instead relies on theoretical deduction.

through micro-scale interactions on an everyday basis (Weedon, 1997). As such, moments arise when we are able to subvert or challenge dominant gender norms *within* the terms of gender (Butler, 1997).

Performativity

As noted in the two preceding sections, according to post-structural theory, language and discourse create the subjectivity that is required for individuals to emerge as distinct actors in the social world. However, if in post-structuralism the self or 'I' is merely a fiction created and sustained through language and discourse and 'there is no 'being' behind the doing' (Nietzsche, 1887: 29), this raises the question of how we manage to feel so complete and unified (Whitehead et al., 2013). Judith Butler seeks to address this ontological dilemma through her concept of 'performativity' which she first outlined in her seminal work *Gender Trouble* (1990), and developed in her later works *Bodies that Matter* (1993) and *Undoing Gender* (2004).

Butler (1990) begins from the position that the construct of 'sex' is as equally fabricated as that of 'gender'. As such, Butler contends that bodies do not have an essential pre-given sex, but that bodies are rendered intelligible through gender, which is a continual act. Indeed, Butler asserts that gender is not innate to our being but is performatively constituted – thus to be feminine is to perform 'femininity'. Drawing on Foucault's theory of discourse and power and Derrida's work on the nature of language, Butler argues that the performative is not, however, a performance in the normal sense of the word, but that gendered discourses are 'citational' as they bring into being that which they name. For example, Butler (1993: 232) states that by saying 'It's a boy' or 'It's a girl' at a child's birth, existing knowledges and discourses of sex are drawn upon which in fact materialise sex – a process of 'hailing' subjects which Butler terms *interpellation*, as borrowed from Althusser (1971). Consequently, despite Enlightenment discourses that impress upon us that both our sex and gendered 'selves' are fixed and stable, our masculine and feminine identities are said to be produced through discursive performatives¹⁶ and reiterative performances,

¹⁶ Butler (1993: 13) defines discursive performatives as 'that discursive practice that enacts or produces that which it names'.

yet are experienced in such a way by performers that they are perceived as being 'natural' and 'authentic'.

Through Butler's concept of performativity, we can see that discursive performatives constrain subjects whilst at the same time constituting them – a point at which Butler's theory of performativity and Foucault's theory of subjectivation intersect (see Youdell, 2006b). Yet whilst Butler (1992) talks of gender as being performatively enacted, this is not to suggest that individuals have free will and are able to pick and choose their gendered subjectivities:

'...performativity' is not radical choice and it's not voluntarism...Performativity has to do with repetition, very often the repetition of oppressive and painful gender norms...This is not freedom, but a question of how to work the trap that one is inevitably in.' (p. 84)

Intelligibility and the heterosexual matrix

Butler asserts that performatives have to make sense in order to work – that is, our performances of gender have to be recognised in the discourses which circulate within particular socio-historical moments in order to be validated by others. Butler uses the term 'cultural intelligibility' to refer to the normative ideals of sex and gender that govern who can be recognised as a legitimate subject, thus determining who can live what Butler terms 'a liveable life' (1990: viii) – a life of value and legitimacy.

Butler (1990: 3) asserts that, at present, our gender identities are rendered intelligible through the 'heterosexual matrix'. According to Butler, the heterosexual matrix is a framework of meaning through which sex, gender and desire are signified. Butler states that we currently assume gender to follow naturally from sex, and desire to follow naturally from gender. As such, sex is thought to (biologically) determine masculinity, femininity and desire, where femininity is expressed through sexual desire for males and masculinity is expressed through sexual desire for females. 'Intelligible' genders are those constituted in a way that maintains the coherence of the heterosexual matrix, whilst 'unintelligible' genders are those that configure sex, gender and desire in a different way (e.g. gay, lesbian or bisexual individuals).

Yet whilst Butler suggests that our performances of gender are constrained by the power structures in which gender is located, this does not foreclose the possibility of resistance and subversion. Butler (1993) acknowledges that the heterosexual matrix is inherently unstable and open to transformation. Indeed, Butler asserts that because we are constantly re-creating our 'selves', moments arise when we are able to subvert or challenge dominant gender norms. Butler (1990) consequently states that certain performances of gender can blur the distinctions between the hierarchical dichotomies of 'masculine and feminine' and 'gay and straight', thus serving to disrupt or displace 'the very gender norms that enable the repetition itself' (p. 148). Yet Butler (1993) also acknowledges that these subversions always involve an element of risk, as we cannot know in advance whether our performances will successfully subvert, or unintentionally reinforce the power order we oppose by confirming hegemonic boundaries¹⁷.

Feminist post-structuralism for education

Butler and Foucault's ideas have been taken up by educational scholars such as Paechter (2000), Nayak and Kehily (2006), Ringrose and Renold (2010) and Youdell (2006b, 2011) in order to theorise the production of gendered schooling subjectivities, thus facilitating an in-depth understanding of how educational inequalities and exclusions are re/produced. Indeed, Youdell (2006a) asserts that by focusing on learners as performatively constituted through matrices of intersecting and incommensurable discourses, we can see how:

'...markers such as race, gender, ability, sexuality, disability, social class come to be entangled with the sorts of learners that it is discursively possible, intelligible, for students to be – and how some students come to be impossible learners'. (p.40)

Whilst feminist post-structuralists emphasise that educational establishments are a key site in which inequalities and exclusions are produced, these researchers find post-structuralism useful for opening up the possibility of change. Youdell (2006a: 36) claims that because discursive performatives are

¹⁷ Butler (1993) gives the example of performances of drag that have been produced by the heterosexual entertainment industry that serve to confirm the boundaries between 'straight' and 'not straight' through parody.

deployed through language (e.g. 'girl', 'boy', 'teacher', 'clever', 'gifted', 'disruptive'), subjects do not precede their designation, and thus we have the opportunity to intercept and challenge performatives in order to transform students' lived experience. So, for example, writing in relation to girls and mathematics, Mendick (2005a, 2005b) argues that by interrupting and deconstructing the discursive performatives of mathematics as 'masculine', 'difficult' and 'objective', we can make mathematics more 'thinkable' for girls. In this study, such an approach is useful for 'opening up' and interrogating the complex and multifarious discourses that determine the extent to which women university students can construct themselves as being 'successful' learners in their chosen (gendered) discipline.

Accounting for the body: New material feminisms

Whilst post-structural ideas have gained increased traction in feminist educational research over the past three decades, criticisms have more recently been levelled against post-structuralism for its focus on the discursive at the expense of the material (e.g. Barad, 2007; Alaimo and Hekman, 2008; Francis and Paechter, 2015). It must be noted that, at present, theoretical thinking within feminist scholarship appears to be shifting towards a 'post-humanist' or 'new material' understanding of the world. Inspired by writers working within the fields of the sociology of science and technology (e.g. Barad, 2003; Haraway, 1991; Pickering, 2010) and by postmodern scholars who place a greater emphasis on the body, subjectivity and power (e.g. Deleuze and Guattari, 1983, 1987), a number of feminist educational researchers have sought to question the privileging of language and discourse over the material that occurs in many post-structural accounts of gender (e.g. Ringrose, 2012; Taylor and Ivinson, 2013; Ivinson and Renold, 2013; Mazzei, 2013). In particular, these academics are concerned that the 'fleshy' body has been overlooked, and that we have underestimated the impact that our sexed bodies have upon how our performances of gender are read by others.

Social constructionists and post-structuralists tend to assume that matter (i.e. bodies, institutions, objects etc.) are materialized through the 'norms' produced in historical discourse and discursive practice. These discourses are thought to constrain our behaviour, thoughts and desires, subsequently influencing how

we present our bodies and shape our material world (Frost, 2011). As such, the gendered body is not assumed to exist prior to its constitution within culture or discursive power regimes. The body is not thought to have ontological independence outside of culture, but is a 'necessity of construction' (Butler, 1989: 602). However, Kirby (2006) observes that this creates a paradox; social constructionists imply that culture creates the body, and yet the body is a prerequisite for the establishment of culture. Some constructionists have attempted to resolve this dilemma by arguing that our physical being is simply a phantasmical or ghostly 'appearance' until it is defined through culture (e.g. Butler, 1989, 1993). However, this still implies a Cartesian separation¹⁸ between nature and culture – a position that many feminist academics have sought to move away from due to the historical dualistic association between masculinity/mind and femininity/body that has been used to denigrate women as Other (Kirby, 2006).

In order to address this paradox, new material feminists wish to counter the proposition that the agency of matter is rooted solely in human action, and attempt to provide a more holistic account of the interactions between the social and material world (Braidotti, 2013). New material feminists assert that matter and biology have a distinct agency and have a reciprocal relationship with culture, cognition and the environment, which are all believed to work together to produce possibilities for knowledge and action (Frost, 2011). Yet in order to avoid biological essentialism which binds our identity to our genetic make-up, these feminist theorists seek to challenge our metaphysics of knowing and radically revise our traditional dualistic notions of ontology (the nature of being) and epistemology (how we come to know) (Hird, 2009). Barad (2007), for example, posits that language/discourse and material bodies/objects are ontologically – as opposed to only epistemologically – entangled. As a consequence, Barad (2007: 37) contends that realism is 'not about representations of an independent reality', but is concerned with our 'intra-acting within and as part of our world'. In relation to gender, Barad thus implies

¹⁸ The term 'Cartesian separation' refers to Renee Descartes' (1649) assertion that there is a distinct division between the mind and body – a belief that lay at the heart of the Enlightenment project (Paliyenko, 1999).

that gendered bodies do not pre-exist their interactions in the material world, but that one's gender identity emerges through individuals' entangled intra-actions.

This new material/spatial turn, or shift in research focus towards the places, objects and spaces in which social actors engage on an everyday basis re-emphasises the importance of the material, which has been somewhat neglected in postmodern and post-structural accounts since the 'cultural turn' in social science in the 1990s (Taylor and Ivinson, 2013). There are, however, some critiques of new material feminist work. Quinn (2013) points out that when such theoretical ideas are put into practice in empirical studies in education, post-humanist approaches tend to direct the research focus towards specific social events and the interactions between the material and the individual. This means that less attention is paid to social inequalities and the notion that one's social position can filter through and shape materiality. For example, Quinn (2012) observes that some young people are constrained by poverty and unequal access to education and housing, which impacts upon the material worlds in which they inhabit and the activities/material objects that they have access to. As such, Quinn (2013) questions whether the non-human/material should be afforded the same importance as the human in empirical studies, for fear of neglecting continued social inequalities that suppress individuals' materiality.

Such criticisms are well founded, however I feel that it is important that we do attend to the materiality of gender and do discuss the 'fleshy' body (without resorting to biological essentialism) in order to better theorise the complexities and nuances of gendered performance. Indeed, whilst post-structural accounts enable us to attend to the construction of subjectivity in talk, important questions linger regarding gender-power relations and the reproduction of entrenched patterns of gender inequality. In particular, questions have been raised about the role of the spectator/society in producing and/or rejecting legitimate gender performances (Francis and Paechter, 2015).

In this study, I have found Becky Francis' (2012) concepts of gender monoglossia and heteroglossia as re-worked from Bakhtin (1981, 1987) useful for theorising power relations in the creation of gendered subjectivities. I feel that Francis' theory – which merges structural and post-structural insights – goes some way towards reconciling tensions between agency/determinism and

materiality/discourse, better accounting for the complex and sometimes transgressive interactions between gender productions and sexed bodies (e.g. 'masculinities' performed by women). However, before I go on to introduce this theory in greater depth, it is important to understand how other educational researchers have sought to theorise gender in their work and highlight some attendant strengths and weaknesses, as these studies precede and inform Francis' theorisation of gender heteroglossia and monoglossia.

Researching gender in education: Multiple masculinities and femininities

The growing influence of post-structural theory in feminist educational research in the late 1980s and early 1990s led many researchers to re-focus their attention on gender-power relations amongst pupils in educational institutions such as primary and secondary schools. Francis (2000b) notes that it was during this period that feminist and pro-feminist researchers first sought to move away from a monolithic presentation of gender, and instead introduced the notion of multiple (and hierarchical) 'masculinities' and 'femininities' (e.g. Mac an Ghail, 1994; Reay, 2001). The concept of plural masculinities and femininities was said to reflect more accurately the different ways in which masculinity and femininity were constructed by pupils, in association with their ethnic, class and sexual identities, and distinct 'personalities' e.g. confidence, charisma etc. (Francis, 2000b).

Connell (1987) was one of the first academics to develop a theory of multiple masculinities and femininities that addressed issues of power and control. Drawing on Gramsci's analysis of class relations, Connell proposed that a hegemonic form of masculinity exists in society that is culturally dominant. The term 'hegemonic masculinity' was not intended by Connell to refer to a particular *type* of masculinity (i.e. a traditional, heterosexual, aggressive and macho form of masculinity), but was said to vary by place, time and context. Moreover, Connell asserted that masculinities were constantly changing and that hegemonic masculinity was always contestable by both women and other masculinities, even though it may try to maintain dominance over women and subordinated masculinities through control over institutional structures. Connell went on to assert that a range of femininities also exist that are relational, constructed in counter-position and subordination to masculinities. 'Emphasised

femininity' was said to represent a culturally dominant and exaggerated ideal of femininity, organised around compliance with the needs and desires of men. However, Connell asserted that this form of femininity could not be termed 'hegemonic' due to the asymmetrical position of masculinities and femininities in the gender order.

Whilst Connell's ideas were, and continue to be highly influential in the field of education, a number of researchers have since criticised the notion of multiple masculinities and femininities (e.g. Hawkesworth, 1997; Hood-Williams, 1997; MacInnes, 1998; Whitehead, 2002). MacInnes (1998) argues that sex and gender appear to be conflated in writings on masculinities and femininities because whilst such writers identify a series of different 'types' of masculinity and femininity, these types appear to be linked back to the sexed body. It has also been argued by academics that to suggest there is a hierarchy of masculinity and femininity with a hegemonic form at the top implies a fixity to gender that does not exist in reality, as men and women often engage in both masculine and feminine behaviours depending on time, place and circumstance (Francis, 2000b; Paechter, 2006).

In light of these criticisms, a number of researchers have sought to find an alternative framework for analysing the production of gender that avoids conflation with sexed bodies. Building upon the work of Judith Butler (1990), Halberstam (1998) challenges the assumption that masculinities automatically follow from male bodies and that femininities automatically follow from female bodies. Thus women can be said to perform 'female masculinities' and men can be said to perform 'male femininities'. However, in line with Connell (1987), Halberstam argues that masculine forms of female identity are not the same as male masculinities as they are not associated with dominance and control.

Yet Halberstam's theory has also been subject to criticism. Some academics argue that Halberstam fails to appreciate the important role that embodiment plays in creating and maintaining our gender identities (e.g. Paechter, 2006; Connell, 2008; Francis, 2012). Francis (2012) argues that our sexed bodies and gender interact to mutually inform both how we create our 'selves' and how others see us, and thus Halberstam's thoroughly discursive approach neglects the social constraints on our agency. Paechter (2006) also questions the vagueness of the terms 'masculinity' and 'femininity' used by Halberstam and

points out that there is only a broad agreement as to what masculinity and femininity actually are. Indeed, Paechter states that in Halberstam's theory, masculinity and femininity are assumed to have a fixed meaning or core. However, Paechter counter-argues that masculinity and femininity are complex entities that shift according to context, asserting that Halberstam risks reifying particular characteristics as masculine or feminine.

Gender monoglossia and heteroglossia

As is evident from the above discussion, there is no agreement amongst researchers as to the 'best' way to conceptualise and empirically examine how individuals construct masculine and feminine identities, as each approach has attendant strengths and weaknesses. However, it seems imperative that we employ a framework for analysing masculinity and femininity that takes into greater account the impact that the material body has upon how we perform gender and how we are perceived by others. To do otherwise risks the body being seen as an inert 'object' that is subject to the processes of social construction (Connell and Messerschmidt, 2005). Indeed, bodies are intricately interwoven with social processes, and who we are is inextricably bound-up with our physicality. For example, in the field of education, numerous researchers have documented how some pupils find it incredibly difficult to 'fit in' with their peers and perform well academically if they do not embody the physical/aesthetic ideals that are highly prized in Western society that constitute the 'ideal' student (e.g. Reay, 2001, Renold, 2001; Rich and Evans, 2009; Warrington and Younger, 2011).

The recent theorisation of gender put forward by Becky Francis (2008, 2010, 2012) appears to have the potential to rupture the connection between gender and sexed bodies, whilst also adding nuance to our analyses of gender production when conducting empirical studies. Francis draws upon Mikhail Bakhtin's (1981) concepts of monoglossia and heteroglossia originally developed in relation to language and literature in order to understand how individuals incorporate aspects of both masculinity and femininity into their performances of gender, simultaneously reflecting and maintaining power relations. In the sections that follow, I will outline Francis' reworking of Bakhtin's

theory of language in greater depth, as such insights underpin how gender is conceptualised in this study.

Monoglossia, heteroglossia, language and gender

According to Bakhtin (1981), language is not a fixed and neutral system of meaning but reflects and produces power relations. Bakhtin asserts that dominant forms of language exist which represent the worldview of dominant social groups, and are presented to us as if they are unitary and total – something which Bakhtin terms ‘monoglossia’. However, Bakhtin asserts that whilst at the macro-linguistic level there exists an illusion of stability and unity, on the micro-linguistic everyday level, language is constantly in flux because different meanings and readings of language are constantly being taken by individuals depending on their socio-historical and local context. As such, contradictions or resistances to the monoglossic system emerge – a process which Bakhtin refers to as ‘heteroglossia’. Thus, for Bakhtin, *context* is of paramount importance in understanding how power is exerted through language, as all utterances are said to be produced through interaction and are embedded within specific socio-historical periods.

Francis appropriates this theory of language and transposes it to the study of gender. Francis (2012) asserts that masculinist social epistemologies can be viewed as monoglossic because masculinity has historically been privileged over femininity. Indeed, Francis states that in our dominant (monoglossic) understanding of gender, masculinity and femininity are dualistically linked with the male and female sexed body. This system is based upon a sex/gender binary which privileges the male/masculine and denigrates the female/feminine as Other (de Beauvoir, 1949; Cixous 1994). Francis (2012: 5) notes, for example, that since the Western Enlightenment, those attributes or characteristics that are highly valued in our society are constructed as masculine (i.e. ‘rational, strong, active’), whereas those attributes that are denigrated are constructed as feminine (i.e. ‘emotional, weak, passive’). Whilst Francis acknowledges that this binarised account has to some extent shifted

over the past few centuries¹⁹, she claims that this hegemonic understanding of the gender order has largely been seen as natural, common-sense and inevitable. Yet in line with Bakhtin's understanding of language, such appearances of stability and fixed 'truth' within the monoglossic gender system are simply a facade, as gender is fluid and constantly emerges from users who are differently located – that is, dialogic heteroglossia is always present within the monoglossic gender system.

The monoglossic gender matrix

Drawing on Bakhtin's (1981) analysis of language as a series of different motifs or matrices (e.g. food, drink, death, sex, abandon) which operate in different literatures in order to frame 'reality', Francis (2012) goes on to assert that the dualistic gender binaries that exist in Western society which ascribe features as either masculine or feminine²⁰ can be seen as a *monoglossic gender matrix* which has become deeply embedded in our socio-historical and cultural discourses. Not only this, but Francis (2012:6) states that this monoglossic account of gender is not benignly imposed, but is stabilised and propagated through the political forces that operate in specific socio-economic periods:

'These gender binaries saturate our language and cultural outputs, immersing us in chains of signification so familiar and incessant that they comprise the very fabric of our lives, desires, comfort and phantasy... This saturation, and the 'truthfulness' of the binary perpetuated by multifarious, myriad, tyrannical repetition, provides an educative case of monoglossia in action.'

In this way, Francis argues that we can see individual performances of gender as comparable with Bakhtin's notion of utterances in a sentence; our individual performances are believed to link together and act as signifying chains, either

¹⁹ Francis (2012) observes that our notions of masculinity and femininity are not static and inert but have changed over the centuries. For example, in the Elizabethan period, a foppish and peacock-like version of masculinity was highly celebrated, but this ideal shifted during the Victorian era when masculinity was re-inscribed as stoic, muscular and physical due to the influence of Christianity (Whitehead, 2002) – characteristics which arguably define masculinity to this day.

²⁰ Francis (2012: 6) gives the examples of: 'mind/body; rational/emotional; truth/dissemblance; active/passive; hard/soft; Subject/Other'.

building upon or resisting dominant discourse, all performed within the inescapable gender matrix. However, whilst resistant heteroglossic performances might seek to undermine monoglossic accounts, monoglossia is strongly aligned with repetition and reification which serve to reinforce a 'totalising' world view and mask heteroglossic contradiction and dissonance (Bakhtin, 1981, 1987). Francis (2012) notes that it is at this point in which Bakhtin's theory links closely with Judith Butler's (1990, 1993, 2004) work on gender performativity and the heterosexual matrix. Indeed, Butler (2004) argues that whilst the heterosexual matrix renders alternative expressions of gender and sexuality possible, such subversive expressions are often difficult to perform in the social world (e.g. intersex, transgender identities, butch women, effete men etc.).

Gender genres

Drawing on Bakhtin's (1981, 1987) work on speech/language 'genres', Francis (2012) states that we can view individuals' monoglossic performances of gender across different places and spaces as 'gender genres' which, despite being shot through with contradiction, function as a whole to uphold the monoglossic system. According to Bakhtin (1981), different elements of language (such as content, style and structure) work together to support the monoglossic system in spite of heteroglossic resistance. These different elements are said to mobilise to constitute the substance of utterances, determined by the nature of the sphere of language in which utterances are used. Francis transposes this concept to the production of gender and argues that different performances and readings of gender function to counteract or negate potentially disruptive heteroglossic aspects without troubling the monoglossic whole. Drawing on one of her empirical studies in education in order to illustrate (Francis et al., 2010), Francis (2012) notes how high-achieving and popular students often manage to promote an overall monoglossic performance of gender despite their performances being inflected with heteroglossic contradiction²¹ by masking or balancing out their subversive behaviours. Francis states that for girls, this means engaging in heterosexual femininity and retaining a strong interest in

²¹ That is, engaging in behaviours associated with the opposite sex such as boys who prioritise academic work, and girls who display single-mindedness, drive and a determination to succeed.

stereotypically feminine pursuits such as fashion and celebrity, whilst for boys this means engaging in heterosexual masculinity and demonstrating a good ability at, and interest in sport.

Addressivity

In Bakhtin's (1981, 1987) work on language, the concept of 'addressivity' is of key importance and Francis (2012) appropriates this concept in order to bring the material body back into our empirical analyses of gender identity. According to Bakhtin (1987: 68), language is not a fixed system removed from social context but is 'inherently responsive' because there is a relational reciprocity between the speaker/author and listener/reader of language. Whilst many constructivist language theorists claim that 'audiences' construct meaning from language, Bakhtin goes further than this and argues that language is reciprocal because both speakers and listeners are situated in, and informed by historical discourses which inform both the speaking and hearing of utterances. Francis (2012) appropriates this idea and argues that gender cannot be understood by simply examining the role that spectators play in shaping our gender identities. Rather, various discourses underpin both our gender performances *and* how our performances are read by others – i.e. the 'addressivity' of gender production (p.9).

Francis (2012) asserts that gender is a *mutual* construction because both the individual and spectator work together to produce meaning. For example, Francis notes that if an individual's performance of gender is rejected by a spectator, this affects the producer's authenticity and subjectivity. Consequently, the spectator and individual are both believed to have power and are said to be 'dialectically merged', because 'one is impossible without the other' (Bakhtin: 1981: 282). As such, Francis observes that material bodies take on a particular significance. Indeed, following Bakhtin, Francis (2012) argues that it is the local level *context* in which our performances of gender are read by spectators that is of critical importance in helping us to understand the production and readings of gender, for it is spectators' readings of 'sexed' bodies that inform the signification of characteristics produced in interaction. Francis gives the example of how 'aggressive' behaviours in a boy/man may be

read as 'bitchy' if performed by a woman (p.10).

The strengths of gender monoglossia and heteroglossia for theorising gender in educational contexts

Francis' re-working of Bakhtin's theory of language seems particularly valuable in helping us to conduct empirical analyses of gender in educational contexts, as it enables us to appreciate the multiplicity of gender identities produced by young people as they go about their daily lives without tying gender to the sexed body – a theory which Francis (2012: 3) argues is more accommodating than those of either "female masculinity/male femininity' or 'multiple masculinities/femininities". This is particularly important in this study, as a key body of literature relating to gender and STEM exists which suggests that girls and young women who pursue STEM at non-compulsory level can find it difficult to reconcile hetero-normative feminine subjectivities with STEM subjectivities as the latter are heavily inscribed as 'male' (see Chapter 2). Some scholars have theorised this tension by arguing that girls/women who pursue STEM at post-compulsory level are in effect 'doing' masculinity (e.g. Mendick, 2005a). However, as we saw in relation to Halberstam's work on female masculinities, this is problematic as it risks stereotyping or reifying certain behaviours as masculine. If, then, women students' performances of gender can be understood as incorporating both masculine and feminine 'traits' relative to context, we can begin to unpick the nuanced ways in which gender-power relations operate within the university. This facilitates a more durable structural account of power than post-structural theories allow (Francis, 2012).

Conclusion

In this chapter, I have sought to outline the key theories which underpin this research project that frame how gender and subjectivity are conceived and will be conceptualised in this thesis. Having now outlined this theoretical framework, I will move on to expand upon my chosen methodology.

Chapter 4

Methodology

Introduction

This chapter outlines the methodology and methods used in this study. In the first half of the chapter, I introduce my case study research design and explain the rationale behind selecting this approach; a particular emphasis will be placed upon the epistemological and theoretical concerns which led to a case study approach being adopted. The second half of this chapter discusses the practicalities and processes of the research. First, I introduce the university setting in which this study took place, before moving on to outline my sampling procedures. I then go on to provide details of the women who took part in this project, before discussing my chosen methods (which included focus group interviews and case studies of individual women students, incorporating participant-kept diaries, in-depth interviews and email interviews), justifying their use in relation to the epistemological orientation of this project. Finally, I move on to explain how I addressed ethical concerns in this project, before outlining my data analysis procedures and choice of write-up technique.

A case study research design

As this study is informed by post-structural theorisations of the 'self' and the notion that women's gender and academic subjectivities are not fixed in place but are developed in discourse and through interaction with others (Weedon, 1997; Butler, 1990, 2004; Youdell, 2006b), I wanted to explore women's subjective experiences whilst studying at university and the multiple meanings that they attach to the situations in which they find themselves (Lichtman, 2012). I therefore sought to obtain in-depth data exploring the complex 'identity work' conducted by the women (Schutz, 1972), so that I could build up a 'thick description' of their lived experience (Geertz, 1973: 10).

Whilst there are a number of research approaches that lend themselves to the collection of such data (see Creswell, 2012), in this study, I chose to employ a case study design (Stake, 1995, 2005). Case studies have long been used in educational research in a variety of ways and for varying purposes. Perhaps

two of the most famous examples are David Hargreaves' (1967) exploration of Lumley Secondary Modern and Stephen Ball's (1981) study of Beachside Comprehensive. These researchers implemented ethnographic case study designs using multiple methods in order to understand how the schooling processes of banding and setting worked to shape pupils' learner identities. In other educational case studies, researchers have sought to lower the unit of analysis and have examined the lived experience of either a number of individuals, or just one person. For example, R.W. Connell (1985) explored the professional lives of a small number of teachers in Australia, assessing how the social structures of gender and class shaped their classroom practices. Ball et al. (2000) conducted a series of narrative case studies with 59 young people residing in South London from 1995-1999 in order to understand their decision-making and pathways post-16. In contrast, Diane Reay (2004) traced the educational biography of one white, working-class boy in her case study 'Shaun's Story', highlighting how the social axis of class, gender and ethnicity intersected in order to determine Shaun's schooling experience.

Hammersley and Gomm (2000) assert that it is difficult to define 'case study' as a research approach because the term is not used in a clear and fixed way. They observe that there is often an overlap between the terms 'case study' and 'ethnography', 'participant observation', 'fieldwork', 'qualitative research' and 'life history'.' (p.1). However, Stake (2005: 444) asserts that the important distinction between case study and other research approaches is that case study involves the examination of a 'bounded system' which exists independent of inquiry, with the researcher respecting the boundaries of the case and seeking to describe and understand the lives of those populating the case.

Whilst case studies can be conducted in various ways by researchers and can involve the use of different data collection methods – including qualitative methods, quantitative methods or a mixture of the two, depending upon the philosophical, epistemological and theoretical beliefs of the researcher – Hammersley and Gomm (2000) argue that researchers employing a case study approach tend to:

- investigate a relatively small number of cases (sometimes just one case)
- gather information on a large number of features of the case
- study cases in their natural settings

- prioritise qualitative over quantitative data
- concern themselves with understanding the case itself, rather than seek to generate empirical generalizations or theoretical inferences.

An embedded single case study design

The unit of analysis in case research study designs can vary greatly; from a single person to a local community, from a village to an entire country (Bryman, 2008). Case studies can also focus on something other than a physical entity such as an event, issue, programme or process. Thus, it is fundamental that the researcher defines the boundaries of their case at the outset of their project (Silverman, 2005). However, Bryman (2008: 53) warns that we must be careful when applying the term 'case study' to a research design as we must make a decision as to whether the case in question (e.g. a location, community, organisation, institution, etc.) is of interest in its own right, or acts as a mere 'backdrop' to the findings of the study.

In this project, the research design which I have adopted is the 'embedded single case study' (Yin, 2009: 46) because the research was carried out at just one site – one high-performing British university – but incorporated multi-level analysis. Whilst I wanted to gain a wider understanding of the university setting in which the women students studied, I also wanted to focus attention upon exploring women's experiences in considerable depth, bringing their narratives to the fore (McLeod, 2011). I therefore opted to conduct a small number of case studies of individual women students studying a variety of science/arts disciplines. Yin (2009: 50) asserts that when a case study involves more than one unit of analysis and when attention is given to a number of subunits, the study may be called 'embedded' (see Figure 1):

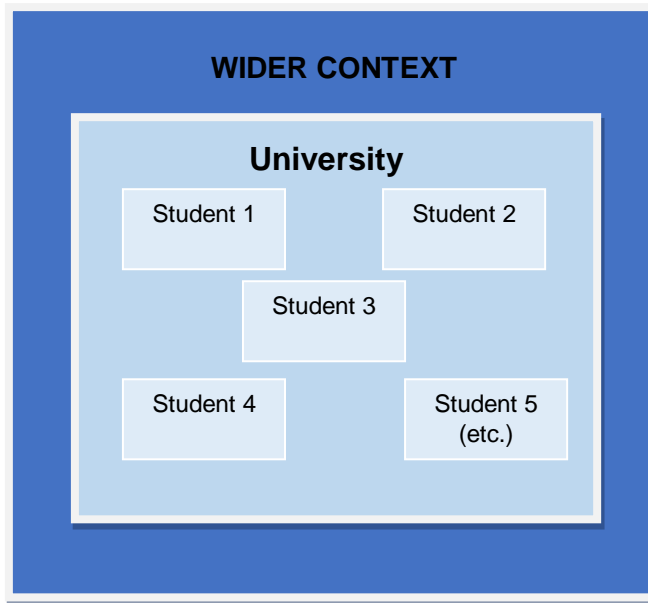


Figure 4.1 – Embedded single case study design applied to my case, adapted from Yin (2009: 46)

The advantage of embedded case study designs are that the researcher can build up a great deal of detail about the case, thus investigating social phenomena in a holistic way (Yin 2009). Yin does caution that researchers can run the risk of concentrating on the subunits to the exclusion of the case in embedded designs, however it should be noted that, in this study, greater emphasis was *intentionally* placed upon understanding the subunits (i.e. the women) than on understanding the case itself (i.e. the university). This is because the primary focus of this project is to understand how women construct their academic and gender identities in a university context, rather than on the processes and procedures of the university under study. Indeed, in this thesis, I wanted to foreground women’s experiences and privilege their ‘voices’²² over those of other actors in the university setting (e.g. lecturers, tutors, lab staff, administration and support staff, etc.). This is something that has often been neglected in studies of student’s ‘gendered’ experiences in HE (Seale, 2010; McLeod, 2011).

²² It should be noted that, in this study, I do not see the giving of ‘voice’ as a simple methodological strategy by means of making sure women’s views are ‘heard’. Rather, like McLeod (2011: 185), I see voice as a ‘communicative practice’ involving concerted listening on the part of the researcher, so that the range of discursive registers from which individuals speak are successfully captured.

Qualitative case study – a feminist research approach?

In this study, I opted to employ a wholly qualitative case study design (Stake, 2005). The specific methods that I opted to use included: focus group interviews, participant-kept diaries, in-depth interviews and email interviews. I felt that qualitative methods would better enable me to answer my research questions which focus upon deeply understanding 'how' women construct their gender and academic identities whilst studying at a high-performing university, in intersection with other social axis such as class, ethnicity, age, sexuality, dis/ability etc. (Lichtman, 2012). These qualitative methods were also philosophically congruent with the feminist post-structural theoretical orientation of the research, which breaks away from the ontological and epistemological assumption that there exists an objective reality which can be 'known' through scientific methods (Pring, 2000; Denzin and Lincoln, 2005).

Whilst by no means a straightforward relationship, qualitative methods have long been linked with feminist social research (Olesen, 2005). During the 1970s-80s, questions were increasingly being asked by feminist scholars about the existence of a 'feminist method', in response to a growing sense of anger that academic knowledge was largely controlled and generated by men and focused on solving 'men's problems' (e.g. Smith, 1974; Miller, 1976; Harding, 1987; Gilligan, 1977; Code, 1981). These scholars largely sought to criticise positivism and its associated quantitative methodologies for practising a detached and objective science which rendered the research subject a mere 'object'. Perhaps the most famous critique was that put forward by Anne Oakley (1981) who set about challenging the 'masculinist' standardized and detached interview approach advocated by positivist and post-positivist researchers. Oakley counter-argued that the best (and most ethical) way to obtain knowledge about a person was to create a non-hierarchical research relationship, with the researcher 'prepared to invest his or her personal identity in the relationship' (p.41).

Whilst these ideas proved highly influential, such perspectives were themselves later subject to critique, with other feminist academics seeking to question the assumption that power differentials can ever be eradicated in the research

process due to the structural differences between women which impede 'full knowing' (e.g. Riessman, 1987; Cotterill, 1992; Edwards, 1990; Ramazanoglu, 1989; Ribbens, 1989). Indeed, questions were raised as to whether white, middle-class women who customarily hold research positions could ever understand the experiences of women from different 'races' and economic backgrounds (Hale, 1991; Patai, 1991; Wolf, 1996). Researchers such as Cotterill (1992) also cautioned that overly collaborative and 'friendly' research techniques had the potential to exploit participants, encouraging women to divulge highly personal and private aspects of their lives. In fact, Doucet and Mauthner (2006) assert that by the late 1980s, many feminists sought to oppose the idea that any research methods or methodologies were inherently feminist.

Despite this, Doucet and Mauthner (2006: 40) note that feminist academics have 'embraced particular characteristics in their work.' Indeed, Doucet and Mauthner outline three basic principles which they feel underpin feminist research. First, they assert that feminist research should be 'not just on women, but *for* women and, where possible with women' (p.40). They also assert that feminist research should be concerned with bringing about social change and social justice as based upon emancipatory goals (also see Skeggs, 1994; Ramazanoglu and Holland, 2002). Finally, they state that feminist researchers should engage in 'methodological innovation through challenging conventional or mainstream ways of collecting, analysing and presenting data' (p.40). Doucet and Mauthner note that feminist researchers initially did this by challenging positivist frameworks (which rely heavily on quantitative methods), which attempt to 'factually' document individuals' lives. However, they assert that many feminists have more recently sought to embrace and employ quantitative methods, thus rupturing the historical link between feminist research and qualitative methods (e.g. Oakley, 1998; McCall, 2005).

Despite the increasing plurality of methodological and epistemological approaches utilised by feminist researchers in recent times, there still exists a close affinity between feminism and qualitative methods (Olesen, 2005). Indeed, qualitative research methods are believed to better allow feminist sensitivity to come to the fore, and privilege women's voices in an emancipatory

way (Mies, 1993; Maynard, 1998; Skeggs, 2001). These are principles that I am keen to uphold in this research project.

A qualitative longitudinal (QL) case study approach

Advocates of the case study approach such as Merriam (1998), Stake (1995, 2005) and Simons (2009) have argued that qualitative case studies should ideally be conducted over a period of time, so that the researcher can gain a deeper understanding of the phenomenon/individuals under study. As a consequence, I decided that my individual case studies should adopt a longitudinal design, and that women's university experiences should be documented over a period of 9 months (i.e. one academic year). A longitudinal element was also incorporated into the research in order to be sensitive to the post-structural emphasis on the fluid and changeable nature of the 'self', and the idea that the meanings that individuals attach to their behaviour and surroundings can shift over time (Davies, 1989; Weedon, 1997; Skeggs, 2001).

Whilst some have argued that time is not the only determining methodological principle and that it can sometimes be compromised, many have suggested it is important that qualitative researchers are not 'blitzkrieg' in their research approach (Rist, 1980; Jeffrey and Troman 2004). I felt that 9 months should allow me time to explore how women's experience of studying at university shaped their perceptions of their course and their academic achievement, moving beyond the usual 'snapshot' accounts of student experience in HE (Neale and Flowerdew, 2003; Finn, 2015).

Comparison

Whilst this study is concerned with exploring the experiences of women studying either a STEM or arts/humanities discipline, I should emphasise that I am not conducting a comparative case study and do not intend to directly compare and contrast women's experiences across the two 'dichotomous' fields. Indeed, writing in relation to qualitative case studies, Stake (2005) argues that formally designed comparison can actually 'compete with learning about and from the particular case' (p.457). According to Stake, comparison is a 'grand epistemological strategy', designed to fix attention on as few attributes as

possible. However, Stake argues that this goes against the interpretivist desire to produce thick description, so that we might gain a deep understanding of social phenomena (Geertz, 1973). In fact, Stake proposes that readers learn more about the case if the researcher concentrates upon describing the person/phenomenon under study in sufficient depth, capturing all its 'uniquenesses and complexities' (p.457), so that the reader can then make their own comparisons.

Generalizability

One of the most common criticisms levelled against case study research is that because only one or a small number of cases are studied, the results obtained are not able to be generalized to a wider population. Case study research is thus deemed to be 'unscientific' (Hammersley and Gomm, 2000; Yin, 2009; Simons, 2009). This argument is premised on the belief that generalization is a key aim of scholarly enquiry, commonly linked with a positivist or post-positivist paradigmatic standpoint (see Guba and Lincoln, 2005). Some case study advocates have attempted to address this concern and have suggested that the kind of inference or generalization made in case study research is different to that of statistical analysis. For example, Yin (2009: 43) argues that survey research relies on 'statistical generalization' whilst case study research relies on 'analytic generalization', whereby the researcher strives to generalize results to broader theory rather than to a wider population.

However, other writers argue that case studies need not produce generalizable findings. These writers assert that the positivist, natural science quality criteria of validity (the extent to which the instrument/technique measures what it is supposed to measure), reliability (whether the findings can be replicated), and generalizability (the extent to which the results can be generalised to a wider population) are inappropriate for assessing the rigour of interpretive work because interpretivist studies are conducted from a different ontological and epistemological position. Merriam (1995), for example, argues that it is not the purpose of interpretivist research to test hypotheses, to establish universal laws, or for results to be generalized in a scientific sense.

Indeed, Lincoln and Guba (1985: 124) try to move beyond the traditional concept of 'generalizability' in case study research (and qualitative research

more broadly), and instead replace it with the term 'transferability'. Lincoln and Guba argue that in order to tell whether the findings obtained in one context might be applicable to another context (i.e. their transferability), the inquirer needs to know the similarity or 'fittingness' between the two contexts. That is, the inquirer needs information about both contexts in order to make a judgement of transferability. Lincoln and Guba state that whilst the researcher cannot indicate to the reader the range of contexts to which they may wish to transfer the findings, they can provide sufficient information about the context of their study so that anyone interested has sufficient information to make an informed judgement of transferability. As a consequence, Lincoln and Guba recommend that researchers use thick description in order to establish the context of the study (Geertz, 1973), so that a reader might properly understand the findings.

Lincoln and Guba's (1985) revised quality criteria have proved relatively popular amongst qualitative researchers since their inception (see Shenton, 1994), and therefore this study will be evaluated according to Lincoln and Guba's measure of 'transferability' as opposed to 'generalizability'. Indeed, in this thesis I have endeavoured to provide a full description of all contextual factors that impinge upon the case, so that the findings obtained in this study might be of value to a range of potential audiences (e.g. researchers, policy makers and practitioners).

Post-structural research and the 'crisis of representation'

It is important to note that, in line with the philosophical tenets underpinning post-structural theory, the experiences and perceptions of the women who took part in the research were not taken at face value and interpreted as being objective, empirical evidence of common sense truths about the social world (Weedon, 1997). Instead, the women's subjective interpretations of their lived experience were examined in light of 'discourses' which serve to provide an illusion of truth, for it is realised that whilst individuals might tell of their experiences, such tellings are inevitably constrained and determined by the discourses which prefigure their representation (Foucault, 1972; Britzman, 2000).

Over the past three decades, many academics – and particularly those working from a postmodern or post-structural perspective – have come to question the

naturalism or social realism which underpinned much 'traditional' or 'modern' qualitative research (e.g. Coffey et al., 1996; Denzin and Lincoln, 2005; Hammersley and Atkinson, 2007). A 'crisis of representation' is thought to have occurred in social science, and academics have begun to critique the naturalist assumption that there is a social reality 'out there' that can be discovered through research, and that can be accurately interpreted and reported by a neutral and objective researcher (Denzin and Lincoln, 2005: 18). In light of this, I wish to emphasise that my research account should not be understood as being objectively true or 'fixed' (Britzman, 2000). Rather, it is recognised that reality is an effect of discourse, and that the researcher's account is a representation as opposed to a mirror image of the social world (Denzin, 1997).

Introducing the case – Marlton University

Having outlined the rationale behind my chosen research strategy and the distinctive features of qualitative case study research, I will now move on to introduce the research site (given the pseudonym 'Marlton University'), and to provide details of the women who took part in the project.

Marlton University is situated within the historic and affluent city of Marlton in the south of England. Marlton University itself has experienced a great deal of success in recent years and has seen considerable investment, updating many of its buildings and facilities in order to provide, as stated on Marlton's website, an 'outstanding' student experience. The University ranks highly in all UK league tables and enjoys high student satisfaction scores, as well as having a very good research reputation. As a consequence, Marlton's entry tariff is relatively high and students must average A-level grades of at least ABB in order to gain a place – although entry requirements do vary by discipline. It is because of Marlton's strong academic profile that I have termed it a 'high-performing' university.

Marlton University offers prospective undergraduate and postgraduate students a wide variety of courses spanning a diverse range of disciplinary areas including: business, law, STEM, medicine, arts, humanities, and social science. Students can opt to specialise in one discipline and study for a single honours degree, or can choose to combine two disciplines in order to graduate with dual

or joint honours. Depending on the degree programme selected, students are often able to study abroad for a year at a 'partner' university, or complete a year in industry. Fees at Marlton University are set at the current UK maximum of £9000 a year, although students can apply for a government-backed loan from the Student Loans Company²³ to cover both their tuition fees and accommodation costs. Marlton does offer a limited range of scholarships for students who can demonstrate excellence in certain extra-curricular fields such as sport, music or debating. The University also offers a small financial bursary to those students from low-income households.

Selecting the sample – choosing from the university disciplines

As one of the key motivations behind this project was for me to explore the experiences of women undergraduates studying STEM and arts/humanities disciplines, I wanted to ensure that both sides of the disciplinary dichotomy were adequately represented. Indeed, HE researchers have documented how different disciplines – even those seemingly closely related to each other – often have very different 'cultures' by virtue of their distinct ontological and epistemological orientations and unique socio-historical formations (e.g. Becher, 1987, 1994; Leman, 1999; Becher and Trowler, 2001; Neumann et al., 2002). As such, I decided to select 3 STEM and 3 arts/humanities disciplines from which the women students in this study would be drawn. I felt that 6 disciplines in total should be manageable for me as a sole researcher in terms of the time that I could spend publicizing the study, recruiting women, and the amount of data that would accrue in relation to each discipline, but should also ensure that I could add a level of complexity and nuance to the analysis.

It should be noted that, in reality, no clear boundaries exist which designate academic disciplines as either 'STEM' or 'arts/humanities'. It is particularly difficult to draw a neat boundary line around arts/humanities disciplines as there is often an overlap with the social sciences (see AHRC, 2013). However, the Higher Education Statistics Agency (HESA)²⁴ provide official annual data on the

²³ The Student Loans Company work with the Student Finance agencies for each UK region and HM Revenue & Customs in order to provide financial support for students in the UK.

²⁴ HESA are the official body who collect statistical data on all HEIs and HE providers across the UK. This data is used by UK governments and HE funding bodies in order to regulate and fund UK HE, and is also

total number of men and women enrolled on undergraduate degrees across all HEIs in the UK, and they employ their own disciplinary dichotomy for certain types of data analysis. In this study, I decided to adopt HESA's classification of STEM and arts/humanities disciplines, thus subsuming 'social sciences' and 'law' under the arts/humanities umbrella (HESA, 2016, see Appendix 1).

When I commenced this PhD study in 2013, I sourced the most recent data published by HESA (2013, see Appendix 2) which related to the academic year 2011/12, documenting undergraduate students' choice of degree by gender. According to the data set, the lowest proportion of women were enrolled on degrees in the following areas:

- **engineering & technology (15.7% women)**
- **computer science (17.8%)**
- **architecture/building/planning (32.5%)**
- **mathematical sciences (39.2%)**
- **physical sciences (40.4%).**

The highest proportion of women were enrolled on degrees in the following areas:

- **education (75.9% women)**
- **languages (67.9%)**
- **social studies (62.4%)**
- **creative arts and design (61.8%)**
- **law (59.7%).**

From these broad areas, I purposively selected the STEM disciplines of **engineering, computer science** and **physics**, and the arts/humanities disciplines of **English, modern languages** and **sociology** for further investigation. These 6 disciplines were chosen on the grounds that they are commonly recognisable disciplines in the UK and have well-established degree programmes at Marilton University.

accessed by interested stakeholders including academic researchers, students, private companies and the press and media.

The women

As it is an aim of this study to explore how women students experience university life in considerable depth, a large sample from which generalisations could be made across a wider population was both philosophically incongruent and, in practical terms, largely unfeasible for me as a sole researcher (Stake, 2005; Lichtman, 2012). As a consequence, I sought to recruit a relatively small number of women whom I could study in considerable detail. In order to build up some contextual information about Marlton University and students' wider perceptions of, and experiences in the disciplines under analysis, I sought to recruit approximately 18 women (spread across the 6 disciplines) to participate in one of 3 focus group interviews. I also sought to recruit a further 18 women to participate as in-depth longitudinal case studies. This required the women keep a week-long diary, participate in two in-depth interviews and complete one email interview. I aimed to recruit 3 women in engineering, physics and computer science, and 3 women in sociology, English and modern languages. I felt that this number should be manageable for me in relation to the scope of this project, yet large enough for me to build up a good idea of any common themes that might emerge across the women's experiences on different courses. When I advertised the research project to students, I let prospective participants decide whether they wanted to take part in a focus group interview, participate as a case study, or do both. (*Note* - 6 of the women opted to take part as a case study *and* attend a focus group interview – see below for further details of the participants).

I initially decided that the research should be conducted with **young women**, aged 25 years or under. I wanted to recruit young women as research suggests that young people growing up today have a very different experience to that of previous generations, in light of the recent changes associated with globalization, deindustrialization, the explosion of information technologies, and the emergence of the flexible labour market (e.g. Furlong and Cartmel, 1997; Harris, 2004). I also opted to recruit women studying in the **second year** of their degree programmes. I felt that women studying in their second year should hopefully have settled into university life and would be able to provide me with detailed descriptions of their everyday activities, yet should have less pressure placed upon them than final year students who would have dissertations to write

and future career plans to make – thus making the research more ethically sound.

Because I needed time to publicise my study and recruit students at the beginning of their second year of study (i.e. the academic year 2014/15 when my fieldwork was scheduled to commence) I could not realistically track my case study participants' lives across a 'full' academic year. I therefore decided to track the women's experiences across their second and (very beginning of) third years of study (i.e. late February/March 2015 to November 2015) – see Appendix 3 for a timeline of the research. This was a relatively lengthy period and included some critical educational junctures (e.g. Easter revision, summer exams, summer holidays, commencement of third year of study), enabling me to be perceptive to change. However, 9 months also did not feel overly long, meaning that it would not be an onerous commitment for the women. This is considered to help reduce rates of attrition – something which qualitative longitudinal researchers such as Thomson and Holland (2003) and Finn (2015) caution can often happen in lengthy studies where concerted engagement is required of participants.

Negotiating access and recruiting women to the study

Once I had selected the disciplines from which the women would be drawn, I sought to negotiate access to the respective student populations at Marilton University. In order to gain permission to contact women studying engineering, physics, computer science, English, modern languages and sociology, in October 2014 I sent an email to the Deans of the Colleges which 'housed' the respective departments (see Appendix 4). All of the Deans were very happy for me to conduct the research, and were happy for me to email the Directors of Education in these six disciplines with a view to negotiating entry into a lecture for five minutes so that I could advertise the study to women students and recruit participants.

In September 2014, my PhD supervisor and I had also approached the Athena SWAN Working Group²⁵ operating at Marilton University by email, and explained

²⁵ The Athena SWAN Charter was founded in 2005 by the Equality Challenge Unit (ECU) and the UK Resource Centre for Women in SET (UKRC) in order to advance the representation of women in STEM (science, technology, engineering, maths and medicine). The Athena SWAN Charter outlines six key principles that universities must address through a plan of action if they wish to obtain Athena SWAN

the nature of my study. As my research sought to understand the experiences of women studying STEM at Marilton University, the Athena SWAN group appeared interested in my study and were keen to have a copy of my results. Following this initial email contact, I was invited to present an outline of my study at Athena SWAN's next Working Group Meeting which would be attended by many of the 'key players' in STEM at Marilton, including the STEM College Dean, various Heads of Discipline and other members of staff dealing with, or interested in equality issues in STEM. Despite this being a nerve-wracking experience, I managed to effectively 'spread the word' about my study – hoping that my association with Athena SWAN would further encourage STEM staff members to agree to the project being conducted within their disciplines.

Having gained permission from the relevant College Deans, I subsequently emailed the Directors of Education (D.E.) in engineering, physics, computer science, English, modern languages and sociology with details about my project (see Appendix 4). All members of staff also agreed to the study being conducted in their departments. However, whilst I had originally requested that I be allowed to enter a lecture in each of the six disciplines and talk to students to publicise my study, few of the D.E.s were willing to let me do this.

The D.E. in physics put me in email contact with one of his student representatives (a second year undergraduate), who he felt could ask around women in the department and take the names of anyone interested in participating. Unfortunately, the student emailed me back and told me that she had found no takers – she stated that second year physics students were really stressed with their workload and were unlikely to want to participate in the research. The D.E. in modern languages directed me to their student representative and student engagement officer and I emailed them to request that they publicise my study to modern languages students. The student representative and student engagement officer told me that they could hand out flyers to students at their next student-staff liaison committee meeting (which I

accreditation (e.g. changing the cultures and attitudes of STEM departments in order to reduce gender inequality, helping women to make a successful transition from PhD to academic career, etc.). Over recent years the Athena SWAN Charter has grown in prominence and is gaining influence amongst the 'top' UK universities. In fact, it is now the case that major funding bodies such as the National Institute for Health Research will only give grants to those institutions which have obtained at least Silver Athena SWAN accreditation (Athena SWAN, 2016).

subsequently produced), and could ask around students they knew – which they obligingly did. However, they later contacted me to say that they had found no takers. In fact, the student engagement officer told me that, having himself worked with Marlton University students for a number of years, I would be unlikely to find anyone willing to participate without a financial incentive. I did manage to locate a member of staff in the disciplines of anthropology and English/film studies willing to let me enter their lecture and talk to students for 5 minutes to publicise my study. I handed out information sheets (see Appendix 5) and took the email addresses of a few women prepared to take part in the research – particularly in anthropology. I therefore decided to switch one of my chosen disciplines **from sociology to anthropology**.

As I could not enter many lectures and talk to students in person, I had to think creatively in order to publicise my project. I therefore emailed the presidents of all of the student societies at Marlton University which in some way related to the six disciplines under study or linked with feminist concerns, with a short piece about myself and my study. Despite many of the presidents agreeing to advertise my study to their members either by email or in person at their next face-to-face meeting, I received no emails from interested students. Having exhausted all of my options and fearing that I would not be able to run the project without a sufficient number of women students across a variety of science/arts disciplines, I decided to offer a financial incentive. This is something that I was originally reluctant to do in light of the ethical concerns associated with ‘coercing’ participants to take part in research (Russell et al., 2000; Goodman et al., 2004). However, in this case, I felt compelled to offer one. I decided to offer those women opting to take part in a focus group interview a £10 Amazon voucher, and those willing to participate as a case study a £20 Amazon voucher – which I felt was commensurate with the time and effort required on the part of the participant (Sullivan and Cain, 2004; Head, 2009). In fact, some researchers do see the giving of payments in research as a positive and ethical act, serving to remunerate participants for their time, thus working to equalise the power imbalance evident in the research relationship (e.g. Young and Willmott 1973; Thompson, 1996; Goodman et al., 2004; Head, 2009).

Having decided to offer a financial incentive, I emailed administrative staff working within the Colleges that housed the 6 disciplines and asked whether it would be possible for them to send a mass email to their students outlining details of my study (see Appendix 6). In the email 'round', I stated that women students could either choose to take part in a focus group interview (£10 Amazon voucher), participate as a case study (£20 Amazon voucher), or do both. Overall, this recruitment method proved highly effective as I received a wealth of emails from interested students in a number of disciplines. In fact, in the discipline of modern languages, I received so many responses from interested women that I had to resort to a 'first come first served' basis and unfortunately had to turn a number of students away. I also managed to recruit a sufficient number of women in engineering – 4 wanted to participate in a focus group interview and take part as a case study, so I recruited them all to the project. In physics, I received email responses from 4 students willing to take part in a focus group and 2 willing to participate as case studies. I also recruited 2 case study students in English. Despite having sent a mass email to the computer science students, I received only one response from a young woman studying mathematics and computer science. In this email, she stated that she thought it would be difficult for me to find any takers in computer science as there were very few women on the course – and unfortunately she did not want to take part in the research herself.

Whilst I did consider choosing another STEM discipline (e.g. mathematics), the problems that I had experienced in recruiting *any* women to the study meant that I was behind schedule (see Timeline, Appendix 3), and needed to commence the research as rooms had already been booked on Marlton's campus for the focus groups and one-to-one interviews – something which I had found incredibly hard to do due to Marlton's complex room booking procedures. Indeed, by the time I had gained permission from the relevant D.E., I would have already held my focus groups. In any case, I felt that it was unnecessary to add a third discipline because, as stated above, I am not seeking to directly 'compare' women's experiences across science/arts disciplines, but to understand them in considerable depth.

The following table (Table 4.1) provides background details of the **14 women** who took part in this project as case studies, and the discipline/s that they were studying at Marlton.

Name	Age*	Ethnicity	Home Residence	Discipline	Secondary School Type	Mother's Occupation	Father's Occupation
Jasmine	22	Caribbean heritage	Caribbean	Engineering	All girls' private	?	Owns a business
Charlotte	20	British Chinese	S-E England	Engineering	All girls' grammar	Teaching assistant	Restaurant owner/property
Mandy	21	White British	S-E England	Engineering	Mixed comprehensive	College administrator	IT
Joanna	19	White British	N-E England	Engineering	All girls' private	Primary head - private school	Health and safety
Emma	20	White British	N-E England	Physics	All girls' grammar	Accountant	Accountant
Grace	20	White British	Wales	Physics	Mixed Catholic comprehensive	Doctor's receptionist	Camera-operator
Hannah	20	British Chinese	Hong Kong	Anthropology	Mixed private	Marketing/charity fundraiser	Hotel management
Margaret	57	White British	S-W England	Anthropology	?	N/A	N/A
Callie	24	White British	S-W England	Anthropology	Mixed comprehensive	Retired tour guide	Retired labourer
Eleanor	19	White British	S-W England	Anthropology and French	Mixed comprehensive	Archaeologist	Computer software engineer
Liz	20	White British	S-W England	English and French	All girls' private	Head of law school	Banking
Rachel	19	White British	N-W England	English	Mixed comprehensive	Owns clothing store	HGV driver
Jane	20	White British	S-E England	French and Spanish	All girls' grammar	Trainee accountant	Retired city worker, home publisher
Maxine	20	White British	S-W England	German and Russian	All girls' grammar	Languages teacher	Software manager

Table 4.1 – Case study participants

*Age at Interview 1 (March 2015)

As is evident from the data, a number of the women were studying two disciplines and therefore 'straddling' two academic fields. This is very common at Marlton University, and I allowed students studying for joint honours degrees to take part in the research due to the difficulties that I had experienced in recruiting an appropriate number of students studying single honours. I did not regard this as being a problem as none of the women were straddling the science/arts divide, and all students were studying a combination of the five disciplines under study – **engineering, physics, anthropology, English, and modern languages**. I also recruited one woman student who was over the age of 25 – Margaret aged 57. I had spoken with Margaret during an anthropology lecture and she was keen to take part in the study. This opened my eyes to the

possibility of exploring a range of experiences across a more diverse student population.

Research Methods

Having now introduced the research site of Marlton University, my sampling procedures and the women who participated in the research, I would like to turn attention to the research methods that I used in this project.

The focus group interviews

Whilst focus group interviews were originally developed for market research purposes in the early to mid-1900s, Barbour (2007) asserts that focus groups have gained increasing popularity in the social sciences in recent decades. Wilkinson (2004) states that focus group interviews are a valuable method as they offer the researcher relatively easy access to participants' beliefs and opinions about topics, and often lead to the creation of more elaborate accounts than are generated in one-to-one interviews. Whilst there is some debate as to the extent of the 'empowering' nature of focus group interviews (see Bloor et al., 2001; Barbour, 2007), Wilkinson (1999) argues that focus groups can also help to level the potentially exploitative power relationship between the researcher and the researched, as participants are often able to take over from the researcher and direct discussion for themselves. Participants can also verbalize their private experiences in a public forum – something which fits well with the feminist orientation of this project (Wilkinson, 1999).

At the very beginning of the data collection period (February 2015), I conducted 3 focus group interviews with 19 women. The aim of these focus groups was for me to explore the women's perceptions of the 5 disciplines under study and their (gendered) experiences whilst studying and socialising at Marlton University – with a view to gaining some contextual data about the university setting (see Appendix 7 for interview schedule). 3 focus groups were considered enough to give me access to a range of perspectives, yet also to be manageable in terms of the time it would take me to arrange and moderate the interviews, and to complete transcription. Each focus group contained between 5 and 8 women which Litosseliti (2003) advises is a sufficiently small number to

enable all participants to express their views, and lasted approximately 1½-1¾ hours respectively.

I had originally intended that each of the focus group interviews would comprise a mix of women from the 5 disciplines (i.e. engineering, physics, anthropology, English, modern languages), so that the women would have the opportunity to share their different experiences and perhaps even challenge each other's views. I hoped that this would lead to the creation of a more elaborate interview account than might be generated if the women were all studying the same or similar disciplines. However, in reality, this proved tricky to facilitate. Due to the delays I had experienced in recruiting participants to this project, I received email responses from women interested in taking part in a focus group in 'drips and drabs' over the course of about a 3-4 week period. I therefore decided to fill up the focus groups one-by-one, on a first-come-first-served basis, to ensure that I had a sufficient number of students taking part in each group and could run the sessions. In the end, I conducted one 'arts/humanities' focus group (Focus Group 1), one 'mixed STEM/arts' focus group (Focus Group 2), and one predominantly 'STEM' focus group (Focus Group 3) – see Appendix 8 for details of the focus group participants.

All of the focus group interviews took place in a seminar room on campus that I had booked for private use. The women chose their own seating arrangement, though the tables were originally set out by myself in a circular configuration. Before the focus groups commenced, I discussed some 'ground rules' with the women to ensure that the interviews ran smoothly – recommended as good practice by Litosseliti (2003). These ground rules included taking turns to speak, not speaking over each other, showing respect for others' viewpoints and agreeing that participants would not report to others outside of the group what had been said by whom, or to use the information anywhere on social networking sites. I also checked that the women were happy for the focus group interviews to be digitally recorded and later transcribed, which everyone agreed to.

My interview schedule took a semi-structured format and whilst I had a list of pre-determined questions and card activities for the women to complete, I let the women take the 'front seat' and build up a group conversation between themselves with minimal steering from me. I felt that this would establish a more

collaborative and reciprocal research relationship (Litosseliti, 2003; Wilkinson, 2004). The women worked together well in all 3 focus groups – perhaps because the women were used to doing this type of group discussion work in seminars. Indeed, the women appeared very happy to build up detailed and thoughtful responses in answer to my questions.

The individual case studies

The 14 women who participated as individual case studies were asked to keep a week-long diary, take part in two in-depth interviews and one email interview during the period February/March 2015–November 2015.

Participant-kept diaries

Individuals of all ages are increasingly documenting their lives in visual, virtual and textual ways since the explosion in popularity of social networking mediums since the early 2000s (Lichtman, 2012). I therefore thought that the research process might be more engaging for the women if a relatively ‘personal’ and creative diary method was used (Kenten, 2010; Lichtman, 2012). Spowart and Nairn (2013) state that diary methods also permit the participant some degree of control over the research process as participants can share the information *they* wish to give, thus modifying the power dynamics which inevitably pervade research methods such the ‘traditional’ one-to-one interview encounter. I felt that this should make the research relationship more ethical – a better fit with the feminist orientation of this study which emphasises respect towards those taking part in the research (Meth, 2003). Not only this, but diary methods also fit well with post-structural sensibilities, as diaries can be seen as sensitive to the fluid, complex, emotional and changing nature of the self – ‘a kind of performance of subjectivity’ (Spowart and Nairn, 2013: 3). Indeed, in this project, it should be emphasised that the women’s diary accounts were not interpreted as being objective representations of women’s lived realities, but rather, as edited or constructed versions of their lives (Pink, 2001).

In order to gain a detailed understanding of the women’s daily rhythms and routines whilst they studied at Marilton University, at the beginning of the data collection period (i.e. late February/March 2015), I asked each of the 14 case study participants to keep a diary for one week (Monday to Sunday). I felt that

one week should be long enough for me to gain a 'flavour' of their lives, but should not be an onerous commitment for the women (Thomson and Holland, 2005; Kenten, 2010). In these diaries, I asked the women to write about what they did each day, who they were with, how they felt, and to reflect upon any instances when they became 'aware' of their gender (see Appendix 9 for an example diary booklet). At the front of the diary booklet, I also provided the women with a blank academic timetable and asked them to record their current course commitments (e.g. lectures, seminars, tutorials, labs, workshops).

When the women emailed me to state that they would like to take part in the research as a case study, I replied and asked whether they would prefer to keep an electronic or handwritten diary. If the women opted to keep an electronic diary, I emailed them a blank copy of the diary booklet in Word along with full instructions on how to complete it, and asked that they email their diary back to me before our first interview together. If the women opted to keep a paper diary, I requested that they provide me with an address that they would like their booklet posting to and subsequently sent them a printed paper copy. I included a stamped addressed envelope and asked that the women send me their diaries once they had completed them so that I could look over them before Interview 1. However, in reality, none of the women posted their diaries back to me, instead bringing them along to interview.

I had initially planned for the diaries to be used as an activity in Interview 1, as a form of 'diary-interview method' (Zimmerman and Wieder, 1977; Spowart and Nairn, 2013). I envisaged that the diaries would act as a stimulus or 'prop' (Plummer, 2001), where I could ask the women to elaborate on their everyday experiences in greater depth in order to gain a detailed research account. However, because some of the women only brought their diaries along with them on the day of the interview (and some of the women who emailed me their electronic diaries only sent them through the night before), I could not spend any time reading through the data and formulating detailed questions. Whilst this meant that I could not discuss the diary content with the women in interview, I found that this was not a major setback. Indeed, the women who *had* sent me their diaries in advance did not seem that keen to elaborate on their diary entries when I probed them further in Interview 1, and appeared considerably more comfortable when answering 'traditional' one-to-one

interview questions. In fact, many of the women often brought up interesting themes that emerged in their diaries during the interview discussion themselves, which I could then follow-up with further questions when and where appropriate.

It has been acknowledged by researchers that due to the private and personal nature of diary methods, such an approach can risk being invasive and intrusive for participants (Spowart and Nairn, 2013; Thomson and Holland, 2005). In this project, I took every precaution to ensure that the women's trust was not abused and that their privacy was upheld (Stacey, 1988). I recognised that whilst some of the women might find the experience liberating, others might feel uncomfortable with the intimate nature of the method (Spowart and Nairn, 2013). I therefore made it clear at the outset of the research that the women had full discretion over what they wished to share with me as the researcher, and could write as much or as little as they wished. I also checked with each participant during Interview 1 whether they were happy for me to take a copy of their diary and to use excerpts in my thesis. I reassured the women that I would not use any portions of text that could be used to identify them, or their family and friends. All of the women were happy for me to do this, and in fact all of the women told me not to worry about making a copy as they did not want their diary back and requested that I keep it.

Interviews

Atkinson and Silverman (1997) claim that due to the prominence of interviewing in everyday life, the mass media and popular culture, we currently live in an 'interview society'. In fact, Edwards and Holland (2013) assert that interviewing is probably the most widely employed method in qualitative research, favoured by social researchers as interviews are relatively flexible and provide direct insights into 'the meanings that individuals and groups attach to experiences, social processes, practices and events' (p.90).

Two one-to-one interviews (and one email interview, see below) were conducted with the 14 women taking part as case studies as a practical means of 'creating' (Kvale, 2007) in-depth data about their lived educational biographies, their present experiences whilst studying at Marlton University, and

their future aspirations. I hoped that interviewing the women on a one-to-one basis would enable me to build up a rapport so that they felt more comfortable taking part in the research, thus treating the women in an ethical way (Oakley, 1992; Skeggs, 2001). However, I also sought to use interviewing as a key research method in this project due to the theoretical compatibility between post-structuralism and qualitative interviewing. Methods writers note that qualitative interviewing enables the researcher to explore the discourses drawn upon by individuals and the narratives they construct in order to make sense of the social world – which are of central importance in post-structural theory (Mason, 2002; Kvale, 2007; Edwards and Holland, 2013). As such, participants' 'talk' during the interview encounter is not regarded as being a 'mirror reflection' of the social world as seen through the eyes of the interviewee (Miller and Glassner, 2004: 125) but rather, as a joint and dynamic co-constructed product of the interaction between the interviewee and interviewer (Alldred and Gillies, 2002).

A semi-structured format was adopted in the one-to-one interviews as I wanted to discuss certain topics with the women and allow some scope for making contrasts between the cases, but also wanted a degree of flexibility in how the women could answer the questions. I also wanted to create an opportunity for me to probe the women further and pursue interesting lines of discussion where appropriate (Edwards and Holland, 2013). I found that this semi-structured interview format proved very effective as it accommodated different 'styles' of response on the part of the interviewees. For example, some of the women were highly vocal and gave long and extensive answers in response to my questions, requiring little probing from me. Other women were more quiet and reserved, and I found that the question schedule acted as a useful guide, yet also allowed me to go 'off-piste', enabling me to focus on the topics that I felt the women were most comfortable with.

In this study, I drew upon the interview model proposed by early feminist scholars such as Oakley (1981), Reinharz (1992) and Smith (1987) who critique the traditional 'masculine' interview paradigm for treating participants as objects, thus excluding care, emotionality and sensitivity. Whilst some have since questioned the biological assumptions upon which this body of work is based (which implies that women are inherently 'caring'), I feel that such an approach

is more ethical as it levels the traditional hierarchical interview situation and forges a more reciprocal research relationship (Fontana and Frey, 2005). Indeed, in my one-to-one interviews, I encouraged the women to digress into personal stories and was not afraid to reassure the women if they had questions (Reinharz, 1992) – therefore breaking with the ‘icy’ demeanour of the modernist interviewer. However, I was also careful to ensure that whilst I sought to develop a rapport with my participants, I did not position myself as a ‘friend’. Indeed, I sought to avoid encouraging participants to divulge more than they wished to in an unethical way (Birch and Miller, 2002; Duncombe and Jessop, 2002).

The interviews took place on three occasions over a period of 8-9 months:

1. Interview 1 – March 2015.

Initial one-to-one interviews were conducted with the 14 case study women in March 2015, mid-way through their second year of study. These interviews were conducted on campus in a private seminar room that I had booked, and lasted between 1-1½ hours. The interviews were largely biographical in nature as I wanted to get to know the women and find out something about their lives and backgrounds. In fact, these interviews might be termed ‘life course interviews’ (Edwards and Holland, 2013) or ‘life story interviews’ (Miller, 2000) as I sought to understand how ‘personal biography, history and society’ mesh together (Edwards and Holland, 2013: 34). Indeed, I wanted to find out how the women subjectively interpreted their educational experience and academic achievement at different life stages (e.g. at school, sixth-form/college, university), thus interrogating how the biological process of ageing – alongside normative expectations linked with crucial life junctures – sought to ‘constrain or enable individuals’ (Edwards and Holland, 2013: 33). However, the present and future also featured heavily in these interviews. I also asked the women questions about university ‘life’ both inside and outside of their course, their feelings about their academic achievement at university, and about their career aspirations and plans for the future (see Appendix 10 for interview schedule). I felt that by blending the women’s past, present and future narratives together, I

could gain a holistic understanding of their subjective experiences and educational decision-making (see McLeod, 2000; Ball et al., 2000).

2. Email Interviews – June 2015.

A short set of four questions were sent to the 14 women by email in mid-June 2015 as they commenced their summer break. These questions were designed to 'catch up' on the women's experiences since I had last met with them. However, this email interview was also built into the research design to remind the women that they were participating in the research and to maintain their interest in the study – as recommended by Thomson and Holland (2003). I asked the women to reflect upon their second year of study, and how they planned to spend their summer break (see Appendix 10). I did not follow up the women's answers at this point in time and engage in a dialogical online interview, so as not to put too much demand on the women's time (see Hewson, 2008). Any themes of interest were followed up in greater depth with the women in their final one-to-one interview (see below). Only one woman, Jasmine (engineering), did not email me back with a response at this point in time.

3. Interview 2 – October/November 2015.

One final follow-up interview was conducted with the women at the end of the research period, at the beginning of the women's third year of study (either in late October or November 2015). In these interviews, I asked the women to retrospectively reflect upon their experience in second year and to comment on their exam results (which they had received during the summer holidays). I also asked the women about their experience so far in Year 3, and about their plans post-graduation. As a concluding activity, I also asked the women to complete a timeline activity for me in order to gain an insight into their envisaged 'future selves' (Bagnoli, 2009; Hanna and Lau-Clayton, 2012). I felt that a timeline activity would also break up the formal interview encounter and create a more empowering, collaborative research relationship (Bagnoli, 2009).

Most of these interviews were conducted on campus in a private seminar room that I had booked and lasted between 1-1½ hours. However, because four of the women were on their year abroad at the time of the final interview (i.e. Jane, Liz, Maxine and Eleanor), I asked these women to complete their questions for me by email asynchronously (omitting the timeline activity). All of the women agreed, and I subsequently sent the women a Word document attached to an email listing my questions. I gave the women full instructions on how to complete the interview and requested that they fill in the questions during the next two weeks and email the document back to me. Only Jasmine (engineering) and Joanna (engineering) did not participate in a final interview, as they did not email me back to arrange an interview time – even after a second email reminder.

The following table (Table 4.2) shows the data that was collected for each of the 14 case study participants, and where any data was missing.

Name	Diary	Interview 1	Email Interview	Interview 2
Jasmine	✓	✓		
Charlotte	✓	✓	✓	✓
Mandy	✓	✓	✓	✓
Joanna	✓	✓	✓	
Emma	✓	✓	✓	✓
Grace	✓	✓	✓	✓
Hannah	✓	✓	✓	✓
Margaret	✓	✓	✓	✓
Callie	✓	✓	✓	✓
Eleanor	✓	✓	✓	✓
Liz	✓	✓	✓	✓
Rachel	✓	✓	✓	✓
Jane	✓	✓	✓	✓
Maxine	✓	✓	✓	✓

Table 4.2 – Data collected for the 14 case study participants

A note on the use of email interviewing as a research method

Email interviewing is gaining increasing popularity as a social research method as online technologies advance and become more widely embraced by the general population (James and Busher, 2009; Lichtman, 2012). However,

methodological writers caution that email interviews are not the same as face-to-face interviews and have their own unique dynamic. Fontana (2001) asserts that a defining feature of email interviewing is the 'distant' nature of the interaction between researcher and participant, with a lack of visual cues potentially making it more difficult for the researcher to read the intentions and interpretive meanings of the participant. However, I felt that these issues were less of a concern in my study. There was less 'distance' between myself and my participants due to the fact that I had previously met the women in person at least once (in focus group interviews and one-to-one interviews). In fact, I felt that the email interviews had both strengths and weaknesses. Some of the participants wrote fairly limited responses in answer to my questions, which could perhaps have benefitted from further probing on my part. Conversely, I did find that one of the women 'opened up' a great deal more in her email interview (Interview 2) than she had when I had interviewed her in person. However, it is difficult to tell whether this participant opened up because of the impersonal nature of the email interview, or because she had grown more comfortable with me as a 'researcher' over time.

It should also be noted that there are important ethical issues involved in the use of email interviewing as a research method. Those who write about online methods have asserted that it is not possible for researchers to guarantee complete confidentiality and privacy to their participants due to the existence of online threats such as viruses, hackers and unscrupulous site administrators (e.g. Mann and Stewart, 2000; Eynon et al., 2008). Some writers have suggested a number of techniques which could be used to improve the security of electronically submitted data. For example, Eynon et al. (2008) recommend the use of encryption and secure socket layer (SSL) protocols when sending emails, which convert data files into a series of random characters before they are submitted. The receiver then uses the same computer programme to decode the data once it has been received, preventing anyone from intercepting and reading the message. Moreover, the data can be stored in encrypted form, adding an extra layer of security. However, Mann and Stewart (2000) caution that encryption can complicate a project as it requires that all participants use email software with the same encryption capability. The use of encryption software also requires some specialist knowledge and training. I therefore

decided not to use encryption software in this project as I feared that it might deter participants from taking part in the research. Instead, following the advice of Mann and Stewart (2000), I made it clear to participants at the outset of the research (on their written information sheet) that I could not promise that any data they sent me via email would not be intercepted – although I did assure participants that this was very unlikely to happen. I also stated that participants were completely free to opt out of the email interview/s if they wished, but no participant did so.

Ethics

Whilst I have already alluded to some of the ways in which I addressed ethical concerns during the course of this project, in this section, I would like to outline more fully how I understood ethics in this project. Edwards and Mauthner (2005:14) define ethics in social research as ‘the moral deliberation, choice and accountability on the part of researchers throughout the research process’. Social researchers have long debated the form that research ethics should take, with many scholars asserting that a balance must be struck between circumventing harm to participants, whilst preserving the academic ‘right to know’ (Hammersley, 1999; Atkinson, 2015). Christians (2005: 144) notes that early codes of ethics in social research were based upon positivist ‘value-free’ social science, with many scholarly organisations issuing ‘fixed’ codes of conduct in order to guide researchers through the research process (e.g. The British Sociological Association). These guidelines were often grounded in a universalist model of ethical conduct, with the rightness or wrongness of actions seen as governed by universal laws – typically premised upon either a deontological or utilitarian model of ethics²⁶. However, universalist and canonical approaches to ethics have been increasingly questioned over the past four decades, particularly by feminist writers who assert that emotionality and compassion should be brought into the ethical decision-making process (e.g. Gilligan, 1982; Noddings, 1984). These scholars advocate a relativist or situational ethical approach whereby the researcher acts reflexively, in an

²⁶ Advocates of deontological (duty-based) ethics assert that certain principles and actions are right in themselves, regardless of the consequences (e.g. Kant, 1785). In contrast, advocates of utilitarian ethics argue that actions are validated by the ‘consequences for human happiness’ (Taylor, 1982: 129), with conduct that is right having the greatest good for the greatest number (e.g. Bentham 1789, Mill, 1861).

attempt to be responsible and accountable to their participants (Seale, 1999; Doucet and Mauthner, 2002).

This research was undertaken in full accordance with formal guidance from the University Ethics Committee, professional bodies such as the British Educational Research Association (2011) and my funding council the Economic and Social Research Council (2015). However, whilst I was compelled to abide by these guiding principles, I did recognise that ethical issues permeate the entire research process, from the research design and planning stage right through to the write-up of results (Edwards and Mauthner, 2005). I therefore adopted a feminist contextual or situational ethical approach and sought to act reflexively, continually reflecting on power imbalances in the research relationship and negotiating ethical dilemmas as and when they arose throughout the course of this project – placing a key emphasis on care and responsibility to participants in practice (Gilligan, 1982; Noddings, 1984). Indeed, records were kept of all the ethical decisions made by myself during the course of the research, and the reasoning behind them.

My participants (who were all aged 18+ years and therefore lawfully classed as adults) were fully informed of the purpose of the research, were assured confidentiality and anonymity, and were told that they could exit the project at any time should they wish to. This was done both verbally by myself at the beginning of the focus groups and one-to-one interviews, and in the form of a written information sheet given to participants at the outset of the research. All participants were also asked to sign a consent form, which is recommended as standard practice by many researchers (Bryman, 2008). However, consent was not only sought at the beginning of the project, but was considered an ongoing process. During each phase of the research, I reiterated the aims of the project to the women and checked that they were still happy to participate – as suggested by Doucet and Mauthner (2002).

In particular, I recognised that some of the issues discussed in the one-to-one interviews might be of a sensitive nature for the women, owing to the fact that they related to their own sense of self and personal identity. As such, I took every care to ensure that the questions I asked were done so in a sensitive manner. I also offered the women the chance to stop the interviews or to change the line of questioning if they wished. Once the interviews had ended,

the women were also given the opportunity to remove from the interview transcript anything they had said that they were uncomfortable with.

To further guarantee participants' privacy, each person taking part in the research was assigned a pseudonym. All case study participants were given the opportunity to pick their own pseudonym, which approximately half of the women did. I felt that it was important to give the women this option in an attempt to level asymmetrical powers relations in the research relationship – to ensure that the women were happy with their name and felt able to relate to it (Grinyer, 2002). The names of any people or places mentioned by the women were also replaced, and any potentially identifying details in events or anecdotes were obscured.

It should be noted that, on occasion, I have slightly changed the name, or have been vague when attributing a discipline to the women. This is because the courses studied by the women were so specific or unique in combination to Marlton University (particularly in association with the women's background characteristics) that the individual might be able to be identified. However, all of the disciplines attributed to the women are accurate in that they comprise the major component of the women's degree, i.e. the women were studying for the most number of credits in the disciplines listed in Table 4.1. This process of anonymisation was carefully undertaken, as I did not want to distort the data in any way, but also wanted to uphold participants' privacy and ensure that they were protected from harm (Becker and Bryman, 2004; Wiles et al., 2008). Particular care was also taken in relation to the anonymity of the university under study, for it is recognised that HEIs are fairly recognisable in terms of their dominant characteristics and because they rely on their reputations to succeed in the competitive educational market.

The role of the researcher and reflexivity

It is recognised that in this qualitative study, I played a crucial role in the research process; I was the primary data collection instrument and was the sole person who viewed, constructed, analysed and interpreted the data (Coffey and Atkinson, 1996). Whereas post-positivist researchers often seek to eliminate researcher 'bias' so as not to compromise the quality of the data obtained

through the use of techniques such as triangulation of methods, member checking or 'bracketing' (i.e. identifying one's views on a topic and putting them to one side), in this study, I worked from a feminist post-structural perspective and therefore accepted that my beliefs, interests and assumptions would inevitably influence the research (Skeggs, 2002; Lichtman, 2012).

In order to ensure that the conclusions drawn in this study were not detrimentally affected, I sought to take a 'decentred and reflexive position' (Breuer and Roth, 2003: 17). Denzin (1997:27) defines reflexivity as the ways in which 'our subjectivity becomes entangled in the lives of others'. Doucet and Mauthner (2006) assert that reflexivity has become an increasing concern in feminist discussion in recent decades, with many feminists acknowledging the need for researchers to 'document their social location and the roles they play in co-creating data and in constructing knowledges' (p.41). However, different scholars have understood the concept of reflexivity of different ways. Some have asserted that researchers ought to make explicit their positionings in terms of gender, class, ethnicity, sexuality, age, and geographical location, thus writing themselves into the research account (e.g. Reinharz, 1997). However, others argue that such an understanding of reflexivity centres attention back upon the researcher, marginalizing the accounts of those being researched (Hale, 1991; Patai, 1991; Skeggs, 2002). Doucet and Mauthner (2006) thus claim that whilst it is important that researchers are aware of their social locales, they must also *actively reflect* upon how these reflexive positionings 'actually shape research practices and the knowledges that are ultimately produced' (p.42).

In this project, I sought to be reflexive by turning attention away from the self and constantly reflecting on the research situation from numerous perspectives, in an attempt to ensure that I did not prioritise my own subjectivity over that of my participants or create unrealistic 'fixed' versions of my participants' subjectivities (Doucet and Mauthner, 2002). Translated into practice, this involved me keeping a reflective journal documenting my own subjective opinions, beliefs, assumptions and personal reflections throughout the research process (Denzin, 1994; Borg, 2001). Ortlipp (2008: 695) asserts that reflective journals enhance the quality of qualitative projects as they enable the researcher to 'make visible to the reader the constructed nature of research

outcomes', which stem from the choices and decisions made by the researcher throughout the research process. In this written thesis, I have also tried to be sensitive to, and highlight how operations of power played out during the research process (see Skeggs, 2002).

Data analysis

Analysis was viewed as a cyclical process – one which commenced the moment the research began (Coffey and Atkinson 1996). During the course of the fieldwork, I sought to keep a notebook documenting my initial analytical thoughts and memos, also jotting down any apparent links between existing literature and theories (Coffey and Atkinson 1996; Saldana, 2009). However, a more formal stage of analysis commenced after all fieldwork had been completed. Once I had transcribed all of my interview data and had stored the transcripts securely in electronic files, I sought to read, re-read and become familiar with the data. I then coded the data in order to draw out major patterns and themes (Coffey and Atkinson 1996).

In order to aid the coding process I used the computer software programme NVIVO. Researchers such as Silverman (2005) and Saldana (2009) recommend the use of computer software for helping qualitative researchers to store, organise and manage their data in a way that aids analytical reflection – although they do point out that such programmes will not analyse data for the researcher, and that theories are only developed in the researcher's mind. Initially, I went back to my research questions and identified three broad areas of interest:

- Women's experiences and perceptions of academic achievement
- Women's disciplinary identities/experiences
- Women's gender identities/experiences

I therefore decided to go through each interview transcript and diary three times, coding in relation to the three areas. Each interview transcript was placed into a separate project in NVIVO, utilising the three headings above. However, the women's diaries (about half of which were handwritten) were not converted into computer files and I instead sought to code these by hand, highlighting and attaching post-it notes to the text where appropriate. I initially conducted a

cross-sectional analysis of the data in order to identify key trends that emerged across all the cases in the study (Saldana, 2009). Using initial/descriptive coding (Saldana, 2009), in an iterative process I sought to pull out the key topics of passages; I dissected and categorised portions of the data into descriptive codes, repeating and refining until all data had been thoroughly examined (Lichtman, 2012). I also employed a form of Foucauldian discursive analysis (Burman and Parker, 1993; Potter and Wetherell, 1987) in order to explore both power relations and subjectivity. In particular, I sought to consider the cultural discourses and subject positions in the women's narratives, constantly reflecting on questions such as: how do the women position themselves in relation to others, and what are the effects of these positionings? How have the participants constructed their account, and how have they positioned themselves in relation to the researcher? (McQueen and Henwood, 2002). This was done by attaching analytic memos to highlighted portions of the interview transcripts in NVIVO. Once all of the data had been coded, I then grouped the codes into a smaller number of categories, before allowing several key themes to emerge (Saldana, 2009). This was not a simple process, but involved a great deal of reflection, looking out for patterns and regularities as well as paradoxes and contradictions in the data (Delamont, 1992).

Following this cross-sectional (horizontal) reading of the data, I then sought to code the data longitudinally and looked vertically through the women's narratives in order to identify change over time (Saldana, 2003, 2009; Thomson, 2007; Henderson et al., 2012). The particular focus here was on the women's experiences of academic achievement over the course of their educational careers. I used Microsoft Excel in order to generate tables documenting the women's achievement trajectories over time, from secondary school, to sixth-form/college, to university. I found it helpful to document the women's numerical grades and their changing perceptions of their achievement over time in these matrices in order to visualise their experiences of achievement over their life courses. Indeed, Saldana (2003) argues that qualitative researchers should not shy away from statistics where and when appropriate, but regard them as an important source of information to supplement longitudinal qualitative analyses.

However, following Henderson et al. (2012), I also drew upon the rich data that I had collected in the interviews and diaries and constructed a 'case profile' of

each of the 14 case study women. In these case profiles I aimed to ‘condense’ the women’s narratives, documenting key ‘turning points’ in the women’s experiences of academic achievement, as well as ‘summarizing key themes from interviews, the subjective accounts of the researcher and sketching preliminary analyses and interpretations in relation to [the] research questions’ (p.20-21). I found that this was an effective way of managing my data as it enable me to build up thick description and synthesise ‘theory and data’, yet also retained a chronological sense of order as described by the women – i.e. their academic ‘life as lived’ (p.21).

Writing and representation

Whilst the practise of coding and classifying data is a critical part of the research process, Coffey and Atkinson (1996) argue that analysis continues as the researcher begins to write-up their data, thus ‘creating’ an account of social life (p.108). Therefore, in this section, I would like to outline how I sought to write-up my research account and explain the rationale behind my choices.

Challenges with interpreting and writing-up qualitative longitudinal (QL) research accounts

Social researchers who have adopted and subsequently written about qualitative longitudinal (QL) research designs have warned of the difficulties that they faced in interpreting their data and writing up a coherent research account (e.g. Ball et al., 2000; Thomson and Holland, 2003; Henderson et al., 2012; Finn, 2015). Thomson and Holland (2003: 236) assert that the interpretation of QL data is complicated by the fact that the researcher must look in two directions: ‘cross-sectionally in order to identify discourses through which identities are constructed, and longitudinally at the development of a particular narrative over time’. In addition, QL researchers must also acknowledge the spatial-temporal localities in which participants are situated and from which they speak, and then fuse the results into a coherent written text (Ball et al. 2000; Thomson, 2007) – no easy feat.

My study was relatively short in QL terms, lasting only 9 months²⁷, and yet even I was taken aback by the complexity of the data that I collected. Because the women were interviewed in considerable depth up to three times over the course of a 9 month period which straddled two academic years, and completed a week-long diary – and many also took part in a focus group interview – a large amount of data was amassed. Moreover, the interviews covered a wide array of topics including women’s past and present educational experiences, their perceptions of academic achievement, their extra-curricular/leisure activities, friendship relations, family lives, future aspirations and career planning. On commencing the write-up, I found that it was not easy to represent the women’s lives in a way that captured the complexity and diversity of their experience, both in terms of the multiple subject positions that they occupied and their perceived life trajectories (Alldred and Gillies, 2002; Thomson, 2007; Henderson et al., 2012).

Henderson et al. (2012) have recently argued that established forms of sociological writing are inadequate for capturing the temporal complexity of QL data, and that researchers must investigate and ‘play with’ new ways of representing the timescapes through which participants move:

‘...the analysis, interpretation and representation of QL data necessarily requires methodological innovation and compels new forms of representation, methods for ‘conjuring evocatively’, that elude the usual temporality of writing research.’ (p. 17).

With this in mind, I set about experimenting with written presentations of the data. Whilst I have conducted a cross-sectional analysis and write-up of the women’s in-classroom and out-of-classroom experiences whilst studying at Marlton University (see Chapters 5 and 6), I found it difficult to capture how the women set about ‘doing’ gender and academic achievement within their chosen discipline via a horizontal reading of the data. Indeed, it became clear that the women’s gender and academic performances were intimately interwoven with other facets of their identity such as class, ethnicity, age and (dis)ability, and were subject to change over time. I also felt a sense of unease at having asked

²⁷ In fact, one might wish to question whether this study counts as QL due to its relatively short duration. However, Saldana (2003) argues that qualitative studies in education can be called longitudinal if they last at least 9 months – which my study did.

the women to tell me their highly personal life stories, and then simply cutting them up into fragments. In order to resolve this tension and to preserve the integrity of the women's accounts, I sought to develop a writing style that presented the women's narratives in a holistic way, giving them at least something of a coherent voice (McLeod, 2011). Therefore, in Chapter 7, I have taken a similar writing approach to that adopted by Ball et al. (2000) and Finn (2015) and have presented the data as a series of 'stories' of the women, which blend detailed narratives with conceptual and theoretical insights. These narratives are not intended to be read as a 'true' and static picture of the women's lived biographies (Scheurich, 1995; McLeod, 2000; Pierre and Pillow, 2000), but as (re)constructions of the stories told to me by the women, pieced together from their talk in focus group interviews, one-to-one interviews, email interviews and diaries (Thomson et al., 2003). I hope that by mixing together different written presentations of the data, the research account is enriched and the women's voices emerge strongly alongside that of the researcher who (inevitably) authors the text (McLeod and Yates, 1997; Denzin and Lincoln, 2005).

Conclusion

In this chapter, I have sought to outline and justify the qualitative case study research design that I adopted in this study, and the individual methods that I used in order to gain an in-depth understanding of women's experiences whilst studying at Marlton University. Having now explained my overall research strategy, in the next three chapters of this thesis, I will introduce and discuss my empirical data.

Chapter 5

Life in the University Classroom: Women Students' Accounts of their Experiences in Formalised Learning Spaces

Introduction

In this first combined results/discussion chapter, I will explore how the women students in all five disciplines (engineering, physics, anthropology, English and modern languages) talked about their everyday experience whilst studying on their respective courses at Marlton University, within formalised learning contexts or 'spaces'. These spaces include the lecture theatre, tutorial/seminar room, and for the engineering and physics students, the workshop and the laboratory. Relatively few gender researchers have sought to bring the significance of disciplines into the foreground of analysis and, in particular, have explored students' gendered negotiations in the university classroom across both STEM and arts/humanities fields (although for one notable exception, see Thomas, 1990). This is an important omission, given that research into STEM *and* arts/humanities classrooms may provide insights into, and have implications for the understanding of learning and student-teacher relationships in HE contexts.

In this chapter, I will seek to examine the five different disciplinary 'classroom cultures' in which the women were being educated at Marlton University. As Lui (2006) notes, the term 'classroom culture' is frequently referred to in the schooling literature despite there being no universal agreed definition of the term. In this study, I draw upon the more specific concept of 'learning culture' as developed by Hodkinson et al. (2007) and James (2014). This incorporates: the dispositions and actions of students and teachers, disciplinary content/identity, university management practices, organisation and location. However, in this project I also draw upon Kessler et al.'s (1985) notion of 'gender regimes'²⁸ and therefore understand disciplinary learning cultures as both implicitly and

²⁸ Kessler et al. (1985) define educational 'gender regimes' as: 'the pattern of practices that constructs various kind of masculinity and femininity among staff and students, orders them in terms of prestige and power, and constructs a sexual division of labour within the institution.' (p.42).

explicitly 'gendered' – that's is, implicated in the formation of gender-power arrangements.

Aims of the chapter

This chapter is designed to fulfil two purposes. First, it seeks provide the reader with an introduction to the five disciplines under study – a 'feel' for life in each discipline whilst studying in formalised learning contexts at Marlton University. Second, this chapter aims to outline how the women students worked to negotiate dominant discourses of gender (as well as intersecting discourses of class, ethnicity, age, etc.) in order to make sense of their classroom experience, and to position themselves as powerful/powerless within their discipline (Foucault, 1977, 1980). It is important to point out that, in this chapter, I am not concerned with establishing the accuracy or veracity of the claims made by the women about their disciplinary classroom cultures. Rather, in line with post-structural theory, I am interested in exploring the ways in which the students interpreted and discursively framed their experience (Weedon, 1997; Alldred and Gilles, 2002).

In the sections that follow, I will take each of the five disciplines under study in turn, starting with a) STEM (engineering and physics), before moving on to b) the arts/humanities (anthropology, English and modern languages). I have chosen to split up the students' accounts by discipline and examine them in turn because whilst there were many similarities across the comments made by the women regarding their experiences in their respective disciplines, there were marked differences too. A summary of the course structures, learning requirements and methods of assessment used in each of the five disciplines at Marlton University can be found in Appendix 11 – providing some important contextual information about the disciplines.

a) The STEM students – engineering and physics

ENGINEERING – A ‘gendered’ classroom culture

Teaching in engineering – ‘hit and miss’

When I spoke with the four women engineering students during their one-to-one interviews, one theme that strongly emerged was the ‘hit and miss’ nature of the teaching that they received in Marlton’s engineering department. All four of the women thought that there were some lecturers who were passionate about their discipline and imparted knowledge in a stimulating way. For example, Jasmine stated ‘...I have lecturers who are top notch, excellent, hands down should be getting awards every month, every year because they genuinely care, they’re just perfection’. And yet, all four students also expressed some anxiety and frustration about the ‘personalities’ and pedagogical styles adopted by certain lecturers. Mandy was the student who articulated her concerns in the frankest of terms. Whilst Mandy said that she largely enjoyed her course, it became clear that Mandy was less than happy with the approach taken by certain lecturers, as evidenced by the following diary excerpt (all names are pseudonyms):

MONDAY

Date: 02 / 03 / 2015

Had four straight hours of lectures which was knackered. I always have 11-2 straight, today however I also had a conference with a visiting local civil engineer called Jim at 2pm.

Structures is always stressful for me because Syall the lecturer is fantastic at teaching but I hate his personality. All of the lectures make me very anxious because of his bullying nature and rude attitude when addressing the class. Even if I have a question I won’t ask because he makes you feel like an idiot.

(Diary Excerpt – Mandy)

Mandy also reiterated these feelings to me during her one-to-one interview. When I asked Mandy to describe what type of student she was in lectures and seminars, she replied:

Mandy: Um, I think lectures I'm very quiet, like you won't see me put my hand up at all. Cos a lot of my lecturers just shut you down. If you're wrong, that's it, you're an idiot kind of thing. So everyone just sits there being like 'I'm not answering this question. I know the answer but I'm not saying it in case it's wrong'.

I went on to ask Mandy how many of her lecturers made her feel like this:

Mandy: It's probably only been like 4 that have, not scared me, like the one I had today for instance, he literally petrifies me. Like I will never answer because of that. But there's some where you won't ask a question because they go off topic or you know they won't know kind of thing.

(Interview 1- March 2015)

We can see that Mandy's affective response is fairly extreme; she goes as far as to state that one lecturer 'literally petrifies me'. This authoritarian, disciplinary model of classroom management has long been identified by researchers as a common feature of engineering and science classrooms in HE (e.g. Greed, 1991; Seymour, 1995; Lewis, 1995) – a model which feminist writers such as Harding (1991) argue is deeply inscribed as masculine. As a result of such hostile and unfriendly interactions with teaching staff, Mandy appeared to employ the strategy of making herself 'invisible' in most classes (see Rodd and Bartholomew, 2006). Mandy told me that she chose to remain in silence in class and avoid interaction with most of her lecturers – even if she had a question – in order to avoid confrontation or being made to look stupid. It is interesting to note that Mandy said that she would not describe herself as being a 'quiet person' in life generally, but that she was quiet in class and that her lecturers would definitely describe her as being quiet. As such, Mandy appears to be constructing a frontstage/backstage learner identity, only feeling able to express her 'self' in backstage out-of-class environs (Goffman, 1959).

Another engineering student, Joanna – who described herself as being fairly quiet and shy – also spoke of certain lecturers creating a tense and edgy atmosphere in class. When I asked Joanna to comment on the quality of the teaching she had received so far on her course, she told me that whilst some lecturers were engaging, enthusiastic and made classes enjoyable, others could be intimidating:

Joanna: There's been a couple, like last term, we also had this guy last year as well, he um, he was very...*(talking slowly)* I don't know how to put it, he *liked* being cleverer than everyone else in a way that he would sort of, if you had a question he'd make you feel very stupid for asking it. Like he wouldn't be like 'That's a good question', because I'm sure a lot of other people would have *(pause)* been behind as well. Um, yeah, and he was very, like he picks on people a lot, um, it was quite a hard topic as well to get your head around so a lot of people weren't quite there and he *(pause)* made it quite scary *(nervous laugh)*.

We've got one guy at the moment for [one module], who you can just tell he doesn't want to be there. He has mini tantrums when people don't get it and it's a bit strange, so it's not really enjoyable to be there. You don't really want to get involved or listen so...

(Interview 1 - March 2015)

In line with Mandy's comments, Joanna also talks about being 'scared' of certain lecturers. However, whereas Mandy sought to make herself invisible in order to avoid uncomfortable interactions with teaching staff, Joanna appeared to employ a different tactic. Joanna told me that she would often listen to her lectures online in the module's electronic learning 'space' instead of attending them in person:

LS: So you find that you're happy as long as it's online, you're happy to kind of teach yourself *(laughs)* the module if it's not being taught as well?

Joanna: Yeah, yeah. I always try and like, keep up with the lectures. I won't just learn it all at Easter. If I don't go to a lecture then I will, like, do it that day. Yeah.

Indeed, Joanna told me that she was happy to catch up with the lectures online and that it 'doesn't really affect the outcome'. Yet it is important to note that whilst Joanna had been a relatively high-achieving student at school (obtaining 5 A* and 5 A grades at GCSE, and A-level grades of BBB), I discovered that she was finding work more difficult at university. Joanna told me that she was on the borderline between a 2.2 and a 2.1 – but Joanna needed to obtain a 2.1 to be allowed to progress onto the Masters course in which she had originally enrolled. Whilst Joanna's dip in grades could be attributed to any number of factors (e.g. her personal motivation and attitude towards study, a shift in learning approach and methods of assessment from school to university), one could question whether Joanna might gain a deeper understanding of the course content and achieve higher grades if she felt comfortable to attend lectures and engage with lecturing staff. Indeed, socio-cultural learning theorists such as Vygotsky (1978) and Dewey (1902) suggest that students' cognition is enhanced through social interaction, which can be established via a more reciprocal student-teacher relationship.

And it was not only highly-qualified, long-standing members of the engineering faculty that students sometimes felt intimidated by. Charlotte talked about an incident that occurred in a tutorial taken by a PhD student whose defensive and hostile attitude had made her feel belittled:

Charlotte: ...in particular one tutorial session I had – I think the last week or the week before – we had a PhD student taking it and he was trying to teach us what we had been learning in lectures but he was doing it in a different method. And the entire class had no idea what he was going on about so I said to him 'I'm really sorry but I don't think we've learnt it'. And he was like, 'It's in the lectures, it's in the lecture notes. Have you been going to the lectures?' And I'm like, 'Yes I have been going to the lectures' and he just kind of... I was trying to point out that, I mean, yes, thank you for explaining everything, but the entire class does not understand what you've been going on about because we haven't learnt it this way. And in trying to say that he just got really defensive and just kind of tried to start an argument, when the entire class was kind of... So when it comes to situations like that I'm like, 'I

don't really want to be in your teaching environment, thank you very much'.

(Interview 1 - March 2015)

In the last sentence, Charlotte expresses that she does not want to be in a teaching environment in which she is made to feel uncomfortable. And in fact, in the four engineering students' diaries there were a number of instances where the women decided not to attend certain lectures or tutorials because they did not like a particular lecturer's teaching style or felt that they could spend their time more productively doing something else, eventually catching up with their lectures online.

WEDNESDAY

Date: 4/3/2015

MORNING

I woke up quite late (due to the night out) and began to work on my control engineering coursework (I woke up too late to make my lecture – however I find my control lecturer very hard to understand so I rarely go).

(Diary Excerpt – Joanna)

MONDAY

Date: 16/3/2015

After the mechanics lecture I opted not to go to the 1pm lecture as I find it dull and can learn what I need from the lecture slides.

(Diary Excerpt – Charlotte)

It is difficult to tell from the diary excerpts the extent to which the women sought to avoid lectures due to a lack of personal motivation (for example Joanna does state that she had had a heavy night out the day before her lecture), and the part that lecturers' pedagogical approaches played in their decision whether or not to attend. Indeed, we must acknowledge that technology has advanced considerably in the past few decades and that students (of any gender) might

be increasingly tempted to skip lectures with the content now readily available online (e.g. see Traphagen et al., 2009; Gorissen et al., 2012).

Of course, lecturing styles will always vary from person to person and some lecturers will take a more authoritarian approach than others. The pressures that HE lecturers now face in light of the Research Excellence Framework (REF)²⁹ which governs staff's performance might also impact upon the time that lecturers feel they can spend interacting with students, potentially affecting student-teacher relationships. And different students will also have different teaching preferences and expectations of staff (Woods, 1990). But what emerged from the data is that there is a fine balance to be struck by engineering lecturers between creating a focused and effective learning environment, and simply intimidating students.

Educational studies indicate that students see effective teachers as those who are fair, take an interest in students as individuals, and are able to establish a good mix of firm behaviour management and relaxed classroom atmosphere (Woods, 1990; Dorman and Adams, 2004; McIntyre et al., 2005; Thornberg, 2008). In fact, Joanna went on to talk about one engineering lecturer whose 'strict' approach actually proved conducive to learning:

Joanna: We've got a lecturer at the moment who's very strict. It's like being back in school, he like, he'll like take your phone off you (*laughs*)...

LS: Oh right! (*Laughs*).

Joanna: ...and like, he won't let you talk, won't let you eat, won't let you drink (*laughs*), it's very sort of back in school. Um, and all of our coursework for that module is end of lecture tests, so you have to attend the lecture in case there's an end of lecture test which is your coursework, so um, I think that's quite good actually because it does make you go. So it's probably the module that I know most about

²⁹ The REF replaced the Research Assessment Exercise (RAE) in 2008, with the first REF being conducted in 2014 by the HE funding councils for England, Scotland, Northern Ireland and Wales. The purpose of the REF is to assess the quality of the research produced at each HEI in the UK, in order to determine the level of grant awarded to HEIs for research and to establish HEI's reputations for public information. However, it is important to note that the Government is currently introducing a new Teaching Excellence Framework (TEF) scheduled to be conducted in 2017, designed to assess the quality of teaching offered in HEIs. It is questionable as to the impact this will have on teaching in HE, and whether a greater emphasis will now be placed upon effective pedagogy as opposed to research.

because I've gone to, like, every single lecture. And he does make you listen, and he's very engaging because he, I feel like he really wants us to do well which is why he's like, you know, 'Put your phone down and actually listen', so...

LS: Yeah, so actually he *does* care, but (*both laugh*)...

Joanna: Yeah, in quite a strict way but, um, it works, yeah.

(Interview 1 - March 2015)

We should be very careful, then, in attributing the women's dislike of certain top-down, authoritarian pedagogical approaches to their gender. A body of research informed by biological and essentialist understandings of gender exists which suggests that male and female students have different learning styles and preferences as a result of differences in the structure of their brains (Murphy, 1989; Belenky et al., 1986; Pickering, 1997; Noble, 1998). These researchers assert that girls differ from boys as they tend to prefer collaborative and democratic pedagogies – preferences which link more closely with the ontological and epistemological orientation of arts and humanities disciplines (see Thomas, 1990; Francis and Skelton, 2005). However, as this study only focused upon understanding women students' perceptions of teaching and learning practices in the engineering classroom, it is not possible to tell whether the male engineering students were equally critical of certain lecturers, and also sought to skip lectures.

And it should be noted that not all of the women felt intimidated by engineering staff. Jasmine was originally from a small island in the Caribbean and was studying at Marilton University as an International Student. In our one-to-one interview, Jasmine set herself apart from the other women on her course. Jasmine confidently told me that she was 'the most outgoing, the one to ask questions':

Jasmine: Yeah I'd say I'm not, like, very afraid. If a teacher picks on me to answer something in front of the entire class I won't go crazy and be like, (*panicked*) 'Oh I don't know!'. Like all the other girls, they will just be like 'Gasp!'. I think I just say 'OK' and answer the question I suppose.

(Interview 1 - March 2015)

Educational researchers such as Mirza (1992, 2006), Connolly (1998), Gillborn and Youdell (2000) and Youdell (2003) note that African-Caribbean girls can often display a more confident and assertive feminine subjectivity in the school classroom, because such traits are prized and encouraged in their 'home' culture. However, these researchers assert that such confident performances of femininity can be constructed by teaching staff as being disruptive or challenging to authority, because they depart from Western 'normative' expectations of white, middle-class, passive femininity. Jasmine appeared perceptive to this, as she told me that if she were to engage with her lecturers as much as she would like and as much as she had previously done at school in the Caribbean, she would become a 'problem' in class:

Jasmine: If I were to just ask all the questions and be interactive as much as I want they would be like, 'What is wrong with this girl? She's taking over the entire class'. So I just kind of fall in with the rest I suppose.

And in fact, Jasmine recounted an incident where she had been singled out and reprimanded in front of the class for speaking over the lecturer in labs. Jasmine told me she was surprised that this lecturer knew her name – something which Jasmine attributed to her confident demeanour in class and the colour of her skin, which she felt made her 'stand out' from the other students :

...this one time I just kind of chuckled to myself, not to say that I disrupted the class, and then one of my lab partners next to me asked 'What?' and I was just kind of like whispering, just cos these two boys always show up late and I just find it hilarious why they even bother right? Always, always. And she was just like – and this is when I knew she knew my name – she was like 'Is there a problem? Is there something I'm not doing?'. She thought I was making fun of *her*, so it was her insecurity issues, not mine. And then this one time in the lab, and she was like going to town on me and it's like, 'Please proceed with your class, I was not disturbing you at all'. And she was trying to quiet everyone down, everyone was talking in the lab and then she was like, 'I need to say this, and Jasmine, particularly you', and it's like, 'Why are you coming out with that?'. And everybody kind of turned to me like,

‘What is her problem?’, not *my* problem, but what’s her problem, you know? So it works kind of bad.

Jasmine did not seem particularly upset about the way she had been treated, but rather, frustrated and angry. Indeed, in a similar way to the African-Caribbean girls in Mirza’s (1992) study, Jasmine had relatively high self-esteem and sought to work hard to achieve good grades, thus retaining a positive attitude towards education. However, Jasmine was critical of Marlton as a university institution which seemingly failed to accommodate those from her ‘culture’ (also see Fuller, 1984). Jasmine’s case serves to highlight the intersectionality of learner identities in HE, and the complex ways in which discourses of gender combine with discourses of ‘race’ to shape students’ lived classroom experience (Ali, 2003; Hill Collins, 2009; Ali et al., 2010; Crozier et al., 2016) .

Women students in engineering – singled out?

In this study, two of the women engineering students felt that because they were in the distinct gender minority, they had become ‘hypervisible’ in lectures and were therefore picked on more often to answer questions in class. This finding departs somewhat from past studies that have been conducted on ‘chilly climates’ within male-dominated disciplines. This body of research indicates that it is often men rather than women who are selected to answer questions in class or at whom questions are directed, as women are assumed to be less competent than their male counterparts (e.g. Hall and Sandler, 1982; Sandler et al., 1996; Henwood, 1998; Allan and Madden, 2006). Yet it is important to highlight that not all of the engineering students believed that they were singled out and picked on to answer questions, as the following extract taken from Focus Group 3 illustrates:

Mandy: I know last year especially, one of our lecturers we had would literally be like – I think it’s only because we’re in the minority – but he’d always be, I dunno, say like in a tutorial there’d be three girls in the class of 50 boys it would always be ‘Oh the girls sitting in the back row, what’s the answer?’. And it’s like ‘Ohhh God dammit’, but it’s because you’re the

girl, it's just something you have to be like, like 'Oh the boy with the blue striped shirt' it's just...I don't know...

LS: You think you stand out more maybe?

Charlotte: Who're you talking about?

Joanna: Porter.

Mandy: Porter.

Jasmine: Oh yeah, yeah, yeah, yeah...

Mandy: Remember he'd always be like 'Oh the girl with the checkered shirt right there'.

Charlotte: You see he never picked on me.

Mandy: See I always got picked on, I found that because I was a girl...

Joanna: I'd say it was the other thing, I'd never really noticed him pick on any girls. Obviously we're the minority...

Mandy: Really?

Charlotte: I was gonna say that.

Jasmine: I'd say he'd pick on the girls; sit up in the front, he will pick you (*laughs*).

Charlotte: But he always picked on the same girls.

Mandy: Ah so it would just be me (*group laughs*).

Charlotte: He'd always pick on the same three or four girls I'd say as opposed to, I know he picked on Jen a lot and he picked on Laura a fair amount, but I think that's kind of like, he recognised those girls as people he'd picked on before and had answered the questions so he'd be like 'Oh it's fine, they'll answer the question again'.

Mandy: You see, I dunno, in my head it was always 'Oh he's picking on girls' because he was always picking on me, but maybe that's because it was always the girls sitting in the back row, like it was always...I don't know.

Joanna: (*Conspiratorially*) You see I always planned my outfits for lectures, like wearing dark colours (**Mandy:** Ahhhh, black!) to blend in, so I don't stand out at all (*group laughs*) because I just wouldn't have an answer. Um, anyway...

(*Focus Group 3 – Mandy, Joanna, Jasmine and Charlotte (engineering), Sally (English)*)

In the above extract, we can see that Mandy feels that she is often singled out by one particular lecturer, Porter, and is asked to answer questions because she is 'a girl'. Mandy told me in our one-to-one interview that she was not happy about this as she feared that she would not know the answer to the question and would be made to 'look stupid' in front of the class. Whilst Jasmine agrees with Mandy's interpretation, believing that Porter does indeed pick on the female students, Charlotte and Joanna disagree. At first they state that Porter does not pick on girls more often. But then towards the end of the extract, Charlotte concedes that perhaps Porter repeatedly picks on 'the same girls'. And Joanna states that she wears dark outfits to lectures so as not to stand out – indicative of an internal fear that she will in fact be picked on.

The women appear to be making sense of their experiences in two different ways, employing two alternative discourses. Charlotte implies that Porter picks on the same girls as they are 'good students' – that is, students who can be trusted to have done the work and to know the answers when asked in class. In doing so, Charlotte appears to be drawing upon educational discourses that now surround girls' academic achievement, which construct (white, middle-class) girls as being good, diligent and conscientious students (Jones and Myhill, 2004; Myhill and Jones, 2006; Francis et al., 2014; Paule, 2015). In contrast, Mandy appears to see her experience through the lens of continued gender inequality in STEM, whereby women students are treated in a different way to men students. This illustrates how women engineering students' experiences are not uniform, but are interpreted through various competing and contradictory discourses (Markwick, 2006).

Help in the classroom

Whilst the women engineering students disagreed about whether they were singled out to answer more questions in class, all four students did feel that they sometimes received extra help in the classroom because of their gender. This has been a common finding in the gender and engineering literature over recent decades (e.g. McLean et al., 1997; McLoughlin, 2005; Powell et al., 2011).

Whilst the women realised that this extra help marked them out as 'different' from the men students (see Weiner, 1994; Powell et al., 2011), in general, the women seemed to appreciate the support – provided that it was offered in an appropriate way:

Charlotte: I find that if you're like, one of the few girls in that tutorial they will come over to you and be like 'Are you OK?', 'Do you understand everything?', sometimes they'll take more care to come over and make sure you're OK.

Mandy: I like that.

Jasmine: I would agree.

Charlotte: I mean it completely depends on who's taking the tutorial.

Sally: Doesn't that come across as patronising?

Mandy: (*Thinking*) Mmmm, sometimes it is, it depends on how they do it.

(*Group all start talking*)

Charlotte: Some of them are OK, they do it in a way that's nice and you appreciate it.

Sally: Yeah, yeah, not 'Are you OK dear?'

Charlotte: It literally depends on who it is, some of them do it quite well and some of them it's a bit like, 'It's OK, I'm fine' (*laughs*).

(*Focus Group 3 – Mandy, Joanna, Jasmine and Charlotte (engineering), Sally (English)*)

However, different students explained and interpreted this help in different ways. For example, Jasmine stated:

Jasmine: I would say that there definitely, the male teachers, they go out of their way to help you because they think you're so helpless. So if I was to go into the workshop and ask a question I would get more of a detailed answer, as opposed to if a guy went in and asked the exact same question.

LS: OK, yeah, yeah. And do you think that's a problem or are you quite happy with that?

Jasmine: Nope, I love it! (*Both laugh*). I mean, work to the advantage, you know? It's not like it's a bad thing, if they want to help you more (*laughs*).

(Interview 1 – March 2015)

In this extract, we can see that Jasmine feels that her male lecturers position her, as a woman student, as being less capable than the men students and therefore offer her extra help. (However, it is interesting to note that Jasmine is currently in line to achieve a 1st!). Yet in an agentic performance, Jasmine discursively inverts this power differential, stating that she will 'work to the advantage'. As noted in Chapter 2, some researchers suggest that women studying STEM are happy to adopt the position of the 'helpless female' as it fits better with hetero-normative feminine subjectivities (Thomas, 1990; Seymour, 1995; Leathwood, 2006; Powell et al., 2009; Powell et al., 2011). Yet in this study, I identified a different motivation behind Jasmine's positioning. As an International Student studying at Marlton from the Caribbean, Jasmine told me that her parents were paying a great deal for her university education (approximately £17,000 a year), and in our one-to-one interview, Jasmine emphasised that she wanted to get 'value for money' for her parents' sake: '...I want to make my parents proud, so me doing good and having their sacrifices and stuff pay-off'. It seemed to me that Jasmine was keen to gain any extra help she could in order to maximise her educational experience and furnish herself with the best skills to help her compete in the competitive global job market:

Jasmine:...it's just the fact that I come here, I pay 17 grand for tuition and I don't want to have to leave the class unless I know what you're teaching, you know?

In recent decades, educational researchers have identified that neo-liberal inspired market values are becoming increasingly embedded within the global field of HE, with a greater emphasis being placed on the principles of individualism, self-interest, choice and competition (Ball et al. 2000; Leathwood and Read, 2009; Tomlinson, 2016). In the above extract, Jasmine appears to be constructing herself as a rational and empowered 'consumer' of higher education, seeking to 'get her money's worth' (see Leathwood and Read, 2009). On the surface, this 'consumer rights/choice' discourse appears to offer Jasmine some degree of agency and power, working to counter her being positioned as the lacking female 'Other'. But as writers such as Apple (2005) and Appadurai (2006) contend, consumer power in the marketplace should not be mistaken for political power. Thus, we might question the extent to which Jasmine's discursive framing serves to challenge the imbalance in gender-power relations evident between 'woman engineering student' and 'man lecturer', and works to counter the message that women are less able than their male peers.

Chivalry or paternalistic masculinity?

Whilst Jasmine seemed to think that some of the male lecturers offered the women students extra help as they perceived them to be less knowledgeable about engineering, other students offered different explanations. For example, Mandy noted that she often received help with physical tasks when she was in the lab or on construction site visits. Mandy thought that these behaviours were not patronising, but indicative of male-female relations in wider society, and as men being 'chivalrous':

In a lab the guys will always offer to do any heavy lifting I may have to do, I get called 'luv' all the time, higher up items are picked up for me and just nice things really.

(Diary Excerpt – Mandy)

Such help might indeed be indicative of the treatment of women in wider society, based on the traditional discourse of women being the weaker sex (de Beauvoir, 1949; Lloyd, 1984). However, it could also be the case that the

engineering lecturers, in particular, were keen to support the women students to ensure that they had a positive experience, in light of high-profile initiatives in the UK and at Marilton University designed to make the culture of STEM more welcoming for women. At the time of the research, staff working within the College of Engineering at Marilton were expressing a keen commitment to fostering gender equality within their department, and the College Dean was hoping to submit a successful bid for Athena SWAN accreditation. It could be the case that staff within the engineering department were being actively encouraged to adapt their teaching approaches and classroom environments to make them more – in liberal feminist terms – ‘female friendly’ (Rosser, 1990). Researchers such as Henwood (1998), McLoughlin (2005), Martin (2006) and Powell et al. (2011) suggest that male staff in STEM disciplines often seek to do this by offering women extra support as ‘a kind of paternalistic masculinity intended to be helpful’ (Martin, 2006: 263). Yet whilst the women in this study seemed appreciative of the help, these researchers do caution that not all women are grateful for such attention, and warn that these behaviours serve to reinforce the discourse that women are less competent than their male counterparts.

Group projects – trials and tribulations

Another key site of tension that emerged in the women’s talk was their experience whilst working with their peers on group projects – something which constituted a major part of engineering students’ assessment in each year of their course (see Appendix 11). In these projects, small groups of students were expected to work together to complete a task such as designing and building a mechanical object (e.g. a buggy) or a new system. I asked the students whether they were able to choose their ‘teammates’ or whether they were allocated into groups, and they told me that this could vary; sometimes they were allowed to choose, but often they would be placed into groups by module leaders who would either sort them by register (for example selecting 7 names at a time), or group students according to recent test scores.

The women stated that when they found themselves in a ‘good group’, they largely enjoyed completing the projects. They said that they liked getting to know other people, enjoyed sharing ideas, and as Joanna stated, ‘you know

that as an engineer you're gonna have to work in a team so it's really good practice'. Yet the students also raised strong concerns about the gendered division of labour in these projects when they found themselves in a 'bad group'. In Focus Group 3, Joanna discussed the problems that she was having during an on-going project:

Joanna: We've got a group project going on at the moment and our group consists of three girls and six boys, there's quite a lot of girls in our group considering the swaying of how many boys and girls there are studying engineering but, we've noticed that out of everyone the three girls are the ones that do all the work, it's like a proper struggle to get the boys to work.

Charlotte: Yeah, I've heard all about this.

Joanna: Yeah I'm sure you have (*laughs*). Um, to the point where we've had to contact the module leader and have a meeting with him with the whole group to be like 'Boys you need to pull your weight', because even things like just being, we had to, what did we have to do, like assign leaders?

Charlotte: Mmm-hmm, kind of assign like, job roles.

Joanna: Like assign leaders and secretaries, and he said to us on the very first day because we've got to assign a secretary, he said to us girls, 'Do not let the boys make you be secretary just because you're a girl'. Still ended up being a secretary just because they didn't do anything (*Jasmine laughs*), but they just sort of, I don't know...

Charlotte: You see mine was the opposite, I'm the *only* girl, so there's nine of us, I'm the only girl with eight guys and the boys are all very keen to – or at least three or four of them I'd say are. Our project leader is one of the guys and he's sooo keen to do everything and he's very good at motivating everyone to do things and keeping everything on track, and another one of the guys was literally like – pardon my language – I'm happy to be the bitch and take all the meeting minutes and everything and I was like 'OK, fine then', so...

Joanna: I can't work out whether it's the gender divide or whether it's just these specific individuals....

Group: Yeah.

Jasmine: Probably the individuals.

Joanna: Because last year we had our group project and the boys were absolutely great so...

Mandy: See I find that interesting because – not like I'm the only one – but most of the time my group projects this year it's been me having to, I don't know, I don't mind taking control of projects but I've been *forced* to, this year especially, where I've been the one who has to do the work till 3am that day that it's been handed in.

Charlotte: I think you've been very unfortunate with some of your groups.

Mandy: I have been very unfortunate, but I don't know, some of them they just...I had one go to me 'Mandy, what am I doing?' and we'll have been in the exact same lecture and you've been sat right next to me listening to the exact same as I've done [*sic*] and you're asking me. But I don't know, I think it's because I will take charge if I have to, but I don't know if that's because I'm female that they look to me, or because it's like 'Oh Mandy's actually doing work'.

Joanna: Yeah, it's hard to see whether they don't want to do it because, you know, they're being told what to do by a girl, or they're not doing it because they feel like if they don't do it, like, 'What's she gonna do?'. Like, if it's a boy you might actually get into an argument about it but...

Group all start talking.

Charlotte: I feel that boys just don't care that much about things, they're just like, 'Whatever'.

(Focus Group 3 – Mandy, Joanna, Jasmine and Charlotte (engineering), Sally (English))

The above extract not only illustrates some of the problems that the women were experiencing whilst working on group projects, but also highlights the

different ways in which discourses of gender and academic attitudes are interpolated by students. Both Joanna and Mandy feel that in their group projects, the male students have not been 'pulling their weight' and have left the girls to do all of the work. Mandy appears to have dealt with this problem by taking on the role of project leader and completing all of the assignments herself (even if this means working until 3am). In Joanna's current group project, the situation appears to have deteriorated to such an extent that Joanna and her fellow women group members have decided to talk to their module leader about their concerns. It seems that the module leader has been sympathetic (and sensitive to gender equality issues, having told the women not to be forced into the secretarial role), and has held a meeting with the men students to reprimand them. In contrast, Charlotte states that she has had a very good experience, despite being the only girl in her group. She counter-asserts that most of the men students in her group are very motivated and keen to do work – even offering to be the 'bitch'³⁰ and take on the stereotypically feminine, low status secretarial role.

Initially, Charlotte attempts to downplay the significance of gender in Joanna and Mandy's experience. Perhaps in light of her own positive experience, Charlotte feels that Mandy and Joanna have simply found themselves in 'unfortunate' groups. Jasmine concurs, stating that it is 'probably the individuals'. In doing so, Charlotte and Jasmine appear to be drawing upon neo-liberal inspired, individualist and 'postfeminist' discourses which imply that gender inequality is no longer an issue in Western society, instead attributing success to individuals' motivation to succeed (see Harris, 2004; Walkerdine, 2003; McRobbie, 2007; Ringrose, 2007). However, we can see that Joanna and Mandy do not necessarily agree with Charlotte and Jasmine's interpretation of events. Having found it difficult to work with their male peers in group projects, these women appear more open to the notion that their classroom experience has been structured by unequal gender relations. Indeed, Joanna even wonders whether the male students' negative and uncooperative attitudes might be symptomatic of continued patriarchal gender relations in wider society, with the men unwilling to take orders from the women students because they are 'only'

³⁰ A pejorative term inscribed as feminine, often used to denigrate women.

women.

'Laddism' in the engineering classroom

Another theme to emerge strongly in the women's interview narratives concerned the existence of 'laddish' behaviours in the engineering classroom. When I asked the women to comment on the behaviour and attitudes of students in their classes, the women singled out groups of 'lads' as being a (relatively minor) source of disruption, often talking through lectures and generally joking around:

Charlotte: *Ha-ha*, engineering definitely has a stereotype for kind of like, lads in engineering, and you kind of notice that sometimes. Depending on where you sit in class, if manage to sit behind, I mean you kind of spot the few groups of people who automatically fit that stereotype and if you kind of manage to accidentally sit in front or behind them, you kind of notice them talking the entire way through the lecture. You're like 'Can you please shut up? I actually was going to try to pay attention'. Which can be irritating (*chuckles*)...Um, and occasional things happen, like if someone says something funny or someone just makes a comment, it can happen every now and again, but it's not really disturbing I'd say or anything like that.

(Interview 1 - March 2015)

Joanna: I guess it's like half and half. There's always people that are there right at the front at every lecture, like really keen. And there's, you know, always a group of boys that are just joking around the whole time.

(Interview 1 - March 2015)

In line with Phipps and Young (2013) and Jackson et al.'s (2015) studies of laddish behaviours in UK universities, the women engineering students identified engineering 'lads' as participating in sports (particularly rugby), and constructing strongly heterosexual, sexually promiscuous subjectivities:

LS: And so do you see [laddy behaviours] on campus, on your course or anything like that?

Jasmine: I do see it on the course, you're right. Because there's so many boys and you can tell which ones do rugby, which ones are the laddy lads, which ones are the nice, genuine, kind ones, you can definitely point them out.

(Interview 1 - March 2015)

Mandy: You tend to get a lot of the rugby lads – well somehow I always manage to sit around them or the people who are just messing around. Like we had, our lecturer today had a Red Nose Day, like he wore a Red Nose for the whole lecture and he had a cup to pass round for money and someone put in a condom. He didn't spot it, but it was just one of those things where you think (*exasperated, embarrassed*) 'Oh my God'. But everyone's just like 'Oooooohhhh, wonder what's gonna happen!', and you can see the people who did it straight away. So...

LS: Oh OK. Were they the male students?

Mandy: Oh yeah.

LS: The rugby lads?

Mandy: Yeah. I'd say sports lads I suppose, because a lot of them do either rugby, hockey or all the sporty ones basically.

LS: Yeah. So you have quite a lot of them in engineering do you?

Mandy: Yeah I was surprised actually.

(Interview 1 - March 2015)

Charlotte: ...if you just happen to sit in front or behind of them [the 'lads'] you just kind of hear them discussing their nights out, whatever girl they've slept with that night, or things like that.

(Interview 1 - March 2015)

Based on the quotes presented above, the lads in engineering appear to be constructing 'high-status', traditional, strongly heterosexual masculine subjectivities (Connell, 2005; Jackson and Dempster, 2009) – which appear to align with the masculinist epistemology of STEM (Harding, 1991; Kelly, 1987). Such laddish behaviours have often been theorised by researchers as a working-class configuration of identity, designed to gain respect and admiration amongst their peers (Willis, 1977; Jackson, 2006). Indeed, Jackson et al. (2015) noted that many of the 'lads' in their study which was conducted in a post-1992 university institution were likely to be: 'working-class "non-traditional" students who fall under the "widening participation" agenda' (p.309). Jackson et al. suggest that these behaviours might be a configuration of identity adopted by those who do not know, or are unwilling to construct a 'good student' subjectivity (also see Reay et al., 2005, Archer, 2008).

Yet it is important to remember that Marlton is a high-performing, predominantly white, middle-class institution and that the engineering lads are unlikely to be from working-class backgrounds. In fact, in the three focus groups that I held as part of this project, the women students identified Marlton 'lads' as being largely wealthy, upper/middle-class, privately-educated or boarding-school alumni (see Phipps and Young, 2013). As such, it is difficult to explain (and perhaps justify) Marlton lads' behaviour in such a way. Some researchers argue that upper/middle-class youths are increasingly appropriating working-class laddish behaviours in an attempt to look cool and 'authentic' (Francis and Archer, 2005b; Francis et al., 2012), which could be a motivation behind the 'macho' masculinities performed by some of the male engineering students at Marlton.

In light of these comments, I asked the women what impact they felt that such behaviours had upon their own, and other engineering students' experiences whilst studying. Research conducted with students lower down the education system in primary and secondary schools suggests that girls can be critical of laddish behaviours in class and will complain to teaching staff (e.g. Warrington and Younger, 2000). In a university context, Jackson et al. (2015) also found that women – particularly mature female students – were those most likely to be critical of, and challenge disruptive behaviour by 'calling out' lads in class. Indeed, Jackson et al. observed that with the introduction of increased tuition fees of up to £9000 a year in 2012, the undergraduates in their study were

increasingly unwilling to tolerate such distractions in class. However, in this project, the women engineering students did not appear to strongly disapprove of, or challenge the 'lads'. Rather, the women seemed happy to ignore any disruptive behaviour, and simply avoided sitting near them:

Charlotte: But I suppose, even in circumstances like that it's only if you're sat immediately near them that you notice that. I suppose kind of further away you don't, it doesn't really affect you so whilst it's a bit irritating, it's not the end of the world if you choose wisely where you sit.

(Interview 1 - March 2015)

Jasmine: If they're in group I stay away.

(Interview 1 - March 2015)

Joanna: But mostly I think everyone wants to do well. Because it is quite a hard, hard, um, degree. I think everyone sort of recognises that, like, you do have to work hard at some point. And cos you're paying so much money for it, like, you want, you want to pass.

(Interview 1 - March 2015)

It might be that the lads' behaviour in engineering lectures was indeed not a significant distraction to the other students, as the women imply. However, as I talked with the women, it seemed to be the case that the engineering lads were actually well-liked by many of their fellow classmates (both men and women), and thus their behaviour was tolerated. In fact, Mandy told me that whilst the 'sporty' lads could be lazy and often sought to avoid completing their share of work during group projects, on balance, they were actually 'really good guys'. This seems to link with the work of researchers who have observed that laddish boys in schools can be popular and earn the admiration of their peers (and teachers) for their humorous antics (Kehily and Nayak, 1997; Francis, 2000b).

Verbal harassment in the engineering classroom

Whilst all four of the engineering students identified groups of 'lads' joking around in lectures as causing minor distractions, Mandy did appear to have experienced a more extreme form of laddism whilst studying on her course. In her diary, Mandy not only documented her day-to-day activities, but also

reflected upon how she had been treated as a woman in engineering since commencing at Marlton in first year:

I would say I am treated differently as a woman, I'd say there are dickheads in the course that have flat out said why are there girls on this course, not listened to my opinion, muttered about my [sic] under my breath and judged all the girls on their looks. I had one guy tell me he didn't make friends with girls below a 6 and refused to speak to me, he is still around but literally has no friends because of the way he treats people. Most guys in engineering I would say know who I am but only because there are such a few number of girls and I for one could name all of the girls on our course.

I do get positives out of being a female engineer, a lot of the guys on my course will just strike up conversations with me if they see I am alone I have only met about 5/6 guys on my course who treat me negatively and the 'good' ones heavily outweigh the bad experiences I have had. You will come across blokes who treat you like you don't belong few and far between [sic]. Two of the guys who treated me like that last year have since dropped out but I don't know the reasons why exactly.

(Diary excerpt – Mandy)

When I asked Mandy to elaborate upon this in interview, she explained:

Mandy: I think probably my first few weeks in engineering was the worst. Because I had a guy tell me – he's gone now, I don't know what happened to him – but he was like, he literally said 'Oh you must be a lesbian if you're in engineering'.

LS: OK, yeah.

Mandy: I was like, 'Thanks mate' (*laughs*). 'I can assure you I'm not'. But um...I just, it's guys, they just judge you for your looks. You can tell, like I've heard discussions about girls in engineering, they'll be like, they'll rank us kind of thing.

LS: Yeah OK.

Mandy: It's just stuff specifically like that, but I haven't had many of them. Like, mainly because they're just dickheads really. You always get them, no matter what subject you do.

(Interview 1- March 2015)

The above excerpts illustrate a number of abusive comments that Mandy was subjected to by a minority of male students when she first arrived at Marlton. This type of sexist/misogynist verbal harassment has long been identified as a feature of classroom exchanges in the lower stages of schooling (e.g. Epstein et al., 1998; Francis, 2000b; Mills, 2001; Renold, 2003). We can see that the 5 or 6 male students appeared to align the discipline of engineering with a strongly heterosexual 'macho' form of masculinity, and sought to denigrate Mandy and her involvement in engineering by questioning her sexuality and disparaging her looks – repudiations of normative, heterosexual femininity (Butler, 2004). On the surface, such behaviours appear to link with high-status laddish performances of masculinity, constructed in opposition to both subordinate masculinities and femininity (Connell and Messerschmidt, 2005; Jackson and Dempster, 2009). The comments might also be viewed as 'banter', designed to give the 5/6 male students kudos amongst their male peers (Phipps and Young, 2013). Yet it is significant that Mandy states that the 5/6 male students were not in fact celebrated by the majority of the men in engineering, but were frowned upon and socially excluded – Mandy points out that two of the students have since dropped out of the course.

It appears that there is a distinct difference between the laddish 'sporty lads' or 'good guys' who Mandy refers to above, and the 5/6 young men who are in the minority. Whilst the sporty lads might joke around and talk through lectures, the 5/6 male students appear to have 'pushed it too far' and have tipped over into offensiveness. Their attitudes towards women appear not to be held by the majority of men in engineering; rather, such attitudes have been deemed disrespectful and unacceptable. It could be the case that in the 'grown-up' space of the university, a more progressive, enlightened and intellectual form of masculinity is required of men, even amongst laddish subcultures (Leathwood, 2006b; Leathwood and Read, 2009). Lingard et al. (2012) alternatively suggest that in 'elite' educational spaces, it is often required that hegemonic student masculinities are re-made out of a recognition that 'macho' masculinities will not fit comfortably within a changing globalised labour market, which increasingly favours feminine skills and attitudes. In any case, the 5/6 male students' performances of what we might term 'hyper-masculinity' or 'exaggerated-

masculinity' (see Page, 2014) appear to have been rejected by the majority of engineering students at Marlton.

Whilst it seems that the 5/6 male students were in effect punished for their behaviour by being cast as pariahs and excluded by their peers, it is important to consider the impact that these negative comments had upon Mandy, and how she sought to make sense of them as a woman in engineering. In the above excerpt, Mandy presents her experience in a reasoned and balanced way; she sets the 'duff' minority of male students against the 'good' majority who treat her positively and welcomingly. She also sees the 'duff' minority as characteristic of all disciplines – where you will always find a minority of unpleasant people – rather than as unique to engineering. Powell et al. (2009) observed a similar 'rationalization' process in action in their study conducted with women engineering undergraduates. They observed that the women would often 'weigh up' the advantages and disadvantages of studying engineering when rationalising their decision about whether to continue with their discipline.

Whilst various researchers have observed that women today often seek to downplay the significance that gender³¹ has upon their experience whilst studying – often seeing their success as dependent on the individualist values of determination, drive and hard work (e.g. Erwin and Mauruotto, 1998; Pomerantz et al., 2013; Francis et al., 2014) – Mandy breaks with this line of thought and instead acknowledges the impact that gender has had upon her experience whilst studying engineering. In an agentic performance, Mandy is able to re-frame her negative experience and place blame firmly at the door of the 5/6 male students, rather than herself or engineering as a discipline. In this way, Mandy is able to forge a relatively successful (if not powerful) space for herself in engineering. Indeed, when I asked Mandy whether she felt a sense of 'belonging' to her course, she stated: 'I feel like engineering was the right choice for me'.

Discussion

On the surface, the above findings might be interpreted as lending weight to Hall and Sandler's (1982) notion of a 'chilly climate' in STEM university

³¹ And also the impact of other structural axis of identity such as class and ethnicity.

classrooms that serves to disadvantage women students. We can see that the women identified a number of ways in which their educational experience had been shaped by gender: some women expressed negative feelings towards certain lecturers, felt singled out or 'picked on' to answer questions, thought that they received extra help, had difficulties whilst working with their male peers in group projects, and had experienced varying degrees of 'laddism' in the classroom. Such findings indicate the existence of a distinctly masculinist learning culture in engineering at Marlton (Keller, 1985; Harding, 1986; Haraway, 1991; Code, 1991) – one that, as we will see, appeared not to be present in the other four disciplines under study.

These findings resonate strongly with studies conducted in engineering over several decades. Educational researchers have repeatedly documented the top-down and authoritarian approach which seems to characterise teaching within engineering and the 'laddish' classroom atmospheres that are sometimes generated by (a minority of) male students (e.g. Felder et al., 1995; Greed, 1991; Lewis, 1995; Brainard and Carlin, 1998; Erwin and Maurutto, 1998; Powell et al. 2011). These researchers argue that such masculinist cultures play a significant role in alienating students – and particularly women, who may have lower levels of self-confidence and feel 'different' studying in the gender minority. This might lead us to question how effective government-backed, liberal feminist inspired initiatives have been over the years in challenging and changing dominant STEM cultures and practices (see Wajcman, 1991; Henwood, 1996; Henwood and Miller, 2001; Rees, 2001; Gilbert, 2001; Phipps, 2007).

Although this study has highlighted much continuity in women students' experiences whilst studying engineering in HE, it is important to interrogate how the women discursively framed their experience and carved out a 'workable' space for themselves within their chosen discipline. As noted above, the women in this study were not necessarily put off from continuing in engineering in light of their experiences. Rather, the women appeared to draw upon two different discourses in order to make sense of their experience:

- 1) the 'postfeminist' discourse that gender equality has been achieved;
- 2) the discourse that gender inequality in STEM persists and that women engineering students are 'pioneers'.

When I asked the students to reflect upon the role that gender played in shaping their classroom experience at Marlton, one student, Charlotte, sought to downplay its significance. Charlotte did not deny that gender could have an impact on other students' experiences, but stated that she had not been treated any differently as a woman. Whilst Charlotte did recount incidents that were clearly gendered (for example being told by a male member of staff in the workshop that the heels on her ankle boots were too high, even though they were only $\frac{1}{2}$ inch), she felt that these incidents were relatively insignificant, and appreciated what the engineering department was trying to do to create a positive environment for women. It seemed to me that Charlotte saw her success as largely dependent upon her own motivation to succeed. In this way, Charlotte appeared to draw upon neo-liberal and post-feminist discourses which construct gender as no longer being an issue in Western society, as gender equality has been achieved (Harris, 2004; Walkerdine, 2003; Ringrose, 2007, 2012; McRobbie, 2008).

In contrast, Mandy, Jasmine and Joanna expressed in interview that they *were* sometimes treated differently as women in engineering, which could put them at a disadvantage. However, these women did not see themselves as passive 'victims' of a biased culture (Markwick, 2006). Rather, in an agentic way, these women knew in advance that they would need to be strong-minded and determined in order to succeed on their course, and seemed prepared to encounter discrimination whilst studying. These women told me that they were very aware of current initiatives and media campaigns designed to champion 'women in science' (e.g. WISE, Head Start³²), and this seemed to bolster the women's confidence, enabling them to feel that they had a 'right' to be in engineering.

In fact, these women seemed able to deal with potentially negative experiences because they saw themselves as being 'pioneers'; Mandy wrote in her diary that she was 'proud to be a female in engineering' as she felt like she was 'part of a

³² WISE (Women into Science and Engineering) is a high-profile UK campaign designed to encourage more girls and women to pursue STEM through activities such as educational workshops and regional events. WISE was founded in 1984 by the Engineering Council and the Equal Opportunities Commission following the Finiston Report on the future of UK engineering. Headstart is an initiative run by the Engineering Development Trust (EDT), a registered charity, which aims to inspire young people – particularly girls – to pursue a career in STEM. Headstart works with schools to offer GCSE and A-level students STEM-based workshops and residential university visits.

change', and Jasmine told me that in light of her isolating experience, she had set up her own student-based outreach initiative in partnership with Marlton University's Athena SWAN Group, designed to inspire girls to study engineering in local primary and secondary schools (see Chapter 6). In this way, we can see the women exerting agency and re-inscribing their experience affirmatively, thus negotiating a relatively successful and powerful space for themselves within their discipline.

Indeed, many of the women seemed surprisingly willing to adopt physical/embodied strategies to cope with the 'chilly climate', such as being quiet in class (Mandy) and wearing dark clothes in order to blend into the background (Joanna). And in an agentic way, these students seemed able to critically reflect on, and 'explain away' negative experiences; for example, bad teaching was largely attributed to the questionable personality of the lecturer (i.e. the individual). However, whilst on the surface these strategies might appear effective, questions might be raised as to whether the women were serving to change the potentially alienating masculine culture of the engineering classroom by simply 'being there', or were merely 'slotting into' the culture of engineering (see Walker, 2001; Markwick, 2006).

PHYSICS – A gendered classroom 'culture'

A demanding and complex workload

One theme that emerged strongly as I talked with the women physics students was the difficult and demanding nature of their discipline. The students were keen to stress to me the heavy workload that they had to cope with on a weekly basis – which they perceived to have 'stepped up' considerably in second year. The physics students seemed particularly concerned about the spacing of their assignments and complained that their (numerous) deadlines tended to fall within a relatively short space of time, which put them under significant pressure:

Emma: Last term and this term there's become like a two, three week period where everything just happens to fall on the same date, so you'll

have mid-terms, you'll have a lab report in, then you've got to do an initial lab report like a day later, um, you've got problem sheets so within two weeks you have seven things due in so...And you have mid-terms, so that's when, like, you really notice how much harder it is than first year. And (*pause*) they don't plan it very well (*sighs*).

(Interview 1- March 2015)

Grace: ...it sort of coincides that there's lots of deadlines in the middle two weeks of each term. And they're just horrific.

(Interview 1- March 2015)

The women were also keen to highlight that this heavy workload was exacerbated by the theoretical complexity of their modules, which they felt made their course particularly difficult. The students were studying highly abstract and complicated modules in fields such as condensed matter, electromagnetism, quantum optoelectronics and nuclear physics (see Appendix 11). In Focus Group 2, the women talked of simply not being able to understand certain concepts in lectures:

Jess: Sometimes it's literally just 10 seconds in you're like, 'Nope, don't understand any of this. Way above my head. I've just got to sit here and kind of try and figure it out later'.

(Focus Group 2 – Jess (physics))

Emma: There's very rarely a physics lecture where I concentrate the whole way through because it gets to a point and I'm like, 'I don't actually understand what he's going on about'...

Physics students: Yeah!

Emma: And then at that point you kind of, you can try and concentrate but it's so much effort.

Poppy: It's so hard.

(Focus Group 2 – Emma and Poppy (physics))

Becky: Generally you will find someone halfway through the course going ‘So, what does this mean?’, and everyone around them will be like, ‘I don’t know!’ (*Group laughs*). ‘Nobody knows what it is so just put it in an equation so it does things!’ (*Physics students laugh*).

(*Focus Group 2 – Becky (physics)*)

Educational researchers have documented how physics is widely perceived as being a highly abstract and difficult discipline, only suitable for students who are of sufficient intelligence and have a natural ability at physics (Thomas, 1990; Carlone, 2004; Archer et al., 2013; DeWitt et al., 2013). And in fact, this discourse of physics being ‘difficult’ appeared to be constantly reinforced to the women as they studied at Marlton. Grace told me that she had even heard staff complaining about the demanding nature of the work: ‘Some of the [problem sheet] questions are just *ridiculously* hard. Like even the demonstrators have said, “It takes us *ages* to mark them, we only get paid for three hours and we’re doing well over that”’. There also seemed to be widespread agreement amongst the women that Year 2 of their course was the most taxing. This discourse appeared to be perpetuated by both staff and older physics students (i.e. 3rd year and postgraduate students), who had taken to warning younger students about Year 2 to ‘prepare’ them for what was to come:

Grace: Second year is just *non-stop* from start to finish, head down, full steam ahead, just get on with it (*chuckles*)...The lecturers warned us but they said that the first term was the most difficult term, if you get through first term you’ll be fine, but that was a lie.

LS: OK (*laughs*).

Grace: Definitely second term was worse, just because the content of the modules was so much more, one, boring and, two, it was just not taught in the best way *at all*. And yeah, the older students do tell you...

(*Interview 2 - November 2015*)

Whilst the women physics students in Focus Group 2 appeared to make light of the fact that physics could be incredibly difficult and demanding, when I talked with the two women participating as case studies during their one-to-one interviews, it became clear that this lack of understanding could cause a great

deal of frustration and anxiety. Emma was a 'top' student at school having achieved a string of A* and A grades at GCSE and A-level and was continuing to perform very well at Marlton, averaging a high 2:1/1st. However, Emma complained that some topics simply would not 'click' into place for her – something which Emma found incredibly frustrating as she was used to being able to master all of the topics:

Emma:...it's just frustrating because like, I'm used to, if I don't understand something it will eventually click, but there's stuff from modules last term which I'm still like, it kind of comes up again and you're like 'Oh crap, I don't really understand that'.

(Interview 1 - March 2015)

And Grace continually re-iterated to me in her first interview how heavy and demanding the workload was in Year 2, and how she was struggling to cope. Indeed, when I first spoke with Grace in March 2015, she appeared very quiet, anxious and stressed about her course, lamenting: 'This year has been *tough*. *Really tough*'.

Researchers such as Carlone (2004) and Archer et al. (2012, 2013) argue that the discourse that physics is hard and difficult is particularly alienating for young women because the subject position of the 'ideal' physics student (i.e. one who is naturally gifted) is discursively inscribed as 'male'. Yet whilst clearly often experiencing feelings of frustration and anxiety, the women physics students in my study did not seem overly perturbed by the complexity of their work, and appeared able to retain a relatively 'credible' physics identity. Whilst the women certainly did not feel that they had control or mastery over their discipline, they appeared to have reconciled themselves to the fact that *no-one* could realistically achieve mastery over physics as the discipline was so incredibly difficult, and thus respected physics *for its complexity* (see Ernest, 2002).

The physics student as 'multi-talented'? – Gender, physics and computer programming

In terms of difficulty, one module emerged as being a particular 'bugbear' for the women in this study. The physics students stated that computer programming

had been the hardest module that they were required to study, and that many students had struggled to even pass the course. Emma told me that she had just scraped a pass in the module, obtaining 41% overall – although having only obtained 27% in mid-term tests. This seemed notable because, as stated above, Emma was a top student averaging a high 2:1/1st. My other case study student, Grace, had unfortunately not managed to pass the module: ‘I failed by 1% because I just couldn’t get my head around it (*chuckles*). Computers just aren’t my thing. I can do like the basic Microsoft stuff (*laughs*), that’s as far as I go though’.

In attempting to explain the challenging nature of this module, some of the women seemed to feel that gender was (at least indirectly) involved. In Focus Group 2, the women physics students told me that they had negative preconceptions of computer programming before they had even started the module and feared that they would not be able to do it. The students attributed this to the gender-biased and ineffective nature of ICT teaching that they were offered at secondary school, and the masculinized discourse of ICT which had made the subject ‘unthinkable’ for them. The women thought that these two factors had curtailed both their knowledge of, and interest in computing:

Poppy: Because I was at an all-girls’ school, you could take computer science or coding or whatever they called it for A-level but you had to go over to the boys’ school to do it.

LS: Right, OK.

Poppy: And there were a few subjects where that happened and it did make it really awkward because it was a 20 minute walk away, and it was just that thing like, there were some subjects where the boys came to our school as well, but that was one of the ones that I don’t think anyone took.

Emma: Yeah, well I went to an all girls’ school and it didn’t offer IT at all.

LS: Right OK, so you think it’s practical constraints as well, you just aren’t given the opportunity...

Emma: Yeah you just wouldn’t think of doing it, because we did ICT at GCSE but that’s using Excel (*group laughs*), which is not what computer

science is, so it just never crossed anyone's mind. Because when we came here [to Marilton University] programming was one of the hardest things because it was so new, I didn't even know that's what you had to do and I think that's the reason, partly. Because one of the guys I lived with, instead of going into physics he wants to go into computing, and that's because he did it at A-level and really enjoyed it and knew what it was, whereas because we weren't offered it, I would just *never* have thought of it...

(Focus Group 2 – Poppy and Emma (physics))

Jess: I think that the perception of it is that it's really hard, you see it on films, you always have that weird computer geek in the films who's always a guy, who's always a nerd.

(Focus Group 2 – Jess (physics))

These findings resonate with an extensive body of research which highlights the role that educational institutions and discourses play in shaping pupils' subject choices and preferences (e.g. Sharpe, 1976; Grafton et al., 1987; Cullen, 1987; Gillborn, 1990; Mendick, 2005; Smyth and Darmody, 2009). Indeed, Grace thought that whilst there were a few women in physics who enjoyed computer programming, more men seemed to be interested in, and excel at it. Grace also stated that some of the male students appeared to be able to bypass official university assessments, serving to reinforce gender 'difference' between the men and women students:

Grace: ...there *were* girls that were good at [computer programming] and enjoyed it and went home and wrote programmes but there was, you heard of a lot more boys who would just go home, sit on their bed and programme this 'new' thing or wouldn't have to do any of the assessments because they showed the lecturer that they did that during their summer holidays and stuff like that.

(Interview 2 - November 2015)

This suggests that women physics students' 'success' as physicists in HE is not only predicated on their ability to construct a positive learner identity in physics, but also their ability to construct a positive learner identity in the STEM

disciplines that interlink and overlap with physics. In this study, the women physicists seemed to find it difficult to negotiate the heavily masculinized discourse of ICT, leaving the women apprehensive of, or even fearful of programming – similar to the women STEM students in Henwood (2000) and Stepulevage and Plumeridge's studies (1998). This indicates that different STEM disciplines are constructed differently by women students, with some viewed as being more masculine and alienating than others (e.g. ICT).

Teaching in physics – Lecturers' communicative styles

The women physics students also spoke of the 'hit and miss' nature of teaching that they received on their course, although in considerably milder terms than the women in engineering. None of the women physics students felt that they had been singled out to answer questions, or believed that they received extra help from staff because of their gender. And whilst the engineering students stated that they sometimes felt intimidated by or 'scared' of their lecturers, the physics students thought that, on the whole, their lecturers maintained an authoritative air, yet were relatively approachable:

Emma: Like all the lecturers, they might come across as quite stern but when you actually talk to them they're really nice. Like my tutor, he's so lovely, all he wants us to really do is learn and really enjoy physics. So like, we'll be going through something and he's like, (*imploring voice*) 'I just want you to understand it so you can see how great it is'. And like, you really feel like he wants you to really enjoy physics, so that's really good. Um, yeah, that's *really* nice.

(Interview 1- March 2015)

Whilst the women seemed to feel that their lecturers were well-informed and passionate about their discipline, they thought that some lacked the pedagogical knowledge and communicative skills required to impart difficult concepts in an engaging way. The students complained that many of their lecturers tended to simply 'read out maths from the screen' rather than interact with the class, which could be 'boring' (Poppy, Focus Group 2). The women also felt that their lecturers were often unable to explain concepts on a level that students could understand:

Poppy: I think it's very difficult for them to bring their intelligence down to our level when they're so specialist in the thing they're teaching. They just kind of assume everyone understands.

Jess: They just assume everyone knows it!

Poppy: And at least like, they just won't bother defining something so they'll just start talking about this thing and no one knows what it is. I just can't handle that!

(Focus Group 2 – Poppy and Jess (physics))

Speaking in Focus Group 2, Jess seemed to feel that many of the physics lecturers³³ found it difficult to impart knowledge because they struggled with social and communicative skills due to their reserved personalities:

Jess: But a lot of the lecturers are, not shy, but are clearly not comfortable speaking in front of that many people and explaining themselves and expressing their views. And like, my tutor this year, he's very shy and he speaks very quietly and he doesn't like to speak to more than a few people which is fine for tutorials because there's only about 5 of us at once for a tutorial so it doesn't matter. But he could never be a lecturer, but he's amazing at explaining things, and I think a lot of the physicists are by nature, or stereotypically, are not particularly outgoing people and find it hard to express themselves and talk about things and explain things I guess.

(Focus Group 2)

Researchers such as Epstein et al. (2010), Moreau et al. (2010), Archer et al. (2013) and DeWitt et al. (2013) have documented how young people appear to hold certain perceptions about science and maths and the people who engage in these two fields of study. These researchers observe that young people often envisage scientists and mathematicians as being male, white, middle-class, nerdy, geeky, obsessive, 'geniuses', and socially awkward³⁴. In the above

³³ It should be noted that the physics students were implicitly referring to male lecturers rather than female lecturers because the women told me that in nearly two years, they had only had one female lecturer.

³⁴ These perceptions are said to stem from images contained within popular culture and the media which, in turn, are said to reflect 17th century Western ideals of scientific 'rational man' (Walkerdine, 1998; Lloyd, 1984).

extract, Jess appears to be drawing upon the common trope of the physicist as being intellectually gifted but socially awkward in order to make sense of her lecturers' and tutor's teaching styles. It is interesting to observe that, in a similar way to the students in Epstein et al.'s (2010) study, Jess realises that she is drawing on a physics 'stereotype' in order to explain their behaviour, but nevertheless feels that this is how they 'are'.

In the extract, it is important to note that Jess is not critical of her lecturers' reserved personalities and lacking communicative skills, but is sympathetic and defensive of them. For example, she acknowledges that her tutor probably could not address a lecture theatre because he is too 'shy', but instead praises his amazing explanatory skills. When Jess says that her tutor is 'shy', she employs a word/quality often linked with femininity (McDaniel, 2003; Scott, 2007). And in fact, Moreau et al. (2010) point out that whilst mathematicians and scientists are often constructed as belonging to dominant groups in society (i.e. white, men, middle-class, heterosexual), they are often 'Othered' in imagined accounts as they are not seen as fitting with hegemonic masculinity. In this way, Moreau et al. argue that scientists and mathematicians become somewhat feminised, as they lie at the opposite side of the male/female binary. Indeed, it appears as though Jess recognises that her lecturers and tutor do not necessarily match up to the traditional, high-status, authoritarian, masculine image of the university lecturer (Leathwood and Read, 2009; Burke, 2013), and seeks to defend them in a maternal and protective way. In fact, it is arguable that their performances of an alternative 'softer' masculinity link more closely with the hetero-feminine subjectivity that Jess herself performs (see Gilbert and Gilbert, 1998; Frosh et al., 2002).

Student interaction, behaviour and attitudes in class

Whilst the women engineering students talked about 'laddish' performances of masculinity evident within the engineering classroom, the women physics students did not mention any such behaviours occurring within their lectures, tutorials or lab sessions. The women seemed to feel that the men in physics were generally quiet and 'techno-geeky' rather than laddish. For example, when I asked the women participating in Focus Group 2 to comment on the behaviour and attitudes of students in their classes, the women stated that, overall,

students' behaviour was good. They thought that if students (of either gender) were not interested in learning, they simply would not turn up to class. However, they did note that if the male students got bored in lectures, they would often play retro childhood computer games:

Becky: Cos the guys are gonna be playing games on their phones
(*laughs*).

Poppy: That's true, the guys are kind of like, Pokémon.

Emma: Yeah they carry their DSs with them *everywhere*.

Jess: Yeah so they have their DSs to play Pokémon in lectures (*physics students laugh*).

(*Focus Group 2 – Emma, Becky, Poppy and Jess (physics)*)

The students also thought that whilst most of the women on their course sought to keep up with fashion and invested in the production of hetero-normative (albeit as I observed 'restrained' or 'appropriate') feminine subjectivities (Skeggs, 2004; Renold and Allan, 2006; Ringrose, 2007; Skelton et al., 2010), the male students lacked any interest in such concerns:

Jess: I think the great thing about physics is that no one cares.

Physics students: Yeah! (*Laughter*).

Jess: If you turn up to your lecture in pyjamas, literally no one would care.

Poppy: They'd [the male students] probably be like 'That's awesome, why didn't I do that?', that would genuinely probably be the reaction.

Emma: I've been surprised, like, when you think of a girl in physics, everyone's like, 'Oh they won't care about their appearance, won't wear make-up, hair scraped back', whatever. But most of the girls take a pride in what they wear, they're interested in clothes. Like if I come in in a top, like yesterday one of the girls was like 'Oh I like your top', they take an interest.

Poppy: But the boys just wouldn't, they would never notice, they would never care, so you never feel pressured that you have to. Because there's so many boys so...

Helen: The flat cap, that's quite a trend isn't it for boys? I see a lot of boys wearing that. Well there's, like, groups.

Jess: (*Surprised*) Not in physics! (*Laughs, group laughs loudly*).

Physics students: No!

Jess: The boys in physics, they don't really understand fashion, generally.

(Focus Group 2 – Jess, Poppy, Emma (physics), Helen (anthropology and film))

In a similar way to Jess speaking about her physics lecturers in the section above, the women appear to be constructing the male physics students as not performing hegemonic 'laddish' constructions of masculine identity that are often said to set the benchmark for masculine subjectivities in the West³⁵ (Connell, 1990; Swain, 2006; Kimmel, 2008; Jackson and Dempster, 2009). Rather, the male students are constructed as performing a 'softer' and more intellectual subjectivity – similar to the 'techno-masculinities' performed by some of the technology-loving teenage boys in O'Donnell and Sharpe's (2000: 48) study. Of course, this is not to say that all of the men in physics assumed 'geek' or 'nerd' subjectivities (see Francis, 2009). Emma told me that many of her male friends in physics played sports and could be very lazy when it came to completing their work – often regarded as strong markers of traditional masculinity (Connell, 1989; Mac an Ghail, 1994; Martino, 1999; Renold, 1997). But what is important is that the women *felt* that this softer form of intellectual masculinity dominated their course. This version of masculinity appears to align more closely with conventional hetero-normative femininity, and as is evident in the extract, the women were pleased about this as they thought that it created a relaxed and comfortable atmosphere on their course. Indeed, it became clear from the women's style of dress and talk in interviews that they did not feel

³⁵ Hegemonic Western masculinities are said to privilege the socio-cultural constructs of physical skill, strength, competitiveness, courage, aggression, self-reliance and a repudiation of the feminine (Swain, 2006; Jackson and Dempster, 2009).

under pressure to construct 'emphasised' or 'desirable' feminine subjectivities (Connell, 1987), despite being in a strongly male-dominated environment.

In fact, the students told me that they felt the women physics students had established a greater presence on their course than the men, despite them being in the distinct gender minority. The women stated that they did not feel as if they *were* in the minority in lectures and tutorials because whilst the women were conscientious and largely turned up to class, a good proportion of the men did not. This apparently made the gender split in class roughly equal, which changed the women's perception of their minority status:

Poppy: I think that's the other thing as well though, we *think* there's more girls because more girls turn up to the lectures.

Physics students: Yeah! (*Laughter*)

Poppy: So it feels like there's more girls in the lectures because it might seem like, I dunno, 50% girls, but actually there's like 20% girls on the course, it's just that fewer guys actually turn up.

Becky: Yeah because girls all have to really want to do physics, they'll actually turn up to their lectures and try to work really hard.

Poppy: I think definitely to get past the stereotype you have to really love the subject.

Physics students: Yeah. Yes.

Becky: Whereas guys will just take physics! (*Laughs*).

(*Focus Group 2 – Poppy and Becky, (physics)*)

In this extract, we can witness the women physics students drawing upon the well-worn discourse of girls being hard-working and diligent, and boys being lazy and care-free (e.g. Clarricoates, 1983; Jones and Myhill, 2004; Davies and Saltmarsh, 2006; Francis et al., 2014). However, it is interesting to note that the women do not claim that they are more likely to turn up to class and work hard because they 'naturally' possess such traits, but because women physics students have a real passion for their subject and are committed to their course – a passion that is able to transcend the (presumably) male, geeky/nerdy physics stereotype.

The women also thought that they had managed to establish a greater presence on their course because of the way in which the women physics students had formed friendship groups. In Focus Group 2, the students told me that the women in physics tended to stick together; in lectures there was apparently a 'core group' of about 12 women who would sit together, and in addition to this core group there were a number of smaller groups of at least three women. In fact, the physics students told me that it was very rare to see a woman 'sat on her own'. This links with research conducted with girls and young women in schools, which highlights the critical importance of single-sex friendship groups in helping pupils' to feel comfortable and happy in educational contexts (Hey, 1997; Renold, 2001; Kehily et al., 2002; Aapola et al., 2005; Allan, 2006). In fact, these strong friendship groups appeared to help the women gain confidence in class, as they noted that it was normally the women who would chat in lectures and cause minor disruptions:

Jess: I think if anything, the girls probably talk more through the lectures than the guys do, for sure, if you hear people talking in lectures, it's girls.

(Focus Group 2)

These findings seem to resonate with the theory of 'critical mass', which has been espoused by some scholars working in the field of gender and science. These scholars argue that STEM classroom learning cultures improve as courses become equalised by sex – serving to foster a more comfortable and positive environment in which both men and women students can study (e.g. Sanders 1985; Cohoon, 2001; Blum, 2001; Blum and Frieze, 2005). It appears as though the women physics students in this study did indeed feel particularly happy when in the presence of a relatively high proportion of women students.

The students also told me that the 'personalities' of several women in their year were particularly strong, which they thought had helped the women to stand out from the male students and create a more 'female-dominated' space:

Emma: In our year we've been quite lucky because the girls are *such* a massive presence compared to the guys. They're louder, they're kind of more social and, um, because they kind of stick together in a big group it doesn't feel like there's only 30%.

(Interview 1- March 2015)

In this way, the women seemed to regain power by inverting the traditional gender hierarchy in male-dominated physics. The women appeared to position themselves in interview as being more dominant and agentic than the men and as wanting to push themselves forward – conjuring up an image of the successful 'can-do' girl of neo-liberal times who can achieve all she desires through drive, enterprise and self-determination (Harris, 2004). Yet it must be recognised that the subject position of the 'can-do' girl is strongly classed and 'raced', and aligns closely with white, middle-class femininity (Allan and Charles, 2014) – a subject position that the women physics students in this study largely inhabited.

It is very important to note, however, that the women thought that their year was different from both past and future physics cohorts at Marlton. The students were keen to point out to me that their year contained an unusually high proportion of women – as noted above, approximately 20% according to Poppy and 30% according to Emma. Indeed, in her one-to-one interview, Emma stated that she was fearful for those women just starting out in physics at Marlton:

Emma: But in the [new intake of] Freshers, when I thought about it I was like, actually I've seen maybe 10 girls and they're all quite quiet, so I think it would be quite weird being in a year where it's just, it would feel dominated by guys definitely...cos when we came in in first year there was one girl on the physics committee, whereas now there's [only] 2 guys, so I think that *because* of our year physics has felt a bigger presence of girls...so I think when our year finally go there will be a lot less, like, female presence.

(Interview 2 - November 2015)

This serves to highlight the importance of recognising the localised, shifting and potentially ephemeral nature of gendered classroom cultures. Indeed, Emma

implies that the physics 'experience' will change for future cohorts of women, indicating that researchers need to be perceptive to spatio-temporal context and the transient nature of classroom learning environments (see Massey, 1994; Lui, 2006; Renold, 2006).

Discussion

From the data presented above, we can see that the gendered classroom culture of physics at Marlton appears very different to that of engineering, despite the two disciplines often being grouped together in popular discourse as being 'masculine', 'high-status', and 'STEM' (see Francis, 2000a). The women physics students constructed their course as being populated by male lecturers and male students who performed softer masculinities (Mac an Ghail, 1994; O'Donnell and Sharpe, 2000; Skelton and Francis, 2012), and as containing a relatively high number of women students – many of whom had strong personalities. This appeared to create a more comfortable and 'empowered' space in which the women could study. And in contrast with the women engineering students, the women physicists appeared not to have experienced intimidating or hostile pedagogical approaches or 'laddish' behaviours performed by their male peers.

Perhaps as a result of this apparently 'female-dominated' classroom culture, when I explicitly asked the women physics students to reflect upon the role that gender played in shaping their experience whilst studying, the women were very keen to downplay the notion that gender had any effect:

LS: So do you feel that you are treated the same as the male students by staff and other students?

Grace: (*Immediately*) Yeah.

(*Interview 1- March 2015*)

Emma: Oh yeah, yeah...there might be a few lecturers who maybe if they're a bit older, I don't know, might not, but every tutor I've had or lecturer I've spoken to there's like, I've never felt like they're thinking 'Oh she's a girl, she's not as good' or something. I've just thought they see you as a physics student rather than, like, boy and girl.

(Interview 1- March 2015)

Yet this is not to say that gender did not play any part in shaping the women's classroom experience whilst studying at Marlton. As we have seen, whilst the students appeared to hold relatively strong and affirmative learner identities as women 'physicists', they did not seem equally able to construct successful 'computer programmer' identities. In fact, the women told me that they felt physics had become more popular in recent years³⁶ and that they could therefore negotiate socially 'acceptable' physics identities for themselves (e.g. 'I suppose the whole stigma of it being nerdy and geeky is not as big as it used to be and stuff like that really', Grace, Interview 2). In contrast, computer science appeared to retain a strongly male geeky/nerdy stereotype which the women found difficult to negotiate. This proved problematic as computer programming formed a key component of their assessment at Marlton. What we must recognise, then, is that whilst disciplines are often bound together in talk as being distinct and discreet entities, there are often strong overlaps in content between disciplines which impact upon students' learning experience (see Becher and Trowler, 2001; Krishnan, 2009).

b) The arts/humanities students – anthropology, English and modern languages

In the preceding section, I sought to examine how the women in engineering and physics narrated their accounts of their gendered experiences whilst studying STEM at Marlton University. I would now like to do the same for the anthropology, English and modern languages students. This section is considerably shorter than the preceding section, despite the fact that it covers

³⁶ The women spoke of the growing popularity of physics in popular culture, citing examples such as the American sitcom *The Big Bang Theory* which focuses in the lives of young physicists, and Professor Brian Cox's television programmes about astrophysics and cosmology.

three disciplines as opposed to two. There are two comments that I would like to make in relation to this point. First, the arts/humanities students had considerably fewer contact hours per week than the STEM students and had much less variety in terms of teaching sessions and modes of assessment (see Appendix 11). As such, the three arts/humanities classroom cultures appeared to be much less well-defined and less important to the women students. Second, as we will see, the students talked very little about the significance of gender in their experience whilst studying – or at least found it very difficult to articulate their feelings about the significance of gender. This is itself of note, and is something that I will further discuss later in this chapter. Because this section is shorter, I have decided to create a joint arts/humanities discussion piece which will follow the empirical data.

ANTHROPOLOGY – a ‘gendered’ classroom culture

Supportive, helpful and passionate staff

All of the women anthropology students felt that, overall, the standard and quality of the teaching that they received at Marlton was very high. In fact, the women seemed to express a certain degree of reverence and respect for their lecturers which appeared to derive from lecturers’ perceived high intellectual ability and ‘vocation’ for their discipline (Leathwood and Read, 2009). Indeed, the women seemed to feel that their lecturers were not self-interested and motivated by the acquisition of professional status or money, but were simply very passionate about their discipline:

LS: And so how do you view the teaching on the course in first year and second year?

Hannah: In first year, *fantastic*. It’s something that I really loved when I came here, I was like, I love being taught by people who are just so passionate about what they’re talking about and what they’re researching in. And for me that was so, so good, like it was so eye-opening because in high school you always have the people, like the teachers who are doing it for the job. And here, that’s really not the case. Um, and in

second year it's the same, I've come across people who are great, great lecturers.

(Interview 1 - March 2015)

The students also felt that staff provided a good level academic and pastoral support, and were often willing to 'go the extra mile' to accommodate students if they encountered problems. For instance, Callie commented 'staff are *really* supportive. Like I used to see my personal tutor every other week in first year'. The women also emphasised that students were able to email staff and make an appointment outside of publicised office hours if they were having difficulty understanding a topic or needed help with planning an essay. Indeed, Margaret (who was a mature student and had to commute to Marlton University from a distance of 45 miles) stated that lecturers had always been willing to find time to see her outside of office hours in order to fit in with her train times.

It appeared that in anthropology, student-teacher relationships sometimes took on an extremely relaxed and informal style, levelling the traditional hierarchy between the teacher as 'authentic' possessor and transmitter of knowledge, and student as powerless 'Other' (Coffey and Delamont, 2000; Weiner, 2006; Renold, 2006). Eleanor wrote in her diary that one lecturer who was a distinguished world-leader in her field of research sought to bring in cakes for the class:

TUESDAY

10/03/2015

Culture seminar, although more of a workshop this week. Found it very helpful to discuss my project with module leader Janine Harvey, a kind and softly spoken anthropologist who has brought us a different cake each week since September!

(Diary Excerpt – Eleanor)

Some students did observe that different lecturers had different pedagogical styles and that some could be more strict and authoritarian than others. For example, Eleanor noted that her one of her current lecturers was relatively 'pushy' and sought to challenge students by making sure that everybody did the set reading and expressed an opinion in seminars. She also stated that this

lecturer was a 'harsher marker' than others – something which Eleanor apparently enjoyed as she liked being intellectually challenged, similar to the undergraduates in Retna et al.'s (2009) study. Eleanor stated that, in contrast, another of her lecturers was more 'laid back' and paced the work more slowly. Eleanor noted that whilst different students had different pedagogical preferences, neither style seemed to alienate students.

The independent learner – Mastering the anthropology essay

Whilst the women anthropology students thought that the standard of teaching they received was very high, as I talked with the students, it became clear that many had found it relatively difficult to adjust to the self-directed and 'independent' style of work that was required in anthropology at Marlton (see Kirkup, 1996; Leathwood, 2006b; Leathwood and Read, 2009). Many of the women appeared concerned about the nature of the essays that they were required to write which they submitted to be formally assessed as coursework assignments throughout the year, and had to write during examinations (see Appendix 11). The women seemed to feel that there was a particular style of essay that they needed to 'master' in order to unlock the highest grades, but felt that they were given little guidance from the department regarding what staff actually wanted. When I pushed the students on what it was that concerned them most, the women stated that the amount of reading they had to do for an essay could be overwhelming, and that it was difficult to know which 'themes' to include and how to structure the information to achieve the best marks. And the women felt that this difficulty was sometimes compounded by the fact that different lecturers appeared to want and reward different things in essays:

Margaret: What you do in one [essay] and you get a glowing mark for, you come to do a different module it's kind of like 'No'. You know, cos some people really reward you for sort of picking a completely different topic, like theme, but *bring in* everything. And the others will kind of like 'No, remember what we've done in the lecture, if you bring this in with a case study that's fine'. And then you sort of think (*anxiously*) awwww, if you just base it too heavily on what's been in the lecture (*chuckles*), are you not getting that right because you haven't brought in current

debates? Hmm (*sighs*). So no, it's hard to know what is required. To the point where I'll say 'I wish I was doing maths because it's right or wrong!'

(Interview 2 - November 2015)

Yet whilst the students emphasised that they felt they *could* go to staff to ask for help with their essays if they needed it – and told me that they would ideally like to have an informal chat with lecturers to make sure they were 'along the right lines' before they submitted work – the women did not seem overly keen on doing this in practice. Indeed, many of the women stated that they had only really started using contact hours towards the end of Year 2. The women appeared to be worried that their questions would be too trivial for their lecturers, and were anxious about being deemed too dependent and lacking ability.

Leathwood and Read (2009) argue that the discourse of the 'independent learner' (i.e. one who can succeed effortlessly in a short amount of time and with little guidance) forms the dominant conception of the 'ideal' student in HE. However, they note that the independent learner discourse is not neutral but 'gendered, classed and racialized, with only white middle-class men traditionally having the status of the independent individual' (p.98). Leathwood and Read thus argue with those who require help or support are constructed as 'feminized' and subsequently pathologized. In my study, two of the women (Margaret and Hannah) appeared to find themselves trapped in a constricting double bind (Bateson et al., 1956), incredibly anxious to do well and get their essays 'right', yet not wanting to appear needy to staff. Margaret in particular longed for greater guidance to alleviate the extreme anxiety she felt about writing essays and to speed up the process of writing them, stating that she would often spend weeks agonising over what to include. However, Margaret was also highly reflexive and realised that perhaps learner-independence was what was expected of students at a 'top' university such as Marlton, and was what *enabled* students to achieve the highest marks:

Margaret: You might find that's the culture of Marlton, and if you do go off and you find it all yourself and you work out how to do these things and you do it well, you'll come out better than a university where you're sort of more spoon fed into being told what to do. So I can sort of see

that side of it as well. So obviously you don't want to be told at every *step* what to do because you do find out as you go, but just maybe a *little* bit more. But I wouldn't want to be spoon fed.

(Interview 1 - March 2015)

In effect, the essays appeared to form part of the 'hidden curriculum' in anthropology at Marlton – the unwritten and subtle forms of disciplinary practice which serve to produce compliant students (Skelton, 1997). The anthropology students realised that they needed to manage their anxieties and learn for themselves how to write essays (e.g. how to use the library and read around topics, how to be critical, how to structure essays appropriately and use correct referencing practices) in order to achieve the highest marks and be deemed a 'successful' student. To fail to master the essay would render them unknowing – an unsuccessful member of the disciplinary community (Becher and Trowler, 2001).

It is important to note, however, that not all of the students were able to pick up on these hidden essay requirements as easily and as quickly as others. As alluded to above, Margaret seemed to express the greatest anxiety about writing essays, and stated to me in interview that she often felt like quitting the course in Year 1 as she would get incredibly stressed, and thought that she would 'fail' the course anyway. Margaret, aged 56, had completed an Access course at an FE college in a strongly working-class area before gaining her place at Marlton. Despite achieving a Distinction, Margaret appeared to have very little confidence in her academic ability and wished for a greater level of academic support as a form of reassurance – something which Margaret felt was a result of her 35-40 year hiatus from formal education. This resonates strongly with studies conducted by HE researchers such as Leathwood and O'Connell (2003), Read et al. (2003), Reay et al. (2010) and Burke (2015), who observe that working-class and mature students can lack the epistemologies, confidence and capitals required to decode the academic literacy of their discipline at university.

Behaviour and attitudes of students in class

When I asked the women to comment on the behaviour and attitudes of students in class, they told me that behaviour was largely good, and that most students were quiet and attentive. The women were keen to emphasise that students sought not to disrupt lectures, even if they were not particularly motivated to do the work. Indeed, Eleanor told me that students ‘just wouldn’t show up if they don’t want to be there or they might have their laptop and be on Facebook at the back or something like that, but wouldn’t disrupt other people.’ Three of the women did note that very occasionally an incident would happen in class where student chatter would become so loud after a break that the lecturer would be forced to step in and reprimand students. However, the women were eager to point out that these incidents appeared to be ‘one-offs’, having happened only once or twice in two years.

One theme that did emerge in relation to student behaviour was that the women felt that seminars could be ‘awkward’ when no one sought to answer the questions that were posed by staff – resonating strongly with similar findings obtained in studies conducted by Thomas (1990), Burke (2013) and Francis et al. (2014). Yet in this study, the women did not appear to attribute this lack of vocality to students’ gender, and as being indicative of a lack of confidence amongst women students (see Thomas, 1990; Phipps and Young, 2013). Rather, the women seemed to feel that classroom responses were the product of students’ ‘personalities’, and that there was always a group of people in class who were more loud and outgoing. Indeed, Callie told me that she was quite a confident and outspoken student and that she was usually willing to step in and say something to get the conversation flowing:

Callie: I think I’ve always been one of the people who does initiate a conversation or makes a point. You always get a little group of people, and it’s generally the same people who you find at school who did the same thing, who initiate that kind of, who are *willing* to talk and *willing* to make comments.

(Interview 1 - March 2015)

In a similar way to Barbara in Francis et al.’s (2014) study, Callie appears to be constructing her learner subjectivity in accordance with the ‘ideal’ male subject

of academia: as rational, agentic, authentic and risk-taking. In doing so, Callie sets herself against the Other students who are unwilling to contribute and are quiet and passive – traits strongly linked with normative femininity.

Gender makes little difference in the anthropology classroom?

When I asked the women anthropology students to comment on the impact that they felt gender had upon their experience whilst studying, all four women replied that gender made no real difference. The students noted in a factual sense that there were significantly more women on their course, but felt that this had little effect upon students' responses or behaviours in class, lecturers' engagement with students, or course content. Indeed, the women appeared to view themselves as 'normal' anthropology students and found it difficult to imagine themselves in the male students' shoes studying in the minority:

Hannah: I think anthropology being already such a female-dominated department, it's almost like there's no, there's not much gender identity, it's kind of just like (*offhand*) 'Oh I'm just another girl doing anthropology'. But there's not, I think when you see a boy, I think that's when it's more like, 'Oh, there's a guy in this class? That's weird, that's different!'. And I think (*pause, thinking*) yeah that's the only thing about gender identity, it's like normal, almost normal.

(Interview 1 - March 2015)

When Hannah says that in anthropology 'there's not much gender identity', she again appears to be drawing upon neo-liberal discourses which construct social structures such as gender as no longer being a concern (Rose, 1999; Bauman, 2005; Ringrose, 2007; Francis et al., 2014). Because there are so many women in anthropology, Hannah seems to feel that, to all intents and purposes, gender is no longer an issue in the discipline – patriarchal gender relations cannot exist. It could be argued that because the women were studying in what might be termed a stereotypically 'feminine' classroom environment – that is, with a high proportion of female course-mates, with lecturers who employed largely democratic and considerate pedagogical approaches, and with many essay-based assessments (Hofstede, 1994) – they could not conceive that their

experience might be 'gendered'. Rather, the women assume their experience to be 'normal'.

Yet whilst the women sought to downplay the impact of gender on their classroom experience whilst studying at Marlton, they did not deny the significance of other structural axis of identity. Margaret (aged 56) and Callie (aged 24) strongly felt that their age and status as 'mature students' had an impact upon their educational experience. Callie felt that because she was a few years older than most of her peers in anthropology and had previously worked in a variety of low-paid jobs (e.g. hospitality, administration), she had gained a good deal more life experience and was therefore more serious about her degree. In fact, Callie told me that when she began her course in Year 1, she was unhappy with the content of some of her modules as she wanted to study more science (e.g. human biology, archaeology), so that she might obtain a job in a related scientific field. Callie therefore took it upon herself to approach the head of department to discuss her concerns. The head of anthropology had proved very amenable, and Callie had managed to enrol herself on a number of modules that were being run in completely separate departments such as sports science:

Callie: It's just I have more life experience in different areas and this sort of, you know, the business world if you like, the working environment...so I was the one that kind of mediated things and talked to people...changed a few modules round and kind of evolved the course a little bit...'

(Interview 1 - March 2015)

In a similar way to Jasmine in engineering, Callie frames herself as being a rational and agentic 'consumer' of HE (Leathwood and Read, 2009), empowered to make Marlton's course 'work for her' so that she might obtain a good job post-graduation. Yet it was Margaret who expressed most vehemently the impact of age on her classroom experience. Being a few decades older than most of the students in anthropology, Margaret noted that she 'stood out' which made it difficult for the other students to know who she was and how to interact with her. Margaret explained that, in Year 1, she had felt very isolated because of this, but stated that things had improved in Year 2:

Margaret: [In first year] I was the oddball because I didn't think, judging from my Access course and the spread of ages I see going through Access courses in FE, 'Oh they'll be *loads* of mature students'. And there are a few more that are sort of early mid late 20s, but no one as mature as me – but then I am probably a bit unusual. But I don't think they kind of knew who I was or what I was, sat there. Um, even walking into a classroom if, you know, one lecturer is just finishing up and you walk in, the lecturer will usually acknowledge me and I think sometimes they probably think I'm the lecturer walking in if I go in quite early. Or I'll be 'Oh yeah, hi' and think 'They wouldn't really be talking to a 20 year old or a 19 year old like this'. And I think they don't know who, where to place me...Also in the first year we had more support staff in, 3 or 4 in some classes, like note takers. And at first I thought 'Oh good! More mature students – have you just joined this class?', 'Oh no, I'm a note taker'. So I think perhaps I could be mistaken for a note taker because they don't always sit with the student. Because I, you know, I got chatting so I got more rapport with the note takers that I used to sit with! (*Laughs*). And I think now [the other students have] got used to me. Know a bit, like, that I'm there, same as them, still worry about assignments, worry about exams, you know, no different. Um, second year has been much better.

(Interview 1 – March 2015)

Read et al. (2003) note how mature students can often feel 'different' on commencing at university, as the dominant construction of the university student remains strongly inscribed as 'young'. In the above extract, we can see that Margaret felt that she was not easily placed by her fellow students or her lecturers, meaning that she felt a lack of belonging and sense of 'Otherness' in class. This highlights the importance of appreciating the (in this case 'aged') body in shaping the way one is perceived, impacting upon one's formal learning experience (Youdell, 2006b; Paechter, 2013; Taylor, 2013) – something that has often been overlooked in studies conducted within HE classrooms. Indeed, Margaret told me that it was only through persevering with peer interaction that she had managed to establish closer friendship bonds with some of the younger students in Year 2, making her classroom experience more comfortable and enjoyable.

ENGLISH – a ‘gendered’ classroom culture

Teaching and academic support in English – ‘I’d say generally pretty good’

The women English students stated that the standard of teaching and academic support that they received at Marlton was good. The students expressed that staff were generally good at their job and were helpful and approachable. However, the women did not seem as enthusiastic about the standard of teaching they received as the women in anthropology. The English students felt that whilst some lecturers were very knowledgeable and engaging, others did not appear to have any great passion for their subject. Liz felt that this was particularly evident in Year 1 of the course:

Liz: Um, English in first year, the teaching wasn’t as good as it has been this year. I don’t know if that’s just because the people who have taught me this year have been more interested in what they’re teaching. Um, because both my seminar leaders for each module that I’ve done have been like, you know, involved in active research with the kind of topics we were covering so I think they were probably more interested in it, and so that kind of comes through a lot more. So yeah, I’d say generally pretty good.

(Interview 1 – March 2015)

This parallels the findings of Retna et al. (2009), who discovered that tutors’ perceived enthusiasm plays a central role in shaping students’ levels of satisfaction with their course. Yet whilst the women told me that staff were generally friendly and approachable, when I probed a little deeper it emerged that, in a similar way to the women in anthropology, the English students were not particularly comfortable using staff’s office hours. When I asked Liz during her first one-to-one interview what she would do if she were having trouble understanding a topic in class, Liz stated:

Liz: Um, I mean you can always go and see people if you’re having a problem with something. I’ve never really had that many problems so I’ve never had to, like, properly test whether the system works!

(Interview 1 – March 2015)

Whilst Liz asserted that she had never really had any problems with her work, when answering questions about her academic achievement, it became clear that Liz had found it somewhat difficult to adapt to the difference in teaching styles between her all-girls' private school/sixth-form and university. Whilst Liz had obtained grades A*, A*, A at A-level, she was finding it difficult to understand what was expected in essays and was averaging 65%. Whilst still representing a solid 2:1, it is arguable that Liz might have benefitted from consulting with staff. This resonates with the work of Leathwood (2006b) who argues that, in light of the individualised discourses of 'learner independence' that currently frame HE, students can find it difficult to ask for help. In fact, Liz seemed to feel that it was her personal responsibility to 'figure out' what was expected at university. And Rachel – a working-class student who had taken part in the government's Aimhigher³⁷ initiative – only appeared to have found the benefit of using staff's office hours in Years 2 and 3 of her course:

LS: If you were finding something difficult, would you be happy to go and see the staff about it?

Rachel: Yeah, now I definitely would. Um, unfortunately like in my first year when I did find it a bit difficult I just kind of relied on my course-mates. Um, I didn't really go to office hours very much. Um, *now*, like having used office hours now, I do kick myself a little bit for that (*chuckles*). Um, I should have gone to do it. But um, now I definitely would. Definitely.

(Interview 2 – November 2015)

Leathwood and Read (2009: 100) argue that 'new' students (i.e. working-class, ethnic minority and mature students) are often denigrated in UK policy discourse as 'lacking' – viewed as being 'needy' and as not having the requisite skills and attributes needed to succeed at university. It could be the case that due to her non-traditional background, Rachel was initially reluctant to approach staff for fear of being seen to have lesser ability than her middle-class peers,

³⁷ Established by the now defunct Department for Education and Skills (DfES) in 2004, the Aimhigher initiative was a UK outreach programme designed to encourage non-traditional students to participate in higher education. The Coalition government closed the scheme in the academic year 2010/2011, although Aimhigher initiatives continue to run in certain areas of England, supported by private funding sources.

and of being unable to cope with the work. Indeed, Rachel told me in interview that she was concerned that her course-mates and lecturers viewed her as being 'a bit dim' by virtue of her class background (see Chapter 7 for further discussion).

Behaviour and attitudes of students in class – 'Painful' silences in seminars

When I asked the women to comment on the behaviour and attitudes of students in class, they stated that students were always quiet and attentive in lectures. In Focus Group 2, the film studies students Helen and Gemma (who studied with the English students on several modules) were surprised when the women physics students stated that they did not (or could not) always pay attention in lectures and would sometimes chat amongst themselves. Helen explained that their experience was very different:

Helen: Everyone in film, like, *massively* pays attention...In my large module which now has a lot of English students doing it because they're all open to English students, but um, I think everyone's there and has a serious passion for films so, I dunno, no one talks *ever* over the lecturer.

(Focus Group 2 – Helen (anthropology and film))

Whilst students' behaviour was said to be very good in lectures, in a similar way to the women in anthropology, the English students also talked about experiencing awkward silences in seminars. In fact, the English students felt that this awkwardness was exacerbated by the fact that their classes could last up to three hours, and that the content could be quite 'dry' and 'boring'. Rachel went as far as to state that these seminars could be 'painful' to attend, and that many students had simply stopped going to them after a few weeks:

Rachel: I think some of my seminars I really, really get into, and then there are others where it's painful to go and I just really can't stand it. I do think sometimes they can be really, really quite boring my seminars. I do a theatre module and there was some seminars where it's just reading, there's no really engaging information or anything like that, I find it really, really boring.

LS: OK so is it, so you're made to read the texts and then are you meant to discuss them in the seminars, does nobody contribute or...?

Rachel: Yeah, there's a *lot* of silences. It so depends on who's in your group. We had one of my modules last year, one of my seminars, this seminar tutor actually at the start of the seminar said 'Do you not like me? Do you not like each other?', no one would talk at all, and I mean it didn't help that she was quite a harsh person! (*Laughs, LS laughs*). But um, no, it's not good. If you get quite an unresponsive seminar group, that's it, you do not want to go. And you definitely see the decrease in people, like the more awkward it gets.

(Interview 1 – March 2015)

In the above extract, we can see that Rachel feels that it is not simply students' 'personalities' that impact upon their desire to speak up in class – as the women in anthropology implied – but the pedagogical style of the lecturer taking the seminar. Indeed, Rachel went on to elaborate:

Rachel: I think a lot of the time it is to do with the seminar tutor. I actually feel that I have a more responsive class if there is a male seminar tutor. With females, I mean the woman I'm referring to that sat us down and said 'Do you not like me?', she was quite intimidating and asked very confusing questions, like would go about it in such a way that everyone's sat there like, 'I don't even know what you've just asked'. So I do feel like that's definitely a factor. But my American literature module I've got a male tutor and he's fun and he engages with us and on our breaks will ask us what we're doing at the weekend, everyone is so, so responsive with him, I think it's much more comfortable.

In this extract, Rachel draws upon discourses of gender and student-teacher relationships in order to explain students' variable desire to engage in class. Whilst Rachel states that her female lecturer is 'intimidating' and a 'harsh person' who asks 'confusing questions', her male tutor is said to be 'fun' and 'engaging' – qualities which Rachel appears to attribute to her tutors' respective genders. This finding links strongly with research conducted by Francis et al. (2014: 13) who found that the undergraduate students in their study constructed 'heroic' discourses around their male lecturers, seeing them as being

charismatic, engaging and 'authentic'. Whilst it could be the case that Rachel's female lecturer was indeed not a good teacher, researchers such as Seymour and Hewitt (1997), Morley (2006), Leathwood and Read (2009) and Francis et al. (2014) argue that it is more difficult for female lecturers to be seen as brilliant as they do not fit the hegemonic construction of the ideal 'academic' which is strongly inscribed as male.

Male students as confident and vocal

Whilst the women thought that men and women students were treated in the same way by lecturing staff, Rachel believed that, despite being in the distinct gender minority, quite often the men sought to speak out more in seminars:

Rachel: I always find that with the male students – I don't know if they do this on purpose – but they do kind of try and speak up a little more. Like in my seminar, I think it was last week, my tutor was talking about a particular author and he said 'What's your favourite book by this author?', and they had a bit of a discussion about that, kind of one-to-one in the middle of the seminar. And I don't know, I felt like, not like a cry for attention really, but it is 'Look I'm here too'. I do feel like they speak out a little bit more to be noticed because it is obviously majority female.

(Interview 1 – March 2015)

This parallels the findings of Phipps and Young (2013) and Francis et al. (2014) who noted that the women undergraduates in their studies believed male undergraduates to be more confident and vocal in class. Francis et al. argue that this strongly relates to the 'authenticity' of male student identities in HE, whereby men are greater able to construct themselves as being 'ideal' male subjects of academia – i.e. as 'confident, rational, agentic [and] 'naturally talented'' (p.10). In the above extract, it could be argued that by asking the male student a question, Rachel's lecturer was attempting to involve the male student who was in the distinct gender minority and might feel alienated or 'Other'. Yet Rachel talks about the male student's behaviour in a disparaging way, viewing it as being 'attention-seeking'. By only asking the male student a question, it seems Rachel's lecturer has (perhaps unintentionally) reinforced the notion that men's opinions are held in higher esteem than women's (see Thomas, 1990;

Morley, 2006).

Gender and module choice

Another key theme that emerged in the English students' interview narratives concerned the module choices made by men and women students in English. The women noted that in some of the modules that they had elected to study – particularly those that concerned feminism, women's writing or romantic literature – there were very low numbers of men. For example, Liz stated: 'in my seminar groups at the moment, in my English group there are no boys...The module I'm doing in English at the moment is about contemporary women's writing so I don't think it's attracted that many guys'. Educational researchers have long noted that subject choice at non-compulsory level remains strongly shaped by gender, with male students tending to avoid those disciplines that are inscribed as 'feminine' or link with femininity – which is constructed as antithetical to normative masculinity (Thomas, 1990; Whitehead, 1996; Francis, 2000a). The above finding suggests that these 'gendered' choices can even extend as far as module selections *within* disciplines in HE (also see Guest et al., 2013). Indeed, Liz felt that her women's writing module might be too 'daunting' for the male students who might feel uncomfortable talking about 'women's issues':

Liz: Maybe the fact that it's probably very girl dominated and talking about stuff like feminism and female identity, they might find that a bit daunting, not really something that they want to talk about too much.

(Interview 1 – March 2015)

Yet Rachel felt that blame could not solely be placed upon the male students for opting to study 'non-feminine' modules. Rachel thought that Marlton's English course appeared skewed towards female authors and 'feminine' interests, which she believed served to dissuade male students from studying certain topics:

Rachel: Um, I do think it's quite tailored to females though, the English course. I went to a module choice lecture the other week and she said 'There's this module so for all you Jane Eyre fans...', and I don't know, it just sounded a bit like, you're gonna be female. I definitely think it is more

tailored to females with, um, like Jane Austen and things, like *Pride and Prejudice* is a girly thing. I do think it's quite tailored, um, I don't know, I always think of like, English for girls and film for boys, that's how in my head I distinguish it. And my friend did film last year and she said there were a hell of a lot more boys in her seminars than there had been in other modules.

(Interview 1 – March 2015)

In this extract, Rachel appears to draw upon the essentialized discourse that men and women students are 'naturally' interested in different topics (Francis and Skelton, 2005; Burke, 2013). In doing so, Rachel seems to imply that because her English course is heavily female-dominated, Marlton's English department have tailored their curriculum to cater for women's 'tastes' – something which has served to alienate the male English students.

Of course, we must recognise that the 'gendering' of module choice that the women speak of in English is not neutral but bears an intellectual hierarchy. As Francis and Skelton (2005) note, 'feminine' arts/humanities disciplines are commonly constructed as being emotion-based, subjective and 'soft' – which can be conflated with 'ease' and a 'lack of rigor'. Because the men sought largely to avoid 'optional' modules which concentrated on feminism and emotional concerns such as love and romance, it could be argued that a gendered hierarchy of knowledge was being perpetuated in English at Marlton. This is important, as feminist researchers have noted that feminist knowledge is increasingly being relegated to the margins of academia (Morley, 2002; David, 2015).

In a related way, some of the women thought that because there were so few men on their course, they sometimes missed the 'male perspective' in classroom discussions. Sally was concerned that this gender imbalance was unfair on all students – particularly in modules which raised issues to do with gender equality and feminism, which she thought would benefit from the input of both genders:

Sally: I have one seminar this term that is only girls and it's led by a woman and it's just really weird, it's like we're missing a whole perspective, a whole gender that's not voiced there at all, and so I think

sometimes the conversation might be a bit skewed in certain ways because of that. I know that last year I had a module where we did feminism on this module I was doing for two weeks and there were two guys in the class, and they were very engaging, but it seemed unfair to tackle something that is all about gender and not have both sexes represented fairly.

Sally makes an important point regarding male students potentially benefitting from studying feminist ideas. Yet in stating that her class discussions perhaps miss a 'male perspective', Sally implies that men and women students have different ideas and outlooks – perhaps overlooking the notion of variance of opinion *within* genders (Read, 2008).

MODERN LANGUAGES – A 'gendered' classroom culture

Small and friendly classes

The women modern languages seemed particularly keen to emphasise to me during interview the positive and supportive atmosphere that framed their course. The women told me that their classes were very small and friendly, and that the department was extremely 'tight-knit'. In Focus Group 1, the women pointed out that whereas in other disciplines at Marlton lectures could be attended by 150-plus students, in modern languages, lectures apparently never exceeded 40. In fact, the women told me that, on average, their classes were attended by 10-12 people³⁸. The women felt that because their classes were so small, modern languages students had got to know each other well and had managed to establish strong friendship bonds. This appeared to create a very comfortable learning environment:

Tess: It's all really personal, it's like 'Oh I know everyone!'

Group: Yeah! (*Laughter*).

(Focus Group 1, Tess (Spanish and international relations))

³⁸ The women thought that class sizes were kept small because language learning requires a high degree of interaction between the teacher and student, which can only be achieved through a low student-teacher ratio.

Jane: It's a really friendly environment so you can, like, the classes are small and they're always a different group of people, you end up with a *lot* of friends who know your friends who know your friends because you've all been in different classes at different times together. So while you might sit down with one friend, you'd both have two or three people that you know, that actually know each other who could come and join you. So it is easy to get to know people, and easy to, yeah, find a group of friends.

(Interview 1 – March 2015)

And the women seemed to feel that this positive classroom atmosphere was at least in part established because the course was heavily female-dominated. In a similar way to the physics students, the women stated that the women modern languages students all seemed to get on really well together – paralleling qualitative studies which highlight the importance of same-sex friendships in reinforcing girls' self-worth and popularity in schools (Hey, 1997; Kehily et al., 2002; Creese et al., 2004; Allan, 2006). The women also expressed that they felt more comfortable working together on classroom tasks with their female peers:

Jane: I feel that naturally a lot of our oral tasks we have to do in pairs, it's like a debate – for French at least anyway – I think naturally it's easier to get on one-to-one with someone you don't know, for me at least, with a girl, or work hard or meet up for a week or two.

Group: Mmm.

(Focus Group 1 – Jane (French and Spanish))

In this extract, Jane draws upon a gender essentialist perspective, suggesting that the girls 'naturally' get on better together and are hard-working (Francis and Skelton, 2005; Burke, 2013). However, Jane does qualify her assertion with the phrase 'for me at least', acknowledging that not all students will necessarily share her opinion. Indeed, Jane was keen to point out that she had attended an all-girls' school which she had thoroughly enjoyed, which she thought might have influenced her views. However, it is important to note that the other

modern languages students in Focus Group 1 did not disagree with Jane's sentiments regarding women working better with women in class.

Not only this, but the women felt that their 'culture' module seminars which contained a greater element of theoretical discussion and debate (see Appendix 11) were comfortable environments in which to voice an opinion because they were female-dominated, and there was less chance of being belittled by male students who could be aggressive and argumentative. In Focus Group 1, it was interesting to witness the women who studied modern languages with international relations compare and contrast their classroom experiences in their respective disciplines:

Liv: I find it easier to take part in a debate or a class discussion if it's mostly girls because I notice that for example in international relations seminars it was a lot of guys and they take control, they speak straight away and I've noticed that not that many girls say much.

Tess: I find it quite hostile, like when I'm in a group of friends, like even here [in modern languages] where I know most of the girls I don't feel uncomfortable, whereas there [in international relations] I feel that if I say something they'll have a better point and they'll kind of slam me down and I'm like 'I'm just saying an opinion, it wasn't...' sort of thing. They're kind of more defensive, especially when they're passionate about something which....

Hannah: I think boys are definitely more prepared to slam you down in a discussion whereas girls are a lot more sensitive about affecting your feelings so I think there'd be 'Oh I can see your point but I also want to think this...', whereas boys are like 'No I think that's wrong'.

Tess: Yeah.

Group: Yeah. (*Slight laughter*)

Tess: Yeah, 'No that's not right' or something like that.

Jane: I feel like the guys in our language classes are more considerate though.

Group: Yeah.

Jane: There's a few that I'd say would slam you down but often they've got quite a feminine approach towards discussion.

Beth: And I think mainly it's affected them more, well maybe we don't notice a difference as much because we are the majority but maybe they do notice more of a difference because they're in the slight minority in languages.

(Focus Group 1 – Beth (French and Russian), Jane (French and Spanish), Liv (Spanish and international relations), Hannah (anthropology), Tess (French, Spanish and international relations))

In the above extract, the women appear to draw upon a number of different gender discourses in order to explain the 'feminine' learning culture of modern languages at Marlton. At the beginning of the extract, Liv states that she finds female-dominated seminars (such as those in modern languages) to be more comfortable than male-dominated seminars in international relations. She claims that in international relations, the male students often take control of the discussion – something which feminist researchers have long observed can occur within educational settings (e.g. Evans, 1987; Luke, 1994; Fisher, 1994; Francis, 2000b; Renold, 2001). Tess and Hannah go on to state that such male-dominated seminars can be very 'hostile' and uncomfortable because men tend to be less sensitive when challenging others' opinions. The choice of metaphor used by Tess when she says she is worried the male students will 'slam me down' is evocative, and conjures up imagery of physical force and embodied strength – traits linked with traditional masculinity (Connell, 2005; Swain, 2006). And Tess and Hannah also appear to be drawing upon the gendered discourse of the 'ideal' university student when describing the male students' rational, objective, right/wrong approach to classroom discussion. When Tess states that she feels the male students will have 'a better point' than herself, she hints at the existence of a gendered intellectual hierarchy – seeing the male students as cleverer than herself.

Yet it is also interesting to reflect upon what Jane and Beth say towards the end of the extract. Jane feels the male students in their language classes are generally more considerate when expressing alternative viewpoints, and adopt more 'feminine' approaches in class discussions. Beth seems to feel that this is

because the women (who are in the majority) have created a more sensitive, caring and respectful space for discussion. This seems to resonate with the work of researchers such as West and Hunter (1993) and Henwood (1998) who observe that women students are sometimes constructed as having a 'civilising' influence on men.

Good teaching and academic support

The women also asserted that the quality of teaching and academic support that they received in the modern languages department was of a very high standard. The women thought that because there were so few students in their classes, they could establish relatively close bonds with their lecturers. They also thought that the epistemic nature of language learning which requires a more didactic and personalised teaching approach fostered a particularly supportive and reassuring classroom environment (Savignon, 1983; von Hoene, 1999):

LS: And so what do you think of the standard of teaching on your course?

Liz: Um, I think in French it's generally really good. There's a lot more kind of teaching rather than just lecturing because with languages you can't really just, well you *can* just be lectured, but you need someone to kind of explain stuff to you a bit more.

(Interview 1 – March 2015)

Maxine: Yeah, I've always found them all really supportive people, yeah *(laughs)*.

(Interview 1 – March 2015)

Jane: I think it's really high. Um, yeah, I think there's obviously within every department, there's always a few tutors that you'll love and a few that you're a bit like, 'Oh, really?' *(laughs)*. But um, no, I think on the whole there's a lot of really, really good teaching and very personal teaching. And like they're always happy to put in extra hours and you can go see them individually and get help if you need it.

(Interview 1 – March 2015)

In the above extract, Jane states that students are able to see staff and ask for extra help if they need it. And in fact, in contrast with the women studying for degrees in anthropology and English, the modern languages students did seem more willing to contact staff for advice. These interactions sometimes appeared to take a relatively relaxed and informal form. Maxine, who was studying Russian and German, wrote in her diary that she was feeling very stressed about her German literature module and had therefore made an appointment to see her lecturer:

MONDAY

Date: 23/02/2015

Morning:

Mondays are usually my busiest day. I had a 9am German Grammar seminar so left home at 8:30...

I went home and attempted some reading for my German literature module – I was feeling quite behind on this module and had an extra meeting with my lecturer later to discuss my essay plan. He's a fantastic lecturer and last year I got a great mark in his module but this year I'm finding the language of the texts really really difficult and don't feel the motivation to put in the extra work.

Afternoon:

At 2pm I had my German literature lecture which I was unprepared for and it left me feeling really stressed. I went to my Russian oral class at 3pm.

At 4pm I met my lecturer and by then was feeling so stressed. But he gave me a cup of tea and was so lovely, talking me through how I could plan my essay. I felt so much better after this. We discussed the possibility of me making headway on my essay tomorrow and coming to see him on Wednesday afternoon. I went outside and got some fresh air, and then caught up with some grammar.

(Diary Excerpt – Maxine)

By providing Maxine with a cup of tea and offering extra support if necessary, Maxine's lecturer appears to construct a caring and supportive teacher subjectivity, levelling the traditional (masculine) hierarchy between teacher as 'authentic' possessor and transmitter of knowledge, and student as powerless 'Other' (Coffey and Delamont, 2000; Renold, 2006; Read, 2008). Read (2008: 613) argues that such teaching methods represent a 'liberal' as opposed to a

'disciplinarian' discourse of teacher-student power relations, whereby the student is treated as if they have equal agency – an approach which Maxine appears to respond to well, and find reassuring.

A distinctly 'feminine' classroom culture?

When asked directly, the women modern language students were keen to downplay the notion that gender had a significant impact upon their experiences in formalised learning spaces. However, the women told me that, in light of taking part in this project, they had noticed one-off incidents that had struck them as being 'gendered'. Maxine recounted how one of her lecturers had announced to the class 'Traditionally girls perform better academically in language exams but this year the boys are much better so the girls need to step up', which Maxine had thought 'ridiculous' – 'I never felt before that we were pitted against the boys or that we should be achieving more than the boys'. And Jane stated that in a recent seminar session she had sought to answer a question at the same time as a male student, yet her tutor had focused on the male student's viewpoint rather than her own – leading Jane to conclude that staff could perhaps sometimes unintentionally 'favour the boys' (see Thomas (1990) and Rensenbrink (2001) for similar findings).

Whilst these women appeared to draw upon discourses of continued (or perhaps residual) patriarchal gender relations in order to describe women's occasional differential treatment in the modern languages classroom, contradictory post-feminist discourses of female 'success' also came to the fore (Harris, 2004; Ringrose, 2007). Jane also seemed to imply that the women modern languages students were at an advantage because they were in the gender majority, which created something of an 'insulating' environment:

Jane: Everyone jokes about it because there's more girls. Um, but it doesn't, it's not an issue, especially not for the girls (*laughs*) because we're in the majority so...

Indeed, Jane constructed Marlton's modern languages course as having a distinctly 'feminine' feel. For example, it was interesting to hear Jane's thoughts on the 'male' student experience:

Jane: Um, I think some of them *love* it. I think there's a lot of quite gay male students as well (*laughs*), which also love it. And I think, I dunno, they *definitely* hold their own within classes, the same way we do...But, yeah. A lot of friendship groups will be like, a big gang of girls with like a few guys (*laughs*).

(Interview 1 – March 2015)

In this extract, Jane expresses that some of the male students enjoy being in a female-dominated environment, drawing upon discourses of heterosexual masculinity (Connell, 2005). In doing so, Jane does not construct the predominance of women in modern languages negatively, as being a sign of the 'feminization' of HE (Leathwood and Read, 2009), rather it is seen as a 'plus' for the heterosexual male student. Yet Jane also goes on to state that there are a number of gay male students on her course who also love being in such a female-dominated environment. Gender theorists have noted how male homosexuality is often linked with the female side of the male/female binary as gay men can be seen as 'lacking' masculinity (Butler, 1990, 2004; Halberstam, 1998). Thus, in stating that there are lots of gay male students in modern languages, Jane's narrative subtly reinforces the notion that the discipline is 'feminine'.

Discussion

From the evidence presented above we can see that the anthropology, English and modern languages classrooms at Marilton University appear to be characterised by similar pedagogical approaches. Whilst the women were keen to emphasise that some lecturers were better than others and that certain lecturers were more authoritarian which could be disliked (e.g. Rachel, English), we can see that staff were generally described as being friendly, approachable and good at imparting knowledge. Such teaching approaches align more closely with critical and feminist pedagogies, which seek to invert the traditional power imbalance between teacher and student and prioritise the acquisition of knowledge through collaboration as opposed to top-down methods (Lather, 1991; Paechter, 1998; Canella, 2002; Morley, 2002). It is perhaps no surprise that these disciplines were shaped by such pedagogies, as non-hierarchical approaches are often said to link more closely with the subjective 'feminine'

epistemology of arts and humanities disciplines (see Thomas, 1990; Francis and Skelton, 2005; Burke, 2013).

Also of importance was the fact that the women felt that because they were often in the overwhelming gender majority, their classroom atmospheres had a distinctly feminine feel – a feel which many of the students found difficult to articulate or define in interview:

LS: So what do you think it means to be a female student on your course? Is there anything that stands out in your experience as being different, or do you think it's the same for everyone?

Eleanor: French and languages is very, maybe has a bit of a feminine vibe to the way that people behave in seminars and err, interact outside of classes and stuff like that. It's a really difficult question! (*LS and Eleanor laugh*).

(Interview 1 – March 2015)

Whilst the women appeared unable to describe exactly what was 'feminine' about their formal learning experience aside from the statistical predominance of women students, it seemed to me that – especially when set against the experience of the women engineering students – the arts/humanities students were studying in more constructive and trusting classroom communities, with a greater sense of co-operation between students and staff (e.g. see hooks, 1994; Freire, 1970). Of course, the anthropology and English students described incidents of painful silences in their seminar sessions, however the students did not feel that these were the result of hostile or uncomfortable atmospheres. Rather, these silences were said to be a symptom of students either being shy, having not done the required reading, or a product of ineffective teaching styles adopted by lecturers.

Yet in spite of these similarities, the data also indicates that the three arts/humanities classroom cultures were nuanced, and that not all of the women had a wholly positive learning experience in spite of these 'feminine' classroom cultures. The women studying for a degree in modern languages felt that their cohort was particularly close – portraying themselves as being like one big 'family' (Jane, Interview 1). This appeared to stem from the applied and

practical nature of modern language-learning which requires a good deal of verbal interaction between students and lecturers in small, intimate classes (Neumann et al., 2002; von Hoene, 2006). In contrast, the anthropology students appeared to feel more isolated in class. They felt that because teaching in their disciplines largely revolved around large lecture sessions with lecturers talking *at* students for an hour or two at a time, there was little opportunity to develop friendships with their course-mates or establish bonds with teaching staff. The anthropology and English students also expressed greater anxiety about becoming 'independent learners', and sometimes struggled to cope with less guidance and support provided by teaching staff – similar to many of the undergraduates in Leathwood's (2006b) study.

Another key finding to emerge was that the anthropology, English and modern languages students found it less difficult to negotiate gender/academic discourses in order to position themselves as powerful and comfortable within their respective disciplines. Because arts/humanities disciplines are discursively inscribed as feminine and are studied by an extremely high proportion of women, the women considered themselves to be 'normal' students. Indeed, there was no need for the women to 'slot into' a masculine discipline and justify their presence, as the women in engineering sought to do (see also Wajcman, 1991; Henwood, 1996; Rees, 2001; Gilbert, 2001). Yet whilst the significance of gender tended to be downplayed by the women, other structural axis of difference did appear to come to the fore, re/defining their lived classroom experience. For example, Margaret and Callie felt that their classroom experience was strongly shaped by their age, whilst Rachel highlighted the significance of her working-class background.

STEM and arts/humanities: Two opposing 'gendered' classroom cultures?

Discussion

Having now outlined and discussed the gendered classroom cultures of the five disciplines under study, in this last section, I would like to take a step back and reflect upon the disciplines as supposedly belonging to dichotomous 'STEM' and 'arts/humanities' cultures.

Scholars have long argued that STEM and arts/humanities disciplines are dualistic as they share two different sets of ontological and epistemological assumptions (e.g. Snow, 1959). Feminist writers have taken pains to demonstrate how this binary is not neutral but strongly gendered, with STEM disciplines constructed as ‘masculine’ and arts/humanities disciplines constructed as ‘feminine’ – with the feminine side of the binary also constructed as inferior³⁹ (e.g. Lloyd, 1984; Harding, 1991; Lees, 1993; Francis, 2000a):

STEM	Arts/humanities
Male	Female
Rationality	Emotion
Objectivity	Subjectivity
Science	Nature
‘Hard’	‘Soft’

(Adapted from Francis, 2000a: 35)

These ontological and epistemological assumptions are said to inform not only the curriculum content and methods of assessment used in academic disciplines when taught in educational institutions such as schools, colleges and universities, but also the pedagogical styles adopted by teaching staff (Biglan, 1973; Kolb, 1981; Paechter, 2000; Becher and Trowler, 2001; Leathwood and Read, 2009; Neumann et al., 2002). These are all said to shape students’ lived classroom experience.

On the basis of hegemonic, binary discourses of gender and academic disciplines, one might expect the disciplines of engineering and physics at Marlton to have stereotypically ‘masculine’ classroom cultures, and the disciplines of anthropology, English and modern languages courses to have stereotypically ‘feminine’ classroom cultures. And indeed, the data presented above indicates that the five degree programmes retained key gendered characteristics or elements that appeared to derive from their respective ontological and epistemological orientations. For example, teaching in engineering and physics took on a largely authoritarian air and lecturers were

³⁹ This gendered binary is said to be rooted in Enlightenment discourses of the intellectual, rational male, constructed in opposition to the excluded, irrational female ‘Other’ (Lloyd, 1984; Dyhouse, 1995; Leathwood, 2013).

often seen as less approachable – perhaps in part due to the objective, non-emotional, right/wrong nature of the course content (Thomas, 1990; Smart and Ethington, 1995). Workloads were also incredibly heavy and intensive, supposedly replicating and preparing students for the industrial environment in which it was anticipated that they would find employment (see Nyström et al., 2016). And in engineering, peer classroom cultures and interactions were distinctly male-dominated. In contrast, anthropology, English and modern languages were generally characterised by friendlier, egalitarian and collaborative teaching approaches. Independent, self-directed study appeared to be prioritised, and a criticality of thought was required of students in essay assessments. Peer interactions in class were also interpreted by students as being largely democratic and supportive.

Yet this science/arts binary can only take us so far in structuring an analysis of gendered classroom cultures, and presents a rather essentialist and deterministic view of academic disciplines. What seemed to emerge from the data was that the classroom cultures of the five disciplines were in fact complex and nuanced. It appeared to be the case that whether disciplines were ‘hard’, ‘soft’, ‘pure’ or ‘applied’⁴⁰ affected the nature of women’s lived classroom experience (Biglan, 1973; Kolb, 1981; Becher, 1994; Neumann et al., 2002). In particular, ‘hard pure’ physics and ‘hard applied’ engineering seemed to be characterised by markedly different gendered cultures.

Alison Kelly’s (1985) work on gender and school science can help us to think through these disciplinary differences. Kelly argues that in the lower levels of schooling, the discipline of science is constructed as being activity-based and physical, largely revolving around the completion of practical experiments. Kelly argues that this emphasis on the physical aligns more closely with dominant versions of working-class masculinity (e.g. Willis, 1977). But Kelly notes that as students progress higher up the schooling system, science becomes increasingly theoretical – science comes to be seen as difficult and as requiring

⁴⁰ Neumann et al. (2002: 406) assert that in ‘hard pure’ disciplines, knowledge is seen as being cumulative and universal with an emphasis placed on the quantitative. ‘Hard applied’ disciplines are also underpinned by hard pure enquiry but are ‘geared towards products and techniques’. ‘Soft pure’ disciplines are typified as being holistic, reiterative and as having a qualitative bias – knowledge is not seen to be superseded but is cumulative and scholarly enquiry is typically seen as being ‘a singular pursuit’. ‘Soft applied’ disciplines are also seen as holistic and qualitative-orientated, but are primarily concerned with the furthering of professional practice.

intellectual labour rather than physical exertion. Thus, science's link with masculinity becomes transformed, as power is now attained through control, patience and mental prowess.

It appears that because engineering at university retains a strongly practical and physical element, it is regarded by students as linking more with laddish, working-class performances of masculinity. Some of the women engineering students in this study (who displayed normative hetero-femininities) needed to work hard to successfully position themselves within engineering because of this. For example, Mandy told me that she sometimes questioned whether she had enough of a 'thick skin' to deal with the competitive and aggressive culture of engineering, even though she enjoyed the course content. In contrast, it appeared as if the women physics students found it somewhat easier to fit into their classroom culture. Being a hard pure discipline, physics is more strongly associated with the mind and rationality. This appears to fit better with softer, intellectual constructions of masculinity, and also aligns more closely with (white, middle-class) femininity, where traits such as diligence and hard work are valorised (Walkerline et al., 2001; Harris, 2004; Francis et al., 2012).

But it must be recognised that the number of women studying engineering and physics also appeared to have a significant impact upon the qualitative nature of women's classroom experience – that is, the presence of female *bodies*. The engineering students noted that women comprised approximately 10% of students on their course, whilst the physics students felt that their course contained nearer 20%-30%, with both degree programmes having around 150 students in the cohort. The physics students felt that because there was a greater proportion of women on their course they were able to establish a larger presence, meaning that they were not relegated to the margins of their discipline (Solomon et al., 2011) – as the women in engineering arguably were.

In a similar way to physics, 'soft pure' anthropology and English can also be seen as involving a great deal of intellectual labour. At Marlton, students were required to develop a criticality of thought and cultivate independent, singular learning styles. In contrast, modern languages is underpinned by aspects of soft pure enquiry but is also applied and practically-orientated (e.g. speaking classes, a year working abroad). This focus on both the mind *and* body appeared to affect the nature of the modern languages 'student experience'.

Indeed, due to increased social interaction, modern languages students seemed to feel a greater sense of support, community and belonging, seemingly boosting students' feelings of contentment and wellbeing.

Gendered classroom cultures as contextually contingent

What we need to appreciate, then, is that whilst classroom cultures are informed by the gendered ontological and epistemological assumptions that underpin science/arts disciplines, they are not determined by them. Becher and Trowler (2001) argue that, in HE, disciplines have specific knowledge properties which function to direct the cultural characteristics of that discipline, resulting in the formation of distinct 'academic tribes and territories' (p.1). However, more recently Trowler (2014) has come to modify his view, arguing that whilst there may be some essentialized characteristics of disciplinary cultures, one must take into account the real life context with its inbuilt complexities:

'...the generative power of disciplines, the power to affect other phenomena in significant ways, does exist, but is more like the power output of a wind turbine than that of a power station. In other words it is variable and contextually contingent.' (p.1723)

Thus, we need to recognise that gendered classroom cultures are bound by context; they are geographically, culturally and historically specific, and that one classroom will vary from another by place, space and time (Massey, 1994; Renold, 2006). Not only this, but students are socially grounded beings and bring with them to learning their own tastes and dispositions, as mediated through their social positionings in terms of gender, class, ethnicity and age (see Bourdieu and Wacquant, 1992; Colley et al., 2003; Hodkinson, 2005; Hodkinson et al., 2007; James, 2014). Thus, different students will interpret their lived classroom experience in different ways, through the lens of a multitude of external influences.

Deconstructing and challenging gendered learning cultures

What the data presented in this chapter also indicates is that learning is not an individualised, de-contextualised and cognitive process, but is socially mediated through learning cultures (Hodkinson et al., 2007; James, 2014). In particular,

this chapter has highlighted the gendered nature of learning cultures – that is, the ‘gender regimes’ (Kessler et al., 1985; Connell, 1996, 2002) that pattern and structure gender arrangements in institutional contexts. The data suggests that gender disparities do exist within academic disciplines in HE today, placing women and men students into hierarchies which serve to influence learning outcomes, thus maintaining power differences. These gender regimes may work to empower women students (e.g. physics, anthropology, English, modern languages) or disempower them (e.g. engineering).

Whilst highly regulatory, Connell (1996) asserts that gender regimes are not, however, fixed and static but can be challenged and changed. Indeed, Connell states that by opening up the narratives contained within oppressive gender regimes, we can work to modify them. What this chapter has done, then, is to shine a light on the experiences of women studying a range of disciplines in HE, so that university educators and educational researchers might better reflect upon, and deconstruct the masculinizing and feminizing effects of classroom processes and practices.

Conclusion

In this chapter, I have sought to outline the key facets of the gendered classroom cultures of the five disciplines under study at Marlton University, illustrating how gender differently structured women’s classroom experiences. In the next chapter, I will move on to explore how the women in this study negotiated life outside of the classroom, including their experiences of friendship, leisure and part-time work.

Chapter 6

Life Outside the University Classroom: Women's Repertoires of 'Student Success'

Introduction

Whilst many educational and youth researchers have sought to move beyond the confines of the 'school' classroom and have explored younger girls' negotiations of friendship and leisure, tracing their impact upon girls' affective states and experiences of academic achievement (McRobbie, 1978; Hey, 1997; Walkerdine et al. 2001; Kehily et al., 2002; Renold and Allan, 2006; George, 2007), very few researchers have attempted to do the same for women university students (although for notable exceptions, see Esposito, 2011; Bhopal, 2011; Finn, 2015). In particular, no studies appear to exist which seek to consider how women science/arts students spend their time outside of formalised learning contexts, and have considered the impact that these experiences have upon women's emotional wellbeing and sense of student 'success'.

Indeed, very few HE researchers have sought to take an in-depth, qualitative approach in order to 'map' women's social worlds, and have considered how friendships/personal relations are managed in conjunction with women's studies. This chapter seeks to address this gap in the literature, and will document how peer networks constituted a key site in which the women in this study could negotiate positions of power/powerlessness and thus 'successful' student subjectivities.

As noted in Chapter 2, a larger body of literature exists which seeks to explore how students engage in extra-curricular activities in addition to their studies (e.g. student societies, volunteering, hobbies, part-time work) – particularly how students from certain social backgrounds are better able to capitalise upon the opportunities available to them in order to construct 'employable selves' (e.g. Moreau and Leathwood, 2006; Tchibozo, 2007; Tomlinson, 2008; Stevenson and Clegg, 2011; Richardson et al., 2014; Clark et al., 2015; Greenbank, 2015). This study will seek to add to the literature by interrogating the experiences of a relatively small number of students but in considerable depth and over time, in

order to understand some of the complex processes involved in negotiating extra-curricular pursuits. Moreover, this study will aim to generate new insights by highlighting the ways in which women studying science/arts disciplines engage in extra-curricular practices, differently shaping the women's perceptions of their own 'success'.

Aims of the chapter

In order to document the complexity of the women's out-of-classroom experiences in sufficient depth in the limited space available, in this chapter, I have opted to focus on one STEM discipline and one arts/humanities discipline out of the five under study – engineering and anthropology. Engineering and anthropology have been selected as illustrative cases not because they are intended to be viewed as typical or representative of science/arts disciplines more generally, but because the women in these disciplines provided me with particularly full and detailed accounts of their out-of-classroom experiences. It should be noted that the engineering and anthropology students' accounts were also similar to those of the other women in this study, but particularly clearly illustrated the diverse ways in which the women negotiated dominant discourses of student life in order to construct 'successful' student subjectivities.

The first half of this chapter seeks to explore the nature of the women's personal/social networks whilst studying at Marlton University (i.e. Mandy, Joanna, Charlotte and Jasmine in engineering, and Callie, Margaret, Eleanor and Hannah in anthropology). The second half of the chapter moves on to explore how the eight women sought to spend their leisure time, interrogating the reasons behind their choices.

a) Personal networks – friendship, love and family relations

Engineering

Mandy, Joanna, Charlotte and Jasmine

Joanna stated that many of the women engineering students had established strong friendships with other women on their course when they commenced

study in first year. Because there were so few women studying engineering, Joanna felt that there was an obvious pool of people to approach – ‘it’s a lot easier to sort of introduce yourself in those first weeks to a girl than a boy. Um, I don’t know why!’. Mandy wrote in her diary that she had made friends with two other women engineering students on her very first day. Mandy explained that she had met one friend, Maya, on the stairs on the way to her introductory lecture, and had met Charlotte in her tutor group shortly afterwards. Mandy, Charlotte and Maya had established a strong peer bond, and spent a considerable amount of time together both inside and outside of class – along with a shared set of friends that the women had made either in engineering, in halls of residence in first year, or whom they knew from home. Mandy included details of her core friendship group in her diary, and explained their peer-shared living arrangements in second year:

My friendship ‘group’ is made up like this:

Northern Road house (Charlotte, James, Kyle, Ginny, Tarek, Polly and Maya)

My House (Me, Rosa, Sophie, Simon and Phil)

Engineering friends: Charlotte, Maya, Tarek, Liam, Ed, Kirsty and Lee

We all hang out together with the engineers making up the majority.

(Diary Excerpt – Mandy)

Both Mandy and Charlotte’s diaries contained many instances of small groups of the friends/housemates going to lectures together, sitting and chatting in Marlton’s cafés, going to restaurants to celebrate their birthdays, going on nights out, and generally hanging out in each other’s houses. In particular, the housemates appeared to enjoy taking it in turns to cook a meal for the ‘house’:

MONDAY

16/03/2015

...After heading to the gym I detoured from my usual route home into town to buy some ingredients for dinner as I had offered to cook for a few friends – something we usually do.

Once home and showered I hung out with two of my housemates, James and Kyle before starting to make dinner for a total of 8 people, myself, James, Kyle, Sophie, Rosa, Mandy, Maya and my boyfriend Tarek.

After dinner Mandy, Kyle, Sophie and I watched Pleasantville and made chocolate chip cookies. I headed up to bed around 11, with Tarek.

(Diary excerpt – Charlotte)

MONDAY

02/03/2015

...In the evening I had dinner at Charlotte's house with everybody – yum sesame chicken and egg fried rice. Stayed late there doing a group project that is due Friday.

(Diary excerpt – Mandy)

Both women emphasised that they very much enjoyed the social side of being a student at Marlton. In fact, Charlotte stated that she felt a strong sense of 'belonging' to both her engineering course and Marlton University because of the friendship group that she had actively managed to create, of which she was at the centre:

Charlotte: I don't know, it sounds kind of big-headed but there's this running joke in my group of friends – so I have good friends in engineering, and I have the people I kind of made friends with in halls last year, but I also have a couple of good friends from home, from the same school who came to Marlton University. And whilst I had the different groups of friends, that kind of just forced them all to be friends and merge (*chuckles*). So there's kind of a running joke where they're

like 'Oh but you're the centre of the group. If you're not here we can't do anything'.

(Interview 1 – March 2015)

Joanna was also friends with Mandy and Charlotte, and it appeared that all three women socialised together in class. However, Joanna's diary indicated that her core social circle comprised a different 'set' of students. Joanna lived in a shared house with Sally (an English student who also took part in Focus Group 3) and five other male students whom she had met in halls in first year. Joanna appeared to spend a good deal of time with her housemates, as well as her boyfriend Daniel (a fellow engineering student) who was also friends with the men in the house. The housemates would often spend time together going to lectures, studying in the library, having lunch together on campus, playing/watching intramural football matches, drinking in the pub and going on 'nights out' to local nightclubs – thus heavily interlinking their academic and free time.

Mandy, Charlotte and Joanna told me that they very much enjoyed the freedom and independence of living away from home with their friends in a shared house where they could come and go as they pleased – resonating with the work of youth scholars who assert that peer-shared living represents new 'youthful' ways of being in late modern society, where friendship takes on an increased significance (Furlong and Cartmel, 1997; Pahl, 2000; Kenyon and Heath, 2001; Heath, 2004; Brooks, 2007; Finn, 2015). The women did state that it could sometimes be stressful living in student houses as housemates could occasionally get into petty fights but, in general, the women constructed university friendships as being enriching and fun – of critical importance in ensuring their happiness whilst studying at university and thus 'central to their sense of student-self' (Finn, 2015: 89).

As noted above, Charlotte and Joanna had boyfriends who were also studying engineering – Tarek and Daniel. Whilst Tarek and Daniel occasionally featured in the women's diaries and interview narratives, the women never spoke about their boyfriends in any great detail. It could be the case that the women omitted talking about their boyfriends because they felt that such relationships were not 'study' related, and therefore of less interest to me in relation to this research

project. However, Charlotte and Joanna did not seem overly coy or private about their relationships, but rather, their narratives simply centred upon friendship relations as opposed to partner relations. In fact, in a similar way to the women undergraduates in Finn's (2015) study, Charlotte and Joanna seemed keen to present themselves as being free, independent, and not weighted down by a partner – mobilising powerful discourses of the 'empowered' individualized neo-liberal female subject (see Walkerdine, 2003; Harris, 2004; Macvarish, 2006; Finn, 2013). It could also be the case that Charlotte and Joanna sought to downplay the significance of their boyfriends in an effort to maintain 'respectable' middle-class feminine subjectivities, de-prioritising love and sexuality in order to focus on their own educational achievement and career aspirations (Walkerdine et al., 2001; Aapola et al., 2005; Kehily, 2008).

Yet whilst Mandy, Charlotte and Joanna appeared to lead very fulfilling social lives, my fourth engineering case study student, Jasmine, was having a markedly different experience. As I spoke with Jasmine during Interview 1, it became clear that whilst she had made some acquaintances in engineering (including Mandy), she had not made any strong friendship bonds with either women or men students. Indeed, Jasmine's diary indicated that she did not socialise with any of the engineering students outside of class; her diary entries largely revolved around going to and from campus to attend classes alone, completing assignments and doing household chores in her peer-shared house (e.g. cleaning, laundry). Jasmine attributed this lack of friends to her 'different' cultural background, which she thought had made it difficult for her to 'fit in':

Jasmine: ...obviously I'm coming from a different culture, I'm a different age because I'm two years older than everyone else in Britain [*Jasmine started school a year later in the Caribbean and took a gap year aged 18*] and it's like, I dunno, it's kind of like you feel a bit more comfortable to approach girls. Had I been the same age as everyone else I think I would have been OK to approach the boys, but honestly, urgh, no, no thanks. Because they kind of like stay in their cliques, and they're very kind of like immature and I don't really know how to respond to them or carry on a conversation for very long I suppose. And you know, you think you'll

bond a bit better with girls and, (*sadly*) I've never had a bonding experience within engineering.

(Interview 1 – March 2015)

Gender and age figure prominently in Jasmine's talk about friendship. In line with Joanna (engineering) and Jane's (French and Spanish) comments in Chapter 5 regarding girls getting on better with girls, Jasmine states that she feels more comfortable approaching other women students – particularly as she is an 'older' student. But because there are so few women engineering students at Marlton, there exists a smaller pool of potential friends, and Jasmine has apparently not found any women with whom she has established a strong connection. Not only this, but Jasmine 'writes-off' the young men in engineering as prospective friends as she regards them as being too 'immature'. Whilst this assertion could lend greater weight to the notion that Marlton's engineering course is heavily populated with 'laddish' male students (see Chapter 5), it could be the case that Jasmine is drawing upon an alternative set of (non-racialized) discourses in order to explain and make sense of her relative social isolation (see Youdell, 2006; Crozier et al., 2016).

In Interview 1, Jasmine was keen to play down the impact that this lack of friendship had upon her experience whilst studying at Marlton. In a similar way to the young black women in Mirza's (1992) study, Jasmine constructed herself as being strong, confident and independent – someone who did not need to rely on others to be happy (also see Wilkins and Lall, 2011). Indeed, Jasmine was keen to emphasise to me that she was an academic-focused 'high achieving' student averaging a 1st. Yet Jasmine's narrative was perhaps tinged with sadness as she reflected upon what she was 'missing out' on:

Jasmine: I think first year [it affected me] a little bit but not so much because I don't rely entirely on my engineering class for my social aspect. I mean I have my friends within my house, like my flat and whatnot so it didn't really faze me too much. I think maybe in terms of help or doing work outside of lectures and stuff, I struggled and, um, well basically I lived in Upton Court [university halls], people who were in St. John's and stuff, they mostly stayed on campus and had more time to

socialise between lectures as opposed to, if I had a break I went to (*inaudible*), and I came back.

LS: OK, so you felt you had quite separate lives, so engineering was like, went there, did the study, then just went back and carried on your life outside?

Jasmine: Yes definitely. That's how I'd describe it.

In the above extract, Jasmine intimates that she has friends in her shared house/flat who 'make up for' her lack of friends in engineering. Yet when I probed a little deeper, it appeared that Jasmine was not particularly strong friends with these housemates; Jasmine would occasionally go out for lunch with a couple of the students, but the rest were more acquaintances. Indeed, Jasmine appeared to feel alienated from Marlton as a university, and told me that she did not feel that she 'belonged'. As previously noted, Marlton has a reputation for being a predominantly white, middle-class institution, and whilst Jasmine stated that she had managed to make friends with 'three people from back home' who were studying on different courses and in different years (which Jasmine was pleased about), she did not feel that there was enough of a community from the Caribbean to mix with, with whom she thought she might have shared interests. Jasmine had attempted to make friends with other International Students through various student societies, but said that the different communities tended to 'stick to themselves' (also see Brown, 2009; Bhopal, 2011; Crozier et al., 2016). And Jasmine told me that she had tried to make friends with the British students but had found it difficult to create any lasting bonds:

Jasmine: It's just some of them are really nice but, then again, they have their home friends and they have their groups so it's sort of like, I'm always kind of like the outlier. Like I'll be friends and good with people but always an outlier.

When I asked Jasmine why she thought this was the case, she told me that two barriers posed a stumbling block. Jasmine stated that in order to make strong bonds with the British students, she felt that she would need to engage in Marlton's heavy drinking culture. Jasmine viewed drinking as being crucial to

facilitating and cementing friendships, but this was something that Jasmine was unprepared to do:

Jasmine:...the British people, I feel as though I would need to succumb to their sort of socialising culture being that you have to, like, over drink, you know, they binge drink, they do all that pre-drinks business. I mean, I obviously know you don't have to go to the extent but I mean, the whole process of doing that and going to the same club, listening to the same music, you do that two or three times a week, that's just not my idea of fun. That is to them so I feel as though even on a socialising aspect, it's not really compatible.

Jasmine felt that in her home culture, it was not 'respectable' to binge drink and engage in laddish or lairy behaviours, regardless of whether you were a man or a woman – something which Jasmine termed a 'culture clash'. Whilst laddish/drinking cultures have been identified as a common characteristic of British university campuses in recent years (e.g. Dempster, 2011; Finn, 2015; Phipps and Young, 2013), not all British students engage in heavy drinking practices. It might therefore be the case that Jasmine was again drawing upon an alternative discourse in order to explain her social difference, thus placing blame for her lack of 'fit' upon British student culture, as opposed to herself (Brown, 2009; Crozier et al., 2016).

Whilst Jasmine was seemingly reserved in terms of her moral conduct, Jasmine also felt that her outgoing personality – as shaped by her home culture – could be read in the wrong way by other students. This resonates strongly with the experience of many ethnic minority schoolgirls in Mirza (1992), Connolly (1998) and Gillborn and Youdell's (2000) studies. As Jasmine stated, 'I'm very outgoing and I'm very dramatic and, like, that's just the culture back home...the way how I would express myself and my stories may seem over the top but that's just my culture. We don't *mean* how we say things, it's just how we relate to one another, you know?'. Indeed, Jasmine was very loud and confident, and was animated in the way that she expressed herself. This confidence also informed the construction of her subjectivity in talk; in interview, Jasmine made bold and assertive statements such as 'I am an excellent test taker so I prefer, if I had it my way I would ask for 100% exams'. And in Focus Group 3, I could observe Jasmine interacting with the other women in this study; Jasmine was very

happy to counter Mandy, Joanna, Charlotte (engineering) and Sally (English) when she had an alternative viewpoint. This led me to question whether the 'Home' engineering students were perhaps finding it difficult to make sense of Jasmine's confident behaviours when they themselves were relatively quiet and reserved, displaying conventional passive, white/Asian middle-class femininities (Connolly, 1998; Walkerdine et al., 2001; Shain, 2003; Archer and Francis, 2005). Indeed, the women might have been mistaking Jasmine's confident behaviours for arrogance or boastfulness, making it difficult for the women to categorise Jasmine as a 'female' student and connect with her on a social level.

Anthropology

Callie, Margaret, Eleanor and Hannah

The 'non-traditional' students

At the ages of 24 and 57, Callie and Margaret are categorised in policy terms as 'mature students' – that is, students who were over the age of 21 when they commenced their degrees (UCAS, 2016). Callie had grown up in a town not far away from Marlton, and had left school at the age of 18 after completing her A-levels. Callie told me that she had 'burnt out' after working incredibly hard to achieve good A-level grades and was unsure about which course to pursue at university, so had decided to go straight into work. Callie had ended up working in various low-paid jobs and had grown increasingly unsatisfied and unhappy, eventually being treated for anxiety and depression. Callie resolved that in order to improve her life prospects, she needed to obtain a degree. Despite a number of false starts – having initially enrolled on various courses at different HE institutions in the local area including foundation degrees in art, design and drama – Callie had finally settled upon studying anthropology at Marlton University. Callie told me that she lived with her long-term boyfriend in a rented house in a village approximately 3 miles away from Marlton, and when Callie had a lecture or a seminar to attend she would commute into Marlton by car.

Like Callie, Margaret was raised no more than 40 miles away from Marlton in the neighbouring city of Waterton. After leaving school at the age of 16, Margaret had entered the workforce as a secretary. Having taken time out to

have a family in her 20s and 30s, Margaret had resumed work in administration and for the past 15 years had worked at Waterton's FE college, providing clerical support for teaching staff. Margaret had been through redundancy three times in her working life, the last round having been announced at her workplace in 2012/13. Margaret told me that, in the past, she had always been very anxious about redundancy as she had separated from her husband and had two sons to support. However, Margaret told me that during this latest round of redundancies, she was in a different place in her life; her sons had now grown up and had left home, so Margaret decided that it was time to prioritise herself and obtain a degree – something that she had always aspired to do.

Margaret lived alone in a house in Waterton. In first year, Margaret had sought to drive in to campus for lectures and seminars, but had since found the train to be more convenient. Margaret told me that she could complete university work such as set readings and essay planning during her journey, in order to maximise her study time. Whilst Margaret lived alone, she told me that she was not isolated. Margaret had a group of long-standing friends in Waterton who she would often meet up with at the weekends, and her sons (aged 23 and 26) would sometimes come to visit. Margaret's elderly father also lived nearby and Margaret had a number of caring responsibilities. Her diary indicated that she would often drive her father to medical appointments, do his shopping, complete household chores (such as doing the cleaning and changing lightbulbs), and pop in to see him every now and again.

Whilst Margaret's experience of 'university life' resonated somewhat with Callie's, there were marked age-based differences. Being 24, Callie was a good deal closer in age to the majority of the students on her course and, as I could ascertain for myself in interview, looked no different to the general student population. Perhaps as a result of this embodied 'youthful' connection (in combination with her outgoing personality), Callie had managed to make a number of friends who were studying anthropology, including one best friend Bella. Callie would attend classes with her friends when they were taking the same modules together, and would often meet up with the young women on campus to have lunch or coffee. Callie told me that her friends continually implored that she join them on nights out, but Callie stated that she did not want to participate in Marlton's student nightlife. Callie told me that she had moved

into a 'different phase' in her life; one where she could no longer gain happiness from 'getting shitfaced and sleeping on the floor and throwing up in a toilet'. Indeed, Callie's diary indicated that she had a very happy home life with her boyfriend Joseph (who worked 9 to 5) and their dog Bert. A typical day in Callie's university life might involve: getting up, walking the dog, driving into university for a lecture/seminar, having lunch with friends on campus, driving home, working on an essay, having dinner with her boyfriend, doing a bit more work, crashing out on the sofa to watch TV, then heading off to bed.

As documented in Chapter 5, Margaret appeared to have experienced much greater difficulty integrating with the other students on her course. In interview, Margaret told me that she had found first year to be very challenging due to her somewhat 'enforced' social isolation. Margaret explained that none of the younger students really knew who she was or where to 'place her' in class as she looked older than them, so had found that the other students rarely chatted to her. Margaret told me that in first year she would simply travel to Marlton, sit through a lecture in total silence and then go home again. However, Margaret told me that second year had been 'leaps and bounds' better. Margaret had managed to chance upon a group of other mature students who she would socialise with both inside and outside of class:

Margaret: There's a group of us, we don't all go to the same lectures but I think one or two. I think it happened because we had a tutorial and a lecture with an hours' gap, so it's 'Let's all get coffee', so we did, and there's about six or eight of us. And now they'll, you know, 'Oh are you going for lunch?' and if it's one or two of them, I feel part of that group now.

(Interview 1 – March 2015)

Margaret seemed to very much enjoy having a group of mature peers to share her experiences with. This strongly parallels the findings of O'Boyle (2014, 2015) who similarly noted that the mature students in his study sought to find other mature students to befriend who could understand the specific pressures of being an older student, such as balancing the demands of university and home life, as well as adjusting to academic study again after a lengthy break. In particular, Margaret seemed to enjoy talking to her friends about assignments –

something which helped to reassure Margaret that she was doing things correctly. In fact, in her second and third years of study, Margaret also seemed to have made friends with a few of the younger students, who she would sit with and chat to when she found herself in their classes. As Margaret pointed out, there were fewer compulsory core modules in anthropology in Years 2 and 3 and so, regardless of age, students would often find themselves in classes where they did not know anyone and would have to befriend those around them. These younger students did, however, appear to be (in Margaret's terms) 'loner' students – students who were strongly focused on academics, sat at the front during lectures and mixed less with the majority of the student body (see Francis et al., 2012).

Whilst Callie and Margaret had experienced friendship at Marlton in different ways and had made different peer-networks, their experiences were similar in that they both appeared to live 'dual lives'. Like the mature students in Edwards (1993), Baxter and Britton (2001), Christie et al. (2005) and O'Boyle's (2015) studies, Callie and Margaret seemed to view university akin to a '9 to 5' job rather than a lifestyle change, seeing a clear separation between their 'home worlds' and 'university worlds'. Drawing upon postmodern scholarship and theories of biographical trajectories (e.g. Giddens, 1991; Beck, 1992), Baxter and Britton (2001) argue that mature students often use higher education self-reflexively in an attempt to re-shape their lived biographies, seeking to (at least in part) break with their past identities. Yet Baxter and Britton argue that this break or rupture with their past lives often results in a 'compartmentalisation of the self' (p.89), whereby individuals experience feelings of dislocation and fragmentation as they negotiate positions across past and future identities.

In this study, whilst Callie sought to clearly separate or 'compartmentalise' her home life and her university life, she narrated less of a rupture to her 'self' when negotiating a position across these two different social fields. Baxter and Britton (2001) draw upon Bourdieu's (1984) concept of 'habitus'⁴¹ in order to emphasise the class-based dimension of this process, noting how mature students must often acquire new forms of 'capital' when studying in HE, which can result in an uneasy transformation of their classed habitus. Yet although

⁴¹ In their work, Baxter and Britton (2001: 89) define habitus as being 'embodied dispositions which generate thought and action'.

Callie had attended a comprehensive school and did not come from a wealthy background, she constructed herself as having a distinctly middle-class disposition (for example, Callie stated in Interview 1: 'I know myself I'm a very middle class person'). Thus, Callie seemingly found it relatively easy to integrate within Marlton's predominantly middle-class student body, before returning back to her home world:

Callie: I mean I've got a friend who's called Bella for a start, she's actually called Arabella, but it's Bella. And she's *lovely*, and I call her bambino because she's just so helpless (*laughing*), she's such a child. Um, but she comes from quite a nice background, speaks very well, knows absolutely nothing about life – parents still sort out her bank account, think her mum votes UKIP, which is not well looked on.

(Interview 1 – March 2015)

Indeed, in Interviews 1 and 2, Callie sought to strongly distance herself from her childhood beginnings in her small and 'insular' home town, instead viewing herself as moving away (in both a literal and metaphorical sense) and seeking to obtain a good degree in order to move on to 'bigger and better things' (see Chapter 7 for further discussion).

In contrast, Margaret initially found it less easy to establish a successful 'social' identity at Marlton University, perhaps in large part due to a mismatch in classed habitus. Margaret stated that when she first started at Marlton, she strongly missed the sociality of her former workplace and sometimes regretted not choosing to study at Waterton University – a less renowned, predominantly working-class university in her home city where she might have met a greater number of students from 'non-traditional' backgrounds similar to her own. Yet over the course of the research, Margaret appeared to become increasingly happy at Marlton; she had started to mix more regularly with other mature students, was increasingly enjoying her course, and was achieving good grades. In fact, Margaret hinted that she had started to lose some interest in her friends from Waterton and was seeing them less often – indicative of a transformation in Margaret's habitus (Lehmann, 2014):

Margaret: When I think about why I saw my friends [from Waterton], it was kind of filling lonely time and ‘Oh’, you know, ‘What am I going to do at the weekend?’, ‘Oh we’ll go out’, or you’ll have a few drinks and then you’re a bit lazy on the Sunday.

And I think maybe any hard work [at university] you have to have a bit of stress, do it, put the work in. Far more worthwhile than having the free time and just maybe, you know, going out for meals, meeting with friends and just pointless conversation which isn’t really about anything in particular, and I feel now I’ve got loads more I can say anyway, it’s just a different focus. And I enjoy talking to the guys here [at Marlton] now more.

(Interview 1 – March 2015)

The ‘traditional’ students

Eleanor and Hannah are both classified in policy terms as being ‘traditional’ students – school-leavers who live and study full-time on campus (Reay et al., 2001). Yet despite this terminological connection, Eleanor and Hannah’s university experiences differed considerably in terms of their level of satisfaction with the social side of life at Marlton. Eleanor told me that, in first year, she had met a group of students in halls of residence who shared similar interests and outlooks to herself, with whom she had established strong peer bonds. As they all got on really well, Eleanor stated that, in second year, she was living in a large student house with 7 of the students who were each studying a different discipline – ‘4 guys and 4 girls in total’. Eleanor clearly enjoyed spending time with her housemates, and her diary contained many instances of the housemates walking into campus together, studying communally in their bedrooms, eating meals together and generally hanging out in the evenings and on weekends. The following extract describes a typical evening ‘scene’ in Eleanor’s student life:

WEDNESDAY

11/03/2015

Worked on anthropology project [on campus] until heading home at 4.30pm. I managed to spill almost an entire carton of milk on the floor when trying to talk on the phone and make tea at the same time – Keeley and Paul laughed a lot! Spent a while wiping and mopping that up, and then had leftovers (and new humour!) for tea. Liam, Keeley and Phil were all there too, so it was nice to eat together. This quite often happens at ‘Simpsons-o’clock’, when the guys put the living room tv on to watch Simpsons while having dinner.

7pm – after popping to Co-op to replace the milk, I join Harry for a study session in his room. He has two desks, and a lot more space and light than in mine. My Step-Grandpa calls to cancel their weekend visit as Grandma’s done her back in, which is a shame as I had been looking forward to seeing them!

(Diary extract – Eleanor)

Whilst Eleanor was strongly embedded within her network of housemates, her diary indicated that she also had another core set of friends. Eleanor had a keen interest in music and played the saxophone to a high standard. On commencing at Marlton, Eleanor had joined three different music groups – a ‘big band’, a jazz band and a concert group. Eleanor told me that, in second year, she had been made vice-president of the big band society which meant that she shouldered the responsibility of organising band practice and performances for the group. Eleanor was clearly a very busy student, and her week-long diary documented a careful balance of study alongside meeting up with friends for band rehearsals, committee meetings and gigs. Whilst Eleanor’s daily schedule appeared to be fairly ‘full on’, Eleanor told me that she loved being part of the band and that she had made ‘closer friends through that than I have through my course. I see them more than I do see people on my course!’

Whilst Eleanor was thoroughly enjoying engaging with the social side of life at Marlton, International Student Hannah appeared to be finding it difficult to integrate with the Home students – something which appeared to strongly impact upon her happiness and wellbeing whilst studying at Marlton. Hannah

told me that, in second year, she was living in a shared house with a group of students that she had met in halls in first year. Two of these students were friends from back home in Hong Kong who had attended the same secondary school and sixth-form as Hannah – Kym and Amy. Hannah had known these girls in school but had apparently become closer to them at Marlton due to their shared cultural background. Indeed, Hannah expressed that she had not found it easy to make friends with the ‘English’ students in first year due to their ‘closed off’ attitudes, and so had relied almost exclusively on her pre-established friendships from home:

Hannah: I think there’s a massive divide between International Students and English students. And I feel like I’m the split, I’m kind of like, I *look* English and I am, but I’ve come from such an international background that I’m not. And I feel like I haven’t really been able to connect to like, to the stereotypical English person like a lot of them here.

(Interview 1 – March 2015)

This resonates strongly with Jasmine’s experience in engineering, who similarly described the Home students as being ‘cliquey’ and unapproachable. In fact, Hannah went on to describe how she thought these cliques had been formed:

Hannah: I think here, there’s no need to be curious [about friends] because there’s so many people who’s just like you. There are so many people who are like ‘Oh yeah we went to the same school and we all have the same friends. There’s someone I know who knows *you*’, and it’s like ‘We all used to play lacrosse together’ or something. And it’s like, well I’m already cut out, I’m already, I can’t really – not compete, compete is the wrong word – but I can’t really like hang out with them too...In my halls *everyone* knew *everyone*...But the thing is, it’s like they all went Beddingdon, they all went to Radley, they all went to some school, or like they know that person who knows that other person. And they all linked really fast, and it was like, shit, like it was a bit scary.

In the extract, Hannah makes a strong connection between friendship at Marlton University and social class. Hannah constructs Marlton as being populated by a certain ‘type’ of English person – a distinctly upper/middle-class person who has been educated at one of the top schools in the country, who

has pre-existing networks of friends and acquaintances. Hannah sees these 'elite' friendships as being exclusionary to those students who do not share their privileged backgrounds – perhaps used by some students as a form of 'social capital' (see Reay et al., 2009; Allan, 2009; Forbes and Lingard, 2013; Maxwell and Aggleton, 2014; Papapolydorou, 2014). Hannah told me that her lack of integration with the Home students had not mattered so much in first year as she had gotten along very well with Kym and Amy: 'We were a three, like we were really close in first year in halls'. However, things appeared to have changed in second year. Speaking in Interview 2, Hannah reflected on some of the problems that had occurred within her shared house:

Hannah: I don't remember if I told you but last year I lived with one of the girls I know from my halls, like she had depression and it was quite severe. And then another girl I was living with, her boyfriend had depression and so she was going through a lot. And then um, and I felt like the energy in our house, our whole house energy was so dark if I'm honest, I think that it doesn't become a nice place to go home to. When like your best friend like doesn't feel hungry because of her medication or is really quiet, and I found that really hard.

(Interview 2 – November 2015)

Perhaps not surprisingly, Hannah had found it difficult to cope with the pressures of living in such an environment, and told me that she herself had experienced issues with anxiety and panic attacks. Hannah's narrative in second year is full of deep unhappiness – an unhappiness that appeared to be exacerbated by the fact that Hannah's friendship network was relatively closed-off and restrictive, and that Hannah had no Home students (or close family in the UK) whom she could turn to for support. But it is important to highlight that Hannah's social experience had started to pick up again in third year. When I spoke with Hannah in Interview 2 as she commenced her final year of study, she told me that a number of changes had taken place in her life over the summer. Whilst working abroad on a marketing internship in Amsterdam, Hannah had met a new boyfriend. Hannah felt that having someone new in her life who she could talk to had helped to ease the feelings of loneliness and isolation that she sometimes felt at Marlton: 'Now with my boyfriend and doing a

long-distance relationship, like I do speak to him quite a bit and I think kind of having someone *there* as well, like not thinking I'm just so reliant on those two girls, it's been much more healthy'. Hannah told me that her living situation had also improved; Kym and Amy appeared to have become a little happier over the summer, and a new housemate had also joined their shared house. Hannah felt that this new housemate had a positive attitude which had helped to reinvigorate the house's atmosphere.

It is interesting to note that throughout this traumatic experience, Hannah's studies had not suffered to any great extent. Hannah told me that she had suffered a panic attack during one exam in second year as she felt that she did not know enough about the module content, but seemed to feel that, overall, she was rapidly developing as a student and was very much enjoying her work. Indeed, academic work appeared to be providing Hannah with a positive outlet during a very stressful time, providing her with a constructive and rewarding focus that functioned to distract her from her social worries (e.g. see Reay et al. 2009; Storrs, 2012).

Discussion

As the data presented above indicates, peer networks took various forms amongst the women in this study. In some ways, the discipline studied by the women (i.e. science/arts) strongly shaped and structured their experiences of friendship. Mandy, Charlotte and Joanna appeared to have made strong connections with their peers in engineering. The women emphasized that because there were so few female students on their course, they had initially found it fairly easy to approach other women and establish friendships. The women told me that once these single-sex friendships had been forged, they had mixed in more generally with the male student population. Not only this, but the intensive structure of the engineering course meant that the women were 'forced' to spend a considerable amount of time together and work together closely in groups (see Appendix 11), forging more intimate peer bonds. In fact, Mandy explained that her university experience revolved centrally around engineering, and that she only had one good friend who was not studying the discipline. The women appeared to move in fairly small circles, and it seemed notable that both Charlotte and Joanna had boyfriends who studied with them in

engineering. These engineering based peer-networks appeared to create a strong sense of 'community' within the discipline (Lave and Wenger, 1991) – or at least for those students who were *able* to establish friendships (see below for discussion of Jasmine).

It is also interesting to note how the 'female minority' experience in engineering appeared able to 'cut through' other axis of difference such as class and ethnicity. Mandy (white-British, comprehensive school), Joanna (white-British, all-girls' private school) and Charlotte (British-Chinese, all-girls' grammar school) mixed together apparently seamlessly; at no point in the research did the women state that they felt their class or ethnic identity had considerably impacted upon their social experience at Marlton.

This is significant, as previous studies have highlighted how working-class and ethnic minority students can sometimes find it difficult to integrate within elite university settings (e.g. Wentworth and Peterson, 2001; Ball et al., 2002; Quinn, 2004; Reay et al., 2009, 2010; Lehmann, 2012, 2014). These scholars often utilise Bourdieu's (1984, 1986) concepts of 'habitus', 'field' and 'capital' in order to theorise students' feelings of disquiet and unease, due to a supposed mismatch in cultured habitus. However, Reay et al. (2009) have problematized the notion of a wholly deterministic relationship between working-class/ethnic minority students, elite universities and a lack of 'fit', noting that some students *are* able to move successfully across the two different fields via an agentic process of 'self-conscious reflexivity' (p. 1105).

In fact, in this study, it appeared that Mandy, Charlotte and Joanna were able to establish strong peer bonds due to their shared interest in, and passion for engineering which superseded structural aspects of difference. What emerged from the data was that these women did not necessarily need to feel a sense of 'belonging' to Marlton University to be happy – with its distinctly white, middle-class and potentially alienating 'institutional habitus' (see McDonough, 1997; Reay et al., 2010). Rather, the women had to assimilate within the smaller disciplinary field of engineering. This highlights an important yet hitherto overlooked and under-examined aspect of habitus in HE – its link with not only institutional, but *disciplinary* context.

Indeed, Collyer (2012: 28) contends that it makes sense to talk of 'disciplinary habitus' because academic disciplines are also 'associated with relatively unique forms of social and cultural behaviour and a set of characteristics which have, over an historical period, become part of its very structure'. Collyer notes that these dispositions interlace and become part of an individual whilst studying in said field. In fact, Collyer asserts that disciplines are not merely knowledge repositories, but function to confer benefits on their members such as a sense of identity, legitimacy and community, whilst simultaneously functioning to exclude non-members.

Yet whilst (three of) the women engineering students described a sense of community on their course, the women studying anthropology did not speak of their discipline as having such a strong community feel. Margaret and Hannah had not made solid friendship bonds with many of their peers in anthropology (or at least, friendships took time to develop), and Eleanor's friendships appeared to have been primarily established in halls of residence in first year and in music societies. Thus, anthropology's disciplinary habitus appeared more diffuse, centring largely upon knowledge-transmission as opposed to student sociality.

Yet the disciplines were not all-encompassing and did not determine the women's experiences of friendship. Structural axis of identity were salient, and shaped the women's engagement with their peers. Perhaps the most prominent finding to emerge in this study was the lack of integration between Home and International Students. Jasmine felt that her engineering course and Marlton University itself were 'cliquey', and Hannah expressed similar sentiments about Marlton's exclusionary, almost 'high school-like' popularity-based peer culture. HE researchers have long noted how International Students can find it difficult to traverse cultural barriers and establish strong peer bonds with Home students, often leading to feelings of isolation (Bochner et al., 1977; Ying, 2002; Brown, 2009; Sovic, 2009; Schweisfurth and Gu, 2009; Taha and Cox, 2016).

However, this study has highlighted the class-based nature of this social differentiation, and how peer networks established in UK schools and colleges now appear to be characterising and potentially monopolising the social space within certain universities – forming 'elite' institutional habituses (Reay et al., 2010). This resonates with a growing body of studies which document how

those students from privileged social backgrounds are increasingly able to deploy personal networks, putting them at an advantage in HE in terms of social integration *and* future employment prospects, where ‘networking’ is often a necessity (e.g. Tholen et al., 2013; Brown et al., 2016). Of course, this is not to say that all of the Home students at Marlton did indeed socialise in elite friendship groupings; rather this was the central discourse drawn upon by the International Students in order to make sense of their feelings of exclusion.

And in relation to the structuring variable of ‘age’, it was clearly notable how Callie and Margaret approached the social side of student life in a different way to the younger students who lived either in halls of residence or in shared houses close to Marlton’s campus. These women treated university akin to a ‘day job’, travelling in to class and then going home again soon after, paralleling a standard working day. Callie often sought to minimise the time that she spent with friends on campus in order to support her boyfriend who was working full-time, and Margaret had complex caring commitments for her elderly father who was requiring an increasing amount of support, and a dog to look after back at home. Thus, friendships were not as deeply rooted or as central to Callie and Margaret’s lives as they were for the younger students in this study. However, in line with the mature students in Christie et al.’s (2005) study, Callie and Margaret did not view living at home as being a ‘second-best’ option, but rather, such choices were seen as economically rational and enabled the women to maintain their existing familial and social networks (also see Reay et al., 2010; Clayton et al., 2009; Finn, 2015).

The relationship between women students’ personal networks and their ownership of ‘success’ at Marlton University

What clearly emerged from the data was that the women’s personal networks at least in part shaped their relationships with student/academic ‘success’. Those women who managed to create strong peer bonds with their fellow course-mates (e.g. Mandy, Joanna, Charlotte, Callie), or with Marlton’s student body more generally (e.g. Eleanor) appeared to express greater levels of happiness and satisfaction with their university experience. As such, these women appeared able to construct ‘well-rounded’ student subjectivities, often emphasising how they sought to balance study alongside a fulfilling social life –

similar to many of the high-achieving students in Clark (2009), Allan (2010a), Francis et al. (2012) and Raby and Pomerantz's (2015) studies. In doing so, these women saw success in the realm of the university in a holistic way, strongly incorporating an element of sociality.

Those women who did not manage to establish friendships as easily expressed a greater level of dissatisfaction with their university experience, often recounting feelings of a lack of fit or belonging to Marlton (e.g. Jasmine, Margaret, Hannah). However, this is not to say that the women's grades suffered as a result of their relative social isolation, or that the women saw themselves as 'unsuccessful' students. Rather, the women appeared to create their own orthodoxies for success, often re/prioritising the importance of academic study in their student lives. For these women, their course and grades appeared to take on an increased significance, with the women often relishing getting 'stuck into' study. As such, these women could negotiate powerful or successful positions within their discipline despite having established fewer peer bonds with their course-mates – but had to construct relatively strong, determined and single-minded academic subjectivities in order to 'brush off' accompanying feelings of social exclusion or alienation. This resonates strongly with the experience of schoolgirl Nyla in Renold and Allan's (2006) study who resolutely focused on academics at the expense of friendships.

b) Extra-curricular activities, part-time work and work experience

Having now explored the nature of women's personal networks whilst enrolled at Marlton University, in this next section, I would like to explore how my participants sought to narrate their accounts of their leisure time, paying particular attention to their engagement in extra-curricular activities (ECAs), part-time work and work experience. In particular, I would like to interrogate the 'interpretive frameworks' (Moreau and Leathwood, 2006: 306) mobilised by the women in order to rationalise their choices – focusing on the ways in which such discourses linked with wider discourses of student 'success'. I will then go on to make some contrasts between the women's accounts across the science/arts divide.

The discourse of graduate 'employability'

Before I move on to present the empirical data pertaining to women's participation in ECAs, part-time work and work experience, it is important to understand the current relationship between HE and the labour market, and how HE has been conceived of in policy discourse in recent years. This policy context frames students' understandings of both university 'life', and the purpose of HE more generally.

As noted in Chapter 2, a number of scholars have observed that a discourse of graduate 'employability' has become increasingly embedded within the realm of HE in recent decades (Moreau and Leathwood, 2006; Cranmer, 2006; Boden and Nedeva, 2010; Tomlinson, 2012). These scholars assert that economic shifts associated with late capitalism have created a greater level of uncertainty in the labour market, resulting in HE policy-makers across many advanced Western societies placing an increasing emphasis on the importance of 'employability skills' so that graduates might meet changing economic demands. Scholars also note that, in the UK context, the 'massification' of HE in recent years has seen exponential growth in student numbers, resulting in students feeling under increased pressure to furnish themselves with extra skills in order to 'stand out from the crowd' of similarly qualified graduates (Archer et al., 2003; Furlong and Cartmel, 2005, Power and Whitty, 2006; Brown et al., 2016). Indeed, Brown (2013) argues that graduate returns are no longer guaranteed, with students increasingly risking ending up in jobs incommensurate with their academic credentials.

Moreau and Leathwood (2006) note that, following the Dearing Report in 1997, the Labour government introduced a new performance indicator in order to measure the quality of HEIs in relation to graduate-outcomes. Researchers have observed that, as a consequence, universities have increasingly been attempting to embed 'employability skills' within the curriculum (Chapple and Tolley, 2000; Harvey et al., 2002). Yet this discourse of employability has been subject to criticism by a number of writers. Morley (2001) argues that such a focus on economic outcomes reflects a rather narrow view of the purpose of education. Moreau and Leathwood (2006) also note that the discourse of employability results in a different 'construction of the worker' (p.309), with students now viewed as being responsible for furnishing themselves with the

requisite skills needed to compete in the competitive job market, and to be 'blamed' if they find themselves unemployed.

Not only this, but HE researchers have also argued that the discourse of employability serves to mask structural inequalities which continue to govern graduate outcomes, observing that labour market processes remain strongly classed, gendered and 'racialized'. In particular, a significant body of literature exists which seeks to demonstrate how middle-class students are better able to cultivate and project 'employable selves', as they are said to have the required knowledges, capitals and personal networks necessary to furnish themselves with such skills (Collins, 2000; Ball, 2003; Reay et al., 2009; Stuart et al., 2011; Stevenson and Clegg, 2011; Lareau, 2015).

In light of these current debates, I would like to explore how my participants sought to divide up their leisure time and draw upon dominant employability discourses which now appear to form an 'official' definition or version of student success. In particular, I will focus on the importance the women attached to ECAs, part-time work and work experience in relation to their present-day experiences, future orientations and imagined future 'selves' (Stevenson and Clegg, 2011) – shaping the ways in which the women could construct themselves as being 'successful' students and future graduates.

Engineering

Mandy, Joanna, Charlotte and Jasmine

As noted in Chapter 5, Marlton's engineering course was demanding and students had a relatively high number of contact hours each week. Yet students were also expected to undertake many of hours of independent study in order to complete group projects, write up coursework assignments, and revise for exams. This appeared to strongly impact upon the nature of the ECAs that the women could engage in in their spare time. When I asked the women to outline the activities that they participated in (e.g. interests, hobbies, student societies, volunteer work), their responses were overwhelmingly muted. The following quote taken from Jasmine represents a typical reply that I received from the women in explanation as to why:

Jasmine: (*Sighs*) I don't have time. I *honestly*, time is a constraint – not to say that I don't want to, I want to be involved in sooo many different things but it's realistically the time.

(*Interview 1 – March 2015*)

All four students had joined student societies at the beginning of the academic year, which was something that students at Marlton University were encouraged to do via a large society fair that was held on campus every September. The societies the women had signed up to varied considerably and included: art society (Mandy); bench-ball society (Charlotte); rowing society (Joanna); engineering society and the International Student society (Jasmine). However, the women's commitment to these societies appeared to be low. Mandy and Jasmine told me that they had stopped going to society meets as they had too little time to spare because their degree was so intensive. In contrast, Charlotte stated that she was reluctant to go to bench-ball meetings because she was fairly lazy(!) and practice was held on a Friday night: 'The bench ball thing is definitely a not worth the effort'. It was only Joanna who had taken a serious interest in a society. Joanna had signed up to rowing in first year but had quickly decided that it 'wasn't for her'. In second year, Joanna had wanted to pursue another sport and so had joined lacrosse – a sport which she had previously played for her home town⁴². Joanna was very much enjoying being part of this group, describing lacrosse society as being like one big 'family'. Joanna's diary contained descriptions of her attending the lacrosse AGM, playing in the Saturday league, and going out for drinks with her teammates afterwards to commiserate their loss.

Whilst the women did not engage in many ECAs or recount any significant hobbies (although some of the women did go to the gym, and Mandy expressed a keen interest in art, drawing and crafts such as crochet), as noted in Chapter 5, Jasmine had decided to set up her own outreach initiative designed to promote engineering to girls in local primary and secondary schools. When I asked Jasmine why she had opted to do this, she stated that when she had started at Marlton in first year, she was shocked by the lack of women studying

⁴² Perhaps indicative of Joanna wanting to extend her (classed) habitus across her 'home' and 'university' worlds, given that lacrosse is an 'elite' sport commonly associated with the wealthy middle-classes.

engineering and wanted to do something to boost female participation in the discipline. This initiative was taking up a considerable amount of Jasmine's spare time, as she had to organise funding and promotion of the scheme, recruit and train engineering students to run 'youth-friendly' workshops, and run the workshops in schools. Jasmine had managed to recruit Mandy onto the team to help produce some marketing materials, as Mandy was keen on art and design. Whilst Mandy told me that she thought the initiative was a good idea because more girls *should* be made aware of engineering as a possible career, Mandy stated that she only offered to take part as a favour to Jasmine.

None of the women had a part-time job beyond the bounds of Marlton's campus. Joanna had considered taking on a waitressing or retail job in the city of Marlton but realised that she could not realistically spare the time away from her studies. Charlotte had signed up to work as a Student Ambassador in order to promote engineering to prospective undergraduates during Marlton's Open Days, but said that she had only done this to add to her CV, rather than for the money. In fact, Charlotte stated that when she applied to be an Ambassador she did not know that the role was paid, and so the money had proved to be a nice bonus. Jasmine worked for Marlton's Student's Guild as a Volunteering Assistant, although her diary indicated that she only had one shift a week which lasted just 3 hours.

Whilst the women engineering students sought to de-prioritise part-time work during term time, believing that it would add too much to their weekly workload, the women did realise the importance of obtaining engineering internships during the holidays in order to improve their chances of employment post-graduation. The women told me that each year, nearly all of the engineering students at Marlton would apply for internships with the country's top engineering firms. However, the women emphasised that these internships were not easy to obtain – 'So many of us have applied for internships this summer and it's just *rejection* after *rejection*' (Mandy). During the course of this research project, three out of the four women who participated as case studies had managed to obtain an internship – Charlotte, Joanna and Jasmine. Joanna and Jasmine had secured internships at two of the UK's leading retail 'brands': a cereal manufacturer and a 'luxury' automobile company. These women had made it through a tough and lengthy interview process, and would spend their

summer break between second and third year living and working away from their family home. Charlotte had managed to obtain an internship at a small engineering firm which specialised in property and construction near to her home in south-east England. Charlotte's mother knew someone who worked in the company and had managed to get Charlotte a 'foot in the door'. The only student who had not managed to obtain an internship was Mandy. Mandy told me that she had applied to numerous companies, but had not been successful.

Sociologists have long sought to question the 'meritocratic' discourse which frames education in many Western nations, whereby students' academic attainment and job market success is seen as dependent upon merit and talent alone (Bourdieu, 1974; Halsey et al., 1980; Goldthorpe, 1996; Ball, 2003; Power and Whitty, 2006; Tholen et al., 2013; Wakeling and Savage, 2015). These researchers have sought to highlight the ways in which both the education system and labour market operate in order to reproduce class inequality, for example through the unequal distribution of economic and cultural capital. And it is arguable that these processes were serving to shape the experiences of the women in this study. All four of the women were achieving the same grades (a 2:1 or 1st) yet, as noted above, the women came from very different educational and social backgrounds. Charlotte, Joanna and Jasmine had all attended 'elite' all-girls' private or grammar schools, whilst Mandy had attended a comprehensive school in London. Even Mandy seemed to have come to the realisation that she was at a distinct disadvantage due to her social background. She knew that she had few contacts within engineering companies and could not afford to complete unpaid work experience, which made it incredibly difficult for her to 'try out' the areas of engineering that she was particularly interested in:

Mandy: I only know one person who's got an internship. But that's one person who's got an internship that hasn't got it because their parents are in that business kind of thing, so they just gave them the job.

...there's a lot of people – I didn't realise till I came here – there's a lot of people at Marlton who are grammar school people and very much they're like, like one of my friends has got their own horse and things like that (*LS laughs*), and she's going skiing in two weeks' time and I'm just like, wow, my parents, like, I have nothing kind of thing (*laughs*). Sounds

really bad. Like some people didn't have to bother with internships, they're like 'Oh no it's fine, I don't need the money'. Whereas I'm like, I need, I don't care, this internship, I need to get a job because I need to pay off my overdraft.

(Interview 1 – March 2015)

This had led Mandy to pursue work in other sectors of employment during her summer break between second and third year. Mandy had signed up to the National Citizen's Service and had been tasked with supervising a group of young people for several weeks, helping them to engage with their local community and improve their communication skills. Mandy said that she liked working with young people, but also needed the money: 'it was either do that or have another year in a supermarket, and I was like nah, I'm gonna do something a bit different.' Mandy had also undertaken work at a bar in order to earn some extra money to see her through her course. Mandy told me that she planned to obtain more engineering-related work experience in the future, but did not know how successful she would be: 'I think if I just had a year I could just get experience of every single thing I wanted to do, it would be great, but the likelihood of it happening is not...*(laughs)*'.

Anthropology

Callie, Margaret, Eleanor and Hannah

Arts/humanities students are often constructed in popular and media discourse as having an 'easy ride' at university due to the relatively low number of contact hours they have in comparison with STEM students (e.g. The Guardian, 2007; The Spectator, 2013). Because such disciplines are predominantly studied by women, Leathwood and Read (2009) observe how this discourse is distinctly gendered, linking with wider debates regarding the perceived 'feminization' and downgrading of HE. Yet this study indicated that the women anthropology students were conscientious workers who sought to spend a considerable amount of their free time studying. Whilst both of the 'traditional' anthropology students, Eleanor and Hannah, appeared to spend a small proportion of their week attending formal lectures and seminars, their diaries revealed that they would work for many hours on university assignments, group projects and

essays during their free time – on weekdays, during evenings, and at weekends. The students would sometimes study on campus in Marlton’s libraries or in computer suites in various department buildings, but would also work in their peer-shared houses. The following extract taken from Hannah’s diary indicates how she spent an entire Saturday working on essay preparation:

SATURDAY

Date 15/2/2015

After breakfast I went to the Study Zone with my housemate at 10am with the aim to start working and putting together a plan for my anthropology coursework...My flat mate and I went for a lunch break, we went to Coffee Choice to grab some food and then went back to the Zone study space.

After lunch I started to do some reading for my coursework...We then had another break, and when I came back I finished all the reading I had to do, however hadn’t planned the essay.

I left the library at 6:30pm, and had a friend come over for dinner which was really lovely.

(Diary extract – Hannah)

Yet Eleanor and Hannah also appeared to participate in a number of extra-curricular activities in addition to their studies. As noted above, Eleanor had various commitments with the three band/orchestra societies that she participated in, and spent a significant amount of time organising and attending band practice, committee meetings and performances – usually going to at least one event a day. Eleanor stated that this took up the majority of her spare time, but said that she also played netball ‘for fun’ on a Sunday evening for an intra-mural team. Looking at Eleanor’s diary, I could see that she would regularly run in order to keep fit, and also took part in a peer-assisted learning scheme which was being run within Marlton’s modern languages department, whereby Eleanor was partnered up with a first year student for an hour or so each week in order to help them with language practice.

Hannah told me that in first year, she had not taken part in many activities outside of her course. Hannah stated that she had been a member of the student-staff committee for anthropology – a platform whereby a number of

student representatives would feed-back students' learning experience to staff to ensure that the course was running smoothly. However, Hannah said she felt that she was missing out on the 'real' university experience in first year by not participating in many societies and by sticking closely to her friends from Hong Kong. Hannah had therefore sought to push herself socially in second year:

Hannah: I think second year I was like, I'm still looking for something a bit more and I think I really needed to create...more of a life? I just felt like I was really just going to class, coming back to halls, and then because my friends were just there anyway. But um, in second year I was like, well I'm living in a house, I'm living with the same people, so it's like I really need to create more of an after school kind of activity.

(Interview 1 – March 2015)

Hannah had signed up to play netball for the University and would train on a Friday and play for the league on Sundays. Hannah was also social secretary for the animal welfare society – a position which she had taken on in order to help out a friend who had set up the society. When I spoke with Hannah again in Interview 2 (November 2015), she told me that she had gained even more confidence in third year and had auditioned for, and joined a singing group. This was something that Hannah had always wanted to do but said she was too 'shy and scared' to try out for in first or second year. Hannah had attended an audition on her own, which she admitted was a big step for her. Hannah also emphasised the importance of physical fitness for her mental health and so had taken up yoga, and often went to the gym to run and do weights exercises which she said helped to balance her mood.

Eleanor and Hannah's approaches and attitudes towards work and work experience, however, differed considerably. Hannah had sought to obtain a part-time job each academic year whilst studying at Marlton. Hannah told me that she had worked as a waitress at a tea shop in the city of Marlton, as a telephonist for the University where she would cold-call alumni in an attempt to gain financial donations, and as a kitchen assistant at one of the University's catering companies. Hannah stated that she had sought to take on these part-time jobs in order to earn some extra cash to see her through her studies. However, Hannah also seemed highly aware of the need to gain internships in

order to improve her employability (Moreau and Leathwood, 2006; Tomlinson, 2012). Hannah told me that whilst growing up in Hong Kong, she had felt under considerable pressure to make a success of herself in business and earn lots of money: 'I think the lifestyle and culture of Hong Kong being so intense, and like fast, like everyone has to succeed financially, there's a lot of pressure'. When Hannah was younger, she had completed an internship at a PR company which she had managed to obtain through a friend of her parents. Hannah had very much enjoyed this experience and had secured another internship with the same company in their Amsterdam branch during the summer vacation between her second and third years of study.

Whilst Hannah's narrative focused centrally upon work and Hannah viewed university as being a key stepping stone on the way towards (hopefully) a high-powered 'fun' and 'sexy' career with a global multinational corporation, at times Hannah's interview narrative appeared confused as she also drew upon alternative discourses of the purpose of education and of educational success (e.g. Newman, 1852; Dewey, 1916; Heidegger, 2002). Hannah told me that she had originally thought about studying business and marketing at university, in line with the expectations of her home culture. But Hannah stated that her father had wanted her to study a discipline that she was passionate about – something which had changed her perspective. As a consequence, Hannah had researched different courses at different HE institutions and had opted to study anthropology, which she was very much enjoying. In fact, Hannah was critical of the career-driven employability discourse that she thought was being championed by Marlton University, which appeared to define graduate success in the narrow terms of 'wealth' and 'social status':

Hannah: What I didn't like was at the beginning of this term...careers people popping into your lectures being like 'By the way, you need a job soon'. I was like, I just felt like we know the pressure's there, I felt like the reminder wasn't really needed... I think 'blue chip' companies and corporate companies is what's the focus. Because, you know, we all go to this upper-middle class school so everyone's in this exact same bubble and they're just, it's like you're moving a portion of people from one group into another, into these corporate jobs that, you know, eventually probably a large majority of us will be in. But I think there are,

like for example I had another girl in my class who during this presentation was like 'Well how about for people who want to work for charities?'. And I was like (*shocked*) 'Yeah, whoa, I forgot about that'. But they also forgot about it too, he was like 'Oh yes, we have a small section on...' I think we're expected to just, cos it's where the money is, they're thinking we're just going to follow the money.

(Interview 2 – November 2015)

In contrast, Eleanor had a clearly defined attitude towards employment. Eleanor stated that work was one her least priorities: 'In terms of career, I barely ever think about it to be honest! (*Laughs*). It's probably quite bad, but day to day, I never really...Yeah (*laughs*).'. Besides having done some volunteering and charity work in the past, it did not appear as if Eleanor had any interest in gaining part-time work or work experience. Yet Eleanor expressed feeling some tension between her relaxed and self-declared 'bohemian' attitude towards life and work, and Marlton University's 'official' employability discourse which centred upon the capitalist enterprises of 'business' and 'money-making':

Eleanor: I think the Uni places quite a heavy emphasis on business and err, that kind of study, like, you know, business and finance or law and that kind of discipline, marketing and stuff, which I don't really feel that I would fit in with, don't really have any interest in anything to do with that! (*Laughs*). So it kind of does grate a little bit because all of their career, like they're very career-minded and they send you loads of emails being like 'Look at this great internship with this law firm', and I just tend to just kind of completely ignore it (*laughs*), because I don't think it's got anything to do with me and I don't feel like I fit in with their typical student that they're aiming that at. Um, yeah I think the university has a kind of business-y ethos and unfortunately kind of maybe, money-making kind of thing...err they cater for, yeah, a kind of typical student that I don't think I fit in with.

(Interview 1 – March 2015)

Margaret and Callie's involvement in ECAs appeared to be strongly shaped by their status as mature students, and their decision to live at home and travel into Marlton to study (also see Christie et al., 2005). When I asked the women

whether they participated in any extra-curricular activities in addition to their studies, Callie and Margaret stated that whilst they would very much like to take a greater part in student life, their home commitments and need to commute meant that this was not an option:

Callie: It's quite difficult for me because I'm, a) I'm a mature student, and b) I live, you know, I live with my boyfriend and we have a *dog (laughs)*, and a house and all these sorts of things. And when I first got here I was determined to sort of join as much of the life as possible, and I used to be part of the women's rugby team, um, but it very quickly became evident that to fully engage was going to be difficult...

(Interview 1 – March 2015)

Margaret: If I was a total free agent I would stay and go to the theatre and do other things, sometimes there's shows or talks and things, so I don't feel part of that, mainly because I do have to go back because I've got the dog at home and I feel like, 'Oh, I need to get back'.

(Interview 1 – March 2015)

In the above extracts, the women imply that because they have 'dependents' who require their presence at home (e.g. dogs, boyfriends), they are not 'free' to participate in student life as fully as they might wish. As such, the women narrate a struggle to match up to the 'ideal' independent student who is unencumbered by domestic responsibilities – similar to the mature students in Leathwood and O'Connell's (2003) study. Indeed, Margaret had not joined any societies and did not attend any events on campus, whilst Callie had been forced to quit the women's rugby team – in part because of a knee injury – but largely because she found it difficult to schedule in all of her commitments: 'As a mature student I have a life outside university which I don't think a lot of undergrads who are 18, 19, 20, have...I found even just the hours difficult to keep up with because I think if you're a normal undergrad, you have completely your own timetable'. Yet whilst the women expressed a desire to take part in more ECAs on campus in order feel a stronger sense of belonging to Marlton, it seemed that Callie and Margaret were not overly disappointed that they could not participate in the same way as the younger students. Like the mature student 'pragmatists' in Christie et al.'s study (2005), Callie and Margaret

appeared to have come to the realisation that they did not necessarily want their university experience to 'change their lives'. Rather, they appeared to want to extend or enrich their existing worlds, retaining at least some sense of their 'old' habitus (also see Baxter and Britton, 2001; O'Boyle, 2015).

Whilst the women did not participate in many university-based activities, they appeared to spend a considerable amount of time and energy focused upon their studies. Margaret and Callie both fervently stated that they sought to keep up to date with their weekly study tasks (e.g. set readings, seminar preparation), and told me that they would spend many weeks planning and writing their essays and revising for exams. When the women were not studying, their diaries indicated that they would primarily catch up on household chores and spend time with their families, although Callie also enjoyed crafts and creative writing.

In terms of part-time work and work experience, Margaret told me that she had made a conscious decision not to undertake any paid employment whilst she was studying for her degree. Margaret stated that she wanted to focus on obtaining a good grade (ideally a solid 2:1), and was therefore using her redundancy money to see her through her course. However, work/work experience was not of central importance to Margaret as she had worked for the greater part of her adult life and also had a very clear career goal in mind. Margaret wanted to teach in a FE college or support adult learners and therefore in her third year of study, Margaret had sought to undertake a week shadowing staff at Waterton's FE college (where she had previously worked as an administrator), with a view to putting together a PGCE application.

In contrast, Callie emphasised that she needed to work part-time whilst studying in order to 'pay the bills' (e.g. rent, car, food), as her student grant would not cover all of her expenses. Callie's parents had both retired from modestly paid jobs and so Callie could apparently not expect any 'handouts' from them. This resonates with studies conducted by researchers such as Barke et al., (2000), Callender and Wilkinson (2003) and Moreau and Leathwood (2006) who observe that non-traditional students (e.g. mature and working-class students) often feel under increased pressure to earn money during term-time. Indeed, it appeared that Callie was a busy student, normally trying to fit in the majority of

her temporary work over the summer vacation period, intending that the money would see her through the next academic year:

Callie: Actually I have 3 or 4 part time jobs. Um, they're all ad-hoc, so that's why I have so many. Um, my main one...I work as a barista for an independent coffee roastery down in Waterton. Um, so I go and I do all their events...And then I'm also a temp for Marlton College, which I only started last summer...Um, and then (*chuckles*) in January, no, beginning of this year, so last term I wrapped Christmas puddings for about 3 months in the morning. Um, and then I've got my own little [online crafts/soft furnishings] shop I run...Um, I also did some work for a chiropractors, and something else might come of that but I'm not sure. Um, I think that's about it.

(Interview 1 – March 2015)

There is a lack of consensus amongst educational researchers as to the impact of part-time work upon students' academic experience and attainment. Some researchers suggest that part-time work helps students to develop important transferable skills such as independence, team-working and time-management (Volkwein and Strauss, 2002; Brooks, 2006; Callender and Little, 2015). Others argue that such work puts increasing stress upon students – particularly those from less affluent backgrounds (Curtis and Shani, 2002; Blasko et al., 2002; Reay et al., 2002; Moreau and Leathwood, 2006b; Richardson et al., 2014). When I asked Callie whether she felt that part-time work impacted upon her studies in any way, Callie found it difficult to provide me with a definitive answer. Callie told me that she could get tired having to work long hours and that 'I wouldn't do [the jobs] if I didn't have to', but also seemed to cope reasonably well balancing the two. It is notable that Callie had not sought to undertake any work experience or internships during the course of the research in order to aid her future career plans (which were albeit relatively undefined), as she sought to undertake a Masters in anthropology or a closely related discipline.

Discussion

As the data above indicates, the discipline studied by the women (i.e. science/arts) appeared to shape the types of ECAs, part-time work and work

experience that the women could engage in during their free time. The women studying engineering felt that because their workload was so heavy, they could not spare the time to engage in many activities outside of their course. On the surface, this might be seen as detrimental to the women's career prospects, as researchers have documented how those students who seek to take part in 'enriching' out-of-class activities and practices (e.g. music, sport, arts) are often at an advantage in the labour market (e.g. Reay, 1998; Lareau, 2003; Ball, 2003). However, it is important to note that the women in engineering were not at all worried or concerned about developing skills and interests outside of engineering – regardless of their class or ethnic background. These women asserted that their degree alone was well-respected by employers and that the qualification alone (perhaps in combination with relevant work experience) should be enough to get them a job:

Mandy: I always think for English, there's so many people leaving with English degrees, all trying to get an English job kind of thing so they need something different. So I suppose for them it would be like, they obviously need a good degree result and something that makes them completely different.

LS: Yeah, yeah.

Mandy: Whereas in engineering they always go, they want obviously good grades and they want a little bit different, but they don't really care.

(Interview 1 – March 2015)

Furthermore, the women in this study were not ignorant of the fact that their relative uniqueness as 'female engineers' might also put them at an advantage in the labour market: 'So I know there's a lot of opportunities, like, just to be a female engineer, they'll employ you because of that' (Mandy). The women knew that, in the current socio-political context, many engineering companies were now being actively encouraged to recruit women in order to look 'diverse'. They were also aware of the numerous government-backed school-based initiatives currently in operation that seek to promote 'women in science' (e.g. WISE, HeadStart). This seemed to give the women a confidence and belief that they would be valued in the labour market. In this way, the engineering students appeared able to re-work traditional discourses of student employability,

disregarding the importance of furnishing themselves with 'soft skills' in the present, instead seeing themselves as successful students because they were studying a highly demanding and prestigious discipline.

In contrast, there was a greater degree of heterogeneity in the way in which the anthropology students took part in activities outside of their course, which appeared to be strongly shaped by their gendered, classed and ethnic backgrounds (see Moreau and Leathwood, 2006b). The younger students (Hannah and Eleanor) appeared to participate in more activities, engaging in various student societies, hobbies and part-time work. Conversely, the mature students (Callie and Margaret) felt somewhat constrained by their home commitments. However, on the whole, the four women did not appear to engage in these activities in order to enhance their future employability, so that they might gain a job more easily post-graduation. Rather, these women sought to do something interesting and rewarding to complement their studies and 'fill in' spare time (e.g. music, crafts, sport or fitness), or felt compelled to work in order to sustain their present lives. As such, in a similar way to the engineering students, these women agentically re-worked 'official' discourses of student success which tie achievement explicitly to employment outcomes, instead prioritising such activities for their enriching psycho-social benefits (e.g. see Clark, 2009; Holloway and Pimlott-Wilson, 2014).

In fact, it was interesting to witness all four of the anthropology students talking about wanting to take part in ECAs (even if they were not able to) in order to gain what Read et al. (2003: 262) term an 'authentic' university experience. The women appeared to have a specific idea of what university life 'should' be like, as based upon popular and media representations of student life (also see Finn, 2015) – Callie explicitly mentioned the television programmes *Skins* and *Fresh Meat*. Indeed, all four of the students, regardless of age, thought that university should be a particularly fun and enriching time in their life, whereby they might meet 'friends for life' (Hannah). As such, some of the women appeared to feel a certain level of dissatisfaction and discontent when their lived reality did not necessarily match up to the ideal (e.g. Callie, Hannah, Margaret). In contrast, the engineering students (perhaps excluding Jasmine), did not appear to draw upon the discourse of the 'authentic' university experience in such a strong way. It could be the case that these women were actually enjoying a fulfilling student

lifestyle, based upon the formation of strong peer networks. Although it could also be argued that the women were so busy with study that they did not have time to stop and reflect upon what their university experience might be like if they were to engage further in ECAs.

Women's agentic negotiation of employability discourses

What emerged particularly clearly during the course of the research in relation to ECAs, work and work experience was that the women were not passive and un-reflexive, but were highly agentic and actively negotiated dominant discourses of employability (Youdell, 2006b; Gonick et al., 2009; Harris and Dobson, 2015). The women – across all social backgrounds – had a clear awareness of their position within a relatively privileged sphere (i.e. a high-performing, white, middle-class university), and were able to critically reflect upon the employability discourse that Marlton University was powerfully mobilising, which the women recognised served to reproduce class privilege. Of course, it must be acknowledged that the women in this study are 'officially' deemed to be of high intellectual ability given that they have gained entry into a high-performing university, and are likely to have been exposed to relatively progressive and critical knowledges during the course of their studies. Yet such agentic negotiation of hegemonic discourses can often be overlooked in studies of young women's experiences within educational institutions (e.g. see Maxwell and Aggleton, 2014).

Whilst the women told me that they all aspired to obtain fulfilling and (reasonably) well-paid jobs and realised that a degree from a 'good' university such as Marlton would help them with this endeavour, at the same time, the women appeared uneasy about developing a singular and calculated focus upon ensuring their future employability. Instead, in a similar way to many of the undergraduates in Finn's (2015) study, the women largely appeared to prioritise friendship/family relations and social activities, seeking to enjoy the 'university experience' whilst they had the chance, given that they would only be students for a relatively short period in their lives (perhaps 3-4 years).

Yet, despite their resistance to hegemonic employability discourses, it could be argued that the women's opposition was somewhat transitory as they realised that, in lieu of extensive work experience and 'employable' skills, they would

need to undertake further study if they were to succeed in the job market. Brown et al. (2016: 193) argue that, in recent decades, the expansion of HE and the 'overproduction' of qualifications has driven middle-class families to find alternative ways of reproducing their structural advantage. Brown et al. note that this has resulted in the growth of postgraduate courses which students must now embark upon in addition to an undergraduate degree – often at significant financial expense – in order to enhance their academic credentials. The women in this study appeared to have realised that this 'extra-credentialism' was something of a pre-requisite; Hannah and Callie were strongly considering applying for Masters courses whilst, as noted above, Margaret was applying for a PGCE in further education. Eleanor did not know what job she wanted to do in the future, but had seemingly not ruled out further study. And whilst the engineering students appeared less concerned about furnishing themselves with extra 'soft' skills in addition to their degree, they similarly realised that in order to give themselves a better chance of gaining employment and of obtaining the most prestigious positions within their field, they would need to undertake postgraduate qualifications. All four students were hoping to pursue either a Masters, or a further qualification in engineering.

However, it became clear that not all of the students would be able to embark upon postgraduate study as easily others. Callie and Mandy (who were not from overly wealthy backgrounds) expressed some concern about how they would fund their courses. These women largely hoped to take out additional student loans in order to cover their expenses, as opposed to relying on family members to fund their education – as several of the women in this study were doing. Callie and Mandy hoped that they would eventually be able to pay off their loans, seemingly viewing this supplementary financial outlay in a positive way, as an investment as opposed to a debt (e.g. see Callender and Jackson, 2008; Harrison et al., 2015).

Conclusion

In this chapter, I have sought to document how the women in this study spent their time outside of formalised learning contexts whilst studying at Marlton University, shaping the extent to which the women could construct themselves as being happy and 'successful' students. In the next chapter, I will take a

closer look at how the women experienced and negotiated academic achievement in their respective disciplines.

Chapter 7

Femininity, Academic Achievement and the Dichotomous Science/Arts Cultures

Introduction

Whilst there exists a wealth of studies exploring pupils' gendered negotiations of academic achievement in the primary and secondary school (e.g. Francis, 2000b; Reay, 2001; Renold, 2001; Jackson, 2006; Renold and Allan, 2006; Skelton et al., 2010; Allan, 2010a; Cobbett, 2013; Raby and Pomerantz, 2015), very few researchers have sought to do the same for students studying in HE. This chapter aims to address this important gap in the literature, mapping women students' differing relationships with educational success in the high-performing university.

Yet this chapter also aims to add a further level of complexity to the analysis by investigating how women students seek to negotiate academic achievement within different disciplines (i.e. science/arts). In doing so, this study seeks to contribute to a small yet expanding body of literature which attempts to interrogate the ways in which young people negotiate discourses of gender, achievement *and* disciplinary identities in order to produce successful and intelligible student subjectivities (e.g. Carlone, 2004; Mendick, 2005a; Skelton and Francis, 2012; Archer et al., 2012). By introducing the complicating variable of women's chosen discipline into the equation, I aim to further disrupt the notion that 'boundless success' really is open to all women students equally today (see Chapter 2).

Aims of the chapter

The first half of this chapter is dedicated to a discussion of the wider discourses which served to shape the ways in which the women in this study were able to see themselves as 'high-achievers' in their respective disciplines. I will explore the women's perceptions of achievement in the two STEM disciplines under study (engineering and physics), before moving on to examine their perceptions of achievement in the three arts/humanities disciplines (anthropology, English

and modern languages). I will then narrow the analytical lens and explore how the women negotiated these academic discourses alongside hegemonic gender discourses 'close-up' (McLeod, 2000). The aim here is to understand how the women forged un/successful learner subjectivities in association with intelligible performances of gender (Butler, 2004). In this section, I introduce six case studies of individual students, outlining the women's biographies before moving on to trace their perceptions of their own academic achievement over time.

At this early stage it is important to point out that, in this chapter, I use the terms 'academic achievement' and 'academic success' interchangeably, in order to refer to the women's subjective feelings about their educational performance. In this way, I aim to move beyond the narrow 'official' definition of educational success contained in policy discourse which defines achievement in relation to students' quantifiable attainment in formal assessments (see Renold and Allan, 2006; Allan, 2010a; Francis et al., 2012).

a) Women's perceptions of the five disciplines – who can be a 'high achiever'?

During the course of the research, it became clear that not all of the women who participated in this study were equally able to see themselves (or be seen by others) as being 'high achieving' or 'clever' students, in spite of their official attainment in formal university assessments. On the surface, it appeared that the women studying for a degree in either engineering or physics occupied a relatively privileged position, as their association with a 'high status' discipline afforded the women a degree of respect from others. However, on closer inspection, it appeared that the women's advantageous positioning was in fact somewhat precarious. In contrast, the women studying for a degree in anthropology, English or modern languages had to negotiate a number of complex, contradictory, and often less than complimentary discourses which framed their disciplines, which foreclosed the discursive space in which the women could be recognised as a 'high-achiever' (Youdell, 2006a; Archer, 2008). This impacted upon the way in which the women viewed themselves and their academic achievement, often stimulating injurious feelings of anxiety, ambivalence, inferiority and abjection (Walkerdine, 2010; Wetherell 2012; Reay,

2015). Indeed, many of the arts/humanities women had to work hard to re-position themselves in a way that facilitated self-belief and confidence in their academic ability and ‘credibility’ – highlighting a hitherto overlooked ‘affective’ dimension of women’s experience whilst studying arts/humanities disciplines.

STEM – what does it take to be a ‘high achiever’?

During the focus groups and one-to-one interviews, I asked the women to discuss their initial impressions of the five disciplines under study (engineering, physics, anthropology, English and modern languages), and the ‘types’ of student who might study them. I also asked the women to reflect upon what high achievement might ‘look like’ in the different disciplines (see Appendix 7). It became clear that the women studying both STEM and arts/humanities disciplines perceived STEM as being particularly difficult, and thought that those students who pursued such disciplines were automatically seen as ‘clever’. Several of the women also drew upon a discourse of ‘respectability’ in order to express how they felt that STEM disciplines were held in particularly high esteem in wider society:

Jasmine: I think of the [physics student] to be very clever and like, curious.

Group: Yeah.

Joanna: Either you have to be very clever or, it’s a very hard subject to get your head around sometimes.

(Focus Group 3 - Jasmine and Joanna (engineering))

Mandy: I think more people respect you for being an engineer. Cos everyone, it’s no way like a doss subject.

(Interview 1 – Engineering student)

Hannah: I would say that [science is] seen as higher, more valuable because you just get it, it’s like people who are really good at science they just get it and I don’t, and I think that for me there’s a difference. I feel that they’re more talented than I am in that sense...

(Focus Group 1 – Hannah (anthropology))

These findings are perhaps unsurprising, as a number of educational researchers have observed that STEM disciplines tend to be constructed by young people as being highly academic, 'hard' and 'difficult' – only suitable for academically gifted and 'naturally' intelligent students (e.g. Francis, 2000a; Epstein et al. 2010; DeWitt et al., 2013; Archer et al., 2012).

Feminist educationalists and historians of science have been keen to trace the origin of the discursive connection between STEM disciplines and academic rigour, concluding that the association is not neutral but profoundly gendered (e.g. Lloyd, 1984; Keller, 1985; Harding, 1986; Walkerdine, 1988; Leathwood, 2013). Walkerdine (1988) traces the emergence of the discourse back to the Enlightenment, when she observes that 'reason' came to be highly valued and was assumed to be achieved by transcending or controlling nature through scientific study. Walkerdine observes that whereas men were seen to be rational beings, women were thought to be confined by their 'natures' and thus excluded from intellectual endeavour (see also Dyhouse, 1995). Walkerdine claims that, as a consequence, rational and objective scientific and mathematical fields came to be inscribed as 'masculine' and 'high status'. Whilst we do need to recognise the longitudinal and historical nature of such claims in order to appreciate that disciplines and their identities have, and continue to be constructed and valued in different ways over time, in different spaces and in relation to different groups, educational researchers have continued to document the durability of these hegemonic discourses (e.g. Mendick, 2005b; Archer et al., 2010; Epstein et al. 2010).

These masculinized discourses of 'difficulty', 'respect', and 'cleverness' appeared to shape the ways in which the engineering and physics students felt that they, and their intellectual ability were perceived by others. In a similar way to the women engineers in Gill et al.'s (2008) study, the engineering and physics students recounted numerous incidents of having been asked by family members and friends what discipline they studied at university, and receiving a standard reply of 'Oh, you must be so clever!'. On the surface, one might expect the women to take up and cite these discourses for themselves, constructing themselves as being 'clever' students – indeed, the women had obtained a place at a high-performing university and so must have obtained good GCSE

and A-level grades in order to merit a place. But as the following excerpts indicate, the majority of the women did not view themselves in such a way:

Emma: That's the nice thing, I think if you say you do physics, people do think 'Oh you must be clever'.

Physics students: Yeah.

Becky: And even if it's not true, it's great.

Physics students: Yeah! (*Group laughs*).

Jess: Yeah, (*impressed*) 'You're really smart'!

Becky: Even if you're not smart people say 'Oh you must be clever', and you're like, 'No, but thanks!'

(Focus Group 2 – Emma, Becky and Jess (physics))

Joanna: My sister's just graduated from Durham with a Masters degree but she did geography, and I do engineering and I'm suddenly seen as the clever kid, and I only got three Bs at A level (*group laughs*). She got straight A*s all throughout school, she's ridiculously clever, just because she does geography she's suddenly seen as not bright.

Sally: That's so weird!

Joanna: And suddenly because I study engineering everyone's like 'Oh wow you must be so clever'. I'm nowhere near as clever as my sister but it's just because she does geography, she's automatically perceived as not that bright.

(Focus Group 3 – Joanna (engineering), Sally (English))

As we can see, some of the women appeared to enjoy the respect and prestige that their association with a high status, masculine discipline such as physics or engineering afforded them and accepted being constructed as 'clever', even if they did not entirely agree with such a favourable interpretation of their intelligence. This resonates with the experience of Toni in Heather Mendick's (2005a) study – a young woman who enjoyed pursuing mathematics at A-level because she could demonstrate her intelligence to others and feel 'powerful'.

Yet other students expressed feelings of awkwardness and guilt about being positioned as a high achiever when they did not feel that their grades merited such a label. As noted above, Joanna felt that her achievements were relatively modest in comparison with her sister who 'really was' clever, but had simply pursued a 'soft' and 'easy' (and one might say 'feminine') humanities discipline, thus downgrading her success in the eyes of others.

Whilst different STEM students responded in different ways to being constructed by others as 'clever', I want to pick up on one common theme that appeared to connect all of the women's narratives – a lack of ownership of, or confidence in their academic ability. It could be the case that the women were seeking to downplay their academic ability in focus group interviews so as not to appear arrogant or boastful amongst their peers, thus maintaining normative performances of 'nice' femininity (Reay, 2001; Renold and Allan, 2006; Paechter, 2007). However, it seemed that the women in physics and engineering felt less able to own their academic achievement because they really *did* fear that their grades were not as high as those of their male peers. The women stated that they were aware that many universities and businesses were now employing the tactic of positive discrimination as part of their recruitment process in order to boost the number of women studying and working in STEM fields, which led the women to question their intellectual ability:

Poppy: I think in some of the science [disciplines] you're kind of told 'Oh companies will want to employ you because they need girls'.

Emma: Positive discrimination.

Physics students: Yeah.

Poppy: The University will want you because of the whole, especially people going on to do PhDs, they want to have more female PhD students than they do so there's always that kind of positive discrimination. And although it's something in a way that you want to capitalise on, in another way it still doesn't seem really fair.

Becky: You feel quite bad about it (*laughs*)...I've always had a slight feeling at the back of my mind that's like, 'Did they let me in because I'm a girl'?

LS: Oh, OK.

Poppy: Yeah, that's definitely...

Jess: Yeah.

Becky: Yeah. I also feel that, like, occasionally, it's just like, 'Am I as good as the guys or did they just let me in because they want more girls?'

Jess: Yeah. I think that's definitely a common thought amongst the girls in physics, is like, 'Did they actually want me to come here, or is it just because I'm a girl?'

LS: And do you think that your achievements are different from the male students or not, or do you not know?

Jess: I think no one really cares what you got at A-level. Like, if you find out what someone got then you're like, 'Oh actually I did get the same as them'.

Emma: I think generally the girls, if you look at A-levels, girls have probably generally done better.

Jess: Actually yeah (*group laughs*).

(Focus Group 2 – Poppy, Emma, Becky and Jess (physics))

In a similar way, Joanna wondered whether she had been awarded a place to study engineering at Marlton University because she was 'a girl', as she had just missed out on the University's A-level entry requirements but had been given a place regardless:

Joanna: I needed three As. Um, and I got three Bs, and I've always wondered if that was because I'm a girl doing engineering and they want girls to come in. So had they sort of neglected the fact that I didn't get the

grades? Or whether I got in over someone else just because I was a girl, and not...yeah.

LS: Oh OK, and does that kind of concern you? Or are you pleased (*laughs*), or...?

Joanna: (*Laughs*) Well, like, I was happy, but it's sort of, I would like to think that, you know, I had stuff on my personal statement that impressed them, there are other things. I mean on two of them I was half a percent off an A so if they actually looked at the scores rather than the grades then they could see that I was, I was close to As, but...

(Interview 1 – Engineering student)

As is evident in the two extracts, the women struggled to make sense of their level of achievement and wrestled with some degree of psychic unease as they attempted to work out whether they did indeed have the same grades as their male peers. In fact, the women in physics felt that many of the male students were more confident in their ability because there was no doubt in their mind that they were intellectually capable:

Emma: I find the guys, I live in a house with guys and they all do physics and they're a lot more confident about their ability than most of the girls.

Physics students: Yeah.

Emma: They're like, 'I'm really good at physics, I'm really good at maths, I'll get 100% in this', and we're like, 'Oh we might get, 50' (*physics students laugh*), and we'll be happy with that, but the guys aren't like that in the slightest.

(Focus Group 2 – Emma (physics))

What the data presented above indicates is that, even if a woman does choose to break with gendered 'norms' and study a high status STEM discipline such as physics or engineering at university, there appears to be restricted discursive space in which women are able to see themselves as 'clever' and 'high achieving' students. Archer (2008) argues that educational discourse – as shaped by discourses of class, gender and 'race' – works to position students in particular ways, simultaneously opening up and denying 'success' to different

students '*irrespective of their actual levels of achievement*' (p. 101, italics in original). Archer introduces a conceptual trichotomy premised upon a Cartesian mind/body dualism in which the male, white, middle-class, Western subject is constructed as the "ideal' pupil' – that is, one who is naturally talented, engaged and independent. This "ideal' pupil' is set against 'Other/pathologized' pupils (e.g. Asian/Oriental pupils and girls) and 'demonised' pupils (e.g. black/white working-class pupils and hyper-masculine/hyper-feminine pupils). These pupils are seen to approach learning in the 'wrong' way. For example, Archer notes that Asian/Oriental pupils and girls can be positioned as conformist plodders, whilst black/white working-class pupils can be positioned as aggressive and lacking ability.

Because they do not fit the white, male learner ideal, it is arguable that the women in physics and engineering inevitably felt Othered/pathologized. Thus their academic achievement was experienced as precarious, as they did not feel able to inhabit an 'authentic' STEM identity (also see Solomon et al., 2011). I would like to highlight the impact that such precarious relationships with academic achievement might have upon the aspirations of young women in STEM. As noted in Chapter 5, one of my physics case study students, Emma, was a high-achieving student in the 'official' sense of the term, maintaining an average of high 2:1/1st for the duration of this study. Yet in spite of her excellent grades (indeed, it appeared that very few physics students were scoring anywhere near a 1st), Emma told me that she did not feel that she was as 'passionate' and as 'confident' about physics as some of the other students on her course. As a result, Emma had decided not to pursue a Masters in physics with a view to a career in medical research at a cancer hospital, which she was initially considering. Instead, Emma had decided to become a physics teacher. Whilst still a very worthy profession, it is arguable that Emma in effect 'leaked out' of the STEM pipeline as she struggled to construct an authentic and legitimate physics identity – similar to the schoolgirls in Carlone's (2004) study who were unable to see themselves as 'talented' and as having 'raw ability' at physics because they did not match up to the male student ideal. Instead these girls, in line with Emma, believed that they were little more than average at physics.

Arts/humanities – what does it take to be a ‘high achiever’?

Whereas the STEM and arts/humanities women in this study constructed engineering and physics as being ‘difficult’, ‘respected’ and for ‘clever’ students, the women drew upon a number of alternative discourses – some positive, and others less so – in order to make sense of the disciplines of anthropology, English and modern languages. What emerged from the data was that the three disciplines were seen to be afforded differing levels of respect in society, which appeared to correlate with each discipline’s apparent ‘easiness’. In particular, several anthropology students felt that their discipline was looked down upon by an imaginary ‘Other’; these women felt that many people did not know what anthropology was and therefore assumed that the discipline was less academically rigorous:

Hannah: [People] think that anthropology, sociology it all kind of sounds, put it all in one box, in one category. I definitely think it’s like wishy-washy, not defined, not as...I definitely think it has a negative perception because it’s like, ‘Well what can you do with it?’, kind of thing.

(Focus Group 1 – Hannah (anthropology))

Helen: I would say that certain things are devalued though, some subjects. People are like, anthropology, film studies, firstly don’t know what anthropology is, it’s probably one of those random subjects like etymology or whatever which no one’s ever heard of so it’s obviously not very clever. And then same with film studies, everyone’s like *(sarcastically)* ‘Oh films, great’.

(Focus Group 2 – Helen, (anthropology and film studies))

In the above extract, we can see that Hannah feels that anthropology has a negative perception because the discipline ties less explicitly to the job market. Thus the value of a degree is judged in monetary terms, in relation to students’ employment outcomes (e.g. see Tomlinson, 2012). And in fact, in Focus Group 3 (which contained four engineering students and one English student), the women openly mocked anthropology for its perceived lack of application to the world of work:

Jasmine: I never really see how [anthropology] could make up an entire degree, I don't know anything about it but I think for practical purposes, I wouldn't want that to stand on its own so I think, I don't know....

Sally: There's not, like, obviously any job.

(Group laughs loudly)

Jasmine: That would be a very miserable dead end!

(Group laughs loudly again)

(Focus Group 3 – Jasmine (engineering), Sally (English student))

Although the concerns raised by the women in the extracts relate ostensibly to employment prospects, there are arguably other feminized discourses at play in the women's narratives too. The students also appear to draw on a set of hierarchical (gendered) binaries which frame 'knowledge', i.e. feminine versus masculine, arts versus science, woolly versus precision, ideas versus facts, the social world versus the natural world (Cixous, 1986; Hekman, 1990; Walkerdine, 1990). As such, 'feminine' anthropology is linked with the inferior side of these binaries, and is inscribed by the students as substandard.

In response to these (anticipated) criticisms of their discipline, the anthropology students had to work hard to re-inscribe negative discourses, instead emphasising how their discipline was valuable in a different way – serving to enhance students' social, moral and intellectual development: 'Having studied [anthropology] I kind of think everyone should. It's one of those like "Why isn't this core?", because it really does make you just look at the bigger picture or, you know, it really cancels out stereotyping and it's so interesting' (Helen, anthropology and film, Focus Group 2). However, it appeared that these adverse discourses left a residue of uncertainty in the anthropology students' minds, framing how they viewed their course and sometimes triggering a lack of belief in their academic ability:

Hannah: There was one [module], it was 'Reading and Writing', and I was almost embarrassed to tell people that was the name of the module, because it kind of sounds like 'Reading and Writing', like, what is that? I kind of felt like I was doing a subject in GCSE a little bit.

(Interview 1 – Anthropology student)

Helen: Actually the first guy I spoke to on the course, he was like 'Oh, I'm not very bright so I chose anthropology', I was like 'Oh, thanks' (*group laughs*). But actually he is very bright and always has a lot of very good insights, I don't know, I don't know what that was about really.

(Focus Group 2 – Helen, (anthropology and film studies))

In a similar way, the women felt that English and modern languages could be constructed as 'easy' and as less academically rigorous by others. However, the women seemed to feel that such judgements were largely made by their friends and housemates who studied different disciplines, who seemed envious of the fact that English and modern languages students tended to have relatively few contact hours and assignments:

Sally: Would you agree with me that [our science housemates] make fun of me for studying English? (*Looks at Joanna, her housemate*).

Joanna: (*Guilty tone*) Sometimes. (*Group laughs loudly*)

Sally: Yeah I definitely get the piss taken out of me sometimes for doing like, an easy subject or a subject that's not for smart people, which is ridiculous.

(Focus Group 3 – Sally (English), Joanna (engineering))

Jane: I feel like it's viewed – might be the impression I give because I don't work in public much – but like my housemates view it as quite a doss subject.

(Interview 1 – French and Spanish student)

Yet many of the women also drew upon more complementary discourses, thus constructing English and modern languages in a favourable light. Some students felt that because English was a long-established and highly academic discipline which taught students how to think critically, it would be valued by employers: 'It's quite a respected course I guess, so I do feel like a lot of doors are gonna be open once I've done it.' (Rachel, English, Interview 1). And in fact, many of the physics and engineering students were keen to stress that they appreciated the effort that was required to obtain a high grade in English, as they felt that they themselves struggled with writing and would never be able to achieve a good mark in a discursive English essay:

Poppy: I think it does depend a lot on how hard a person finds that subject. Like when someone says to me 'Oh physics, you must be really clever' I go, 'Yeah but if you put me in an English class I'd fail'. I just can't write essays, I write too concisely (*group laughs*), I don't get the points in.

Physics students: Yeah.

Poppy: Like I really struggled, even at GCSE.

(Focus Group 2 – Poppy (physics))

Whilst the discourses drawn upon by the physics students appear positive, it must be acknowledged that often these women were speaking in a focus group with a number of arts/humanities students, and so it might have been the case that these women did not want to offend arts/humanities students with a negative appraisal of their discipline.

In a similar way, many of the women felt that modern languages students were often afforded a certain level of respect in wider society as language learning is believed to be a difficult skill to master: 'I know a lot of people who – actually especially a lot of older adults – who say "I wish I'd learnt a language", or "I wish I could speak another language fluently". It's seen as quite a good thing to be able to speak another language or lots of other languages... so a lot of people do respect that you can speak other languages' (Beth, French and Russian, Focus Group 1). In the three focus group interviews, a number of the women compared the study of modern languages to the study of science and mathematics where students have to learn and apply specific formulae in order

to achieve an end result – in the case of modern languages, linguistic formulae need to be correctly sequenced and configured in order to put together intelligible sentences. Perhaps as a consequence, some of the women constructed language learning as being a ‘knack’ that students either had or did not have:

Jane: I think that languages are also often seen similarly to science as well, as either something that you can or can’t do. I said to people before, it’s such a dull subject but they say that’s just because you can do them, so for someone sitting down at the course we do, they’d really struggle.

Hannah: That’s so true, because when you know someone who can speak 4 or 5 languages you just think, wow, languages is their thing, their brain is good at that....

(Focus Group 1 – Jane (French and Spanish), Hannah (anthropology))

This parallels the findings of Walkerdine (1998), Carlone (2004), Mendick (2005b), Epstein et al, (2010) and Archer et al. (2012) who similarly observe how young people, parents and teachers often view scientific and mathematical aptitude as being an innate ‘gift’ that some students have (i.e. white/Asian middle-class boys), whilst others do not (i.e. girls, working-class students, other ethnic minorities). These researchers argue that girls, in particular, are excluded from the subject position of the ‘achieving’ student in scientific and mathematical disciplines as they do not fit the male learner ideal. However, in this study, it did not seem as if the modern languages students were so forcibly constrained from constructing themselves as ‘high-achievers’ and as having a ‘gift’ for languages. Because their discipline strongly centres upon language and communication skills, the women appeared to feel ‘safe’ with the content matter which aligns closely with normative notions of ‘talkative’ and ‘sociable’ hetero-femininity: ‘I think that quite often there’s a stereotype that modern language students are often quite talkative, are able to communicate even if they’ve never met [the person] before’ (Beth, French and Russian, Focus Group 1). Thus, to do well in modern languages involved less of a rupture to the women’s gendered selves.

It also appeared to be the case that the women felt that modern languages was a respected and valued discipline because it linked strongly with employment. The women stated that because language skills were highly desirable in an increasingly globalised labour market, their expertise would be in high demand:

Jane: Yeah, I think the image of a language student is quite an all-rounded one, well-rounded one...I think language students are interesting cos I think we've travelled and, like, they've kind of chosen what they want to do with their life...Um, I think the employers have a use for it.

(Interview 1 – French and Spanish student)

In the extract, Jane constructs modern languages students as being 'interesting', 'well-travelled' and 'all-rounders'. In doing so, Jane draws strongly upon neo-liberal discourses which construct successful individuals as those who are free, independent, driven, mobile, capacious, reflexive and enterprising – individuals with a globalized outlook who are better able to negotiate the inherent risks and uncertainties associated with late modern society in order to find a place in the competitive labour market (Beck, 1992; Bauman, 2000). These employment-based discourses appeared to offer the women studying modern languages an empowered space in which being a 'high achiever' was extremely desirable.

Discussion

The data presented above indicates that the women in this study had to negotiate a wide array of (gendered) discourses that linked with their respective disciplines, which both opened up and foreclosed the space in which the women could be seen as 'clever' and 'high-achievers' (Youdell, 2006b; Archer, 2008). The women studying physics or engineering found themselves to be automatically positioned by others as 'clever'. In some ways, the women very much enjoyed the status and prestige that this positioning afforded them. But it is too simplistic to say that the women were supremely confident in their ability because of this. Rather, it appeared that the women were largely ambivalent about their achievement; they found it difficult to recognise themselves as being 'naturally talented' at STEM and therefore deserving of a place on their course

through merit alone – similar to the schoolgirls in Walkerdine (1998) and Carlone's (2004) studies.

Another of the key issues that the findings raise relates to women's position within arts/humanities disciplines. It has long been the case that, in the UK, a significantly greater number of women opt to study arts/humanities disciplines at university as opposed to STEM. However, as is evident above, some arts/humanities disciplines are commonly constructed as being 'soft' and 'easy' (see Thomas, 1990; Leathwood, 2006). The psychological repercussions for women pursuing such disciplines must not be underestimated; indeed, many of the women in this study expressed varying levels of concern about the 'worth' of their degree and how they were perceived by others. In particular, Hannah (anthropology) was highly anxious about the 'respectability' of her degree, and told me that she had strongly considered changing courses in first year as she was 'embarrassed' to tell other people about the topics that she studied. Hannah also felt that her parents were not overly happy about her choice of degree, but were prepared to concede their views provided that she was happy: 'I think they do think the course sounds a bit la di dah, cos they're a bit like, "So what do you graduate *with*?"...but they know I've done well since I've been here so I think that bit is like, "Oh she knows what she's doing. We trust her" kind of thing'.

Bev Skeggs (1997) asserts that 'respectability' is central to the production of legitimate white, middle-class feminine subjectivities, strongly circumscribing the ways in which women think, act and present themselves. Indeed, Skeggs argues that 'To not be respectable is to have little social value or legitimacy' (p.3) – an abject position powerfully associated with working-classness. In this study, my participants appeared highly aware of a hierarchy of value or respect in terms of academic disciplines, with the 'hard sciences' seen as affording students greater academic capital – largely because such disciplines are perceived to have greater exchange value in the labour market (see Mahbub, 2015). As a consequence, some of the women pursuing arts/humanities disciplines were concerned that their degrees were not respectable in the eyes of their families, their peers and potential employers, impinging upon the women's self-worth and leading to feelings of shame and inferiority.

Women's agentic negotiation of STEM and arts/humanities 'achievement' discourses

Whilst the data presented above indicates that the women held common perceptions of the five disciplines under study and the 'type' of student who could do well in them, it is important to emphasise that there was no one way in which the women negotiated hegemonic discourse in practice. Rather, the women agentially took up and discarded certain discourses in light of their structural positions. Indeed, additional factors such as the women's family/friend relations and their self-perceived 'ability' at disciplines shaped the ways in which the women were able to re-inscribe negative discourses and produce a positive learner identity within their chosen discipline.

In fact, what strongly emerged from the data was that some of the women were able to 'brush off' negative appraisals of their discipline (despite some residual feelings of anxiety and inferiority bubbling under the surface) as they actively *dis-identified* with the opposite side of the science/arts binary. In other words, the women studying physics and engineering largely felt that they were 'terrible' at writing essays, whilst the women studying anthropology, English and modern languages generally expressed a strong aversion to anything numerical. In doing so, the women constructed their academic ability as being biological and innate, justifying their participation in their chosen discipline because they simply *could not do well* in an alternative subject. Of course, this raises questions as to whether innate ability is to be admired or not, and whether agentic choices are seen by students as less significant than 'natural' disposition (Paule, 2015).

b) Facilitating 'high achievement' in STEM and arts/humanities disciplines at Marlton University

The first half of this chapter was concerned with tracing the discourses operating on a macro level which served to shape the ways in which the women in this study felt that they could be seen as 'clever' and a 'high achiever' within their chosen discipline. Having now explored these wider discourses, I would like to re-focus the analytical lens and examine how the women's everyday, micro-level performances of gender served to either facilitate or impede high

achievement in their chosen discipline in the specific context of Marlton University.

The desirability of 'high achievement' at Marlton University

Researchers exploring pupils' negotiations of academic achievement in primary and secondary school settings have observed that high achievement is often constructed by pupils as being antithetical to sociability and popularity, and that pupils who display highly academic attitudes and behaviours risk being bullied ostracised by their peers (e.g. Willis, 1977; Mac an Ghail, 1994; Francis, 2000b; Frosh et al., 2002; Renold, 2001; Jackson, 2006). However, in this study, it appeared that high achievement was openly prized and actively sought by many of the undergraduate students who attended Marlton University. This is perhaps unsurprising, given that Marlton is a high-performing university seeking to promote 'academic excellence', and that students will have achieved good grades in order to gain entry into the relatively prestigious academic institution. Indeed, many Marlton students might already be seen as inhabiting 'high achieving' subject positions.

When I asked the 14 women who participated as case studies whether they felt that it was socially 'acceptable' to be seen as a high achiever and to openly desire good grades at university, all 14 replied in the affirmative. Those women who had attended either an all-girls' private school or an all-girls' grammar school asserted that high academic achievement had always been valorised by staff and students within their institutions, and that Marlton University had simply continued to foster a 'pro-academic' attitude. This resonates with the work of educational researchers such as Proweller (1998), Power et al. (2003), Allan (2010a) and Forbes and Lingard (2015), who observe that elite selective schools often have a highly academic institutional habitus which serves to forge a positive relationship between students and academic achievement. In contrast, the women who had previously attended mixed comprehensive schools expressed a perceptible shift in how they experienced academic achievement across the two educational contexts. In a similar way to the working/lower-middle class undergraduate students in Reay et al. (2009) and Quinn's (2003) studies, these women appeared to have (finally) found a relatively 'safe' space in which their desire to achieve was largely shared and respected by others:

LS: Would you say it's more acceptable to achieve in the university than in perhaps a secondary school environment?

Eleanor: Yeah, probably (*laughs*). I think during GCSE I was probably a lot less comfortable doing well and I definitely wouldn't talk to *anybody* about it. If I did really well, I just wouldn't say anything. So yeah, whereas at uni I would, like my housemates or something, I would come home and be like (*excited*) 'Ah guess what?! I did really well in this!' and I would kind of expect them to be pleased for me (*laughs*), and I would be pleased for them in the same situation. So I think it's probably more acceptable. Yeah, definitely at GCSE I just found it kind of crippling! (*Laughs*) If I did really well, I wouldn't speak to anyone about it. Yeah.

(Interview 1 – Anthropology and French student)

Yet whilst the women expressed that Marlton University was a comfortable space in which to study, this is not to say that all of the women were effortless achievers, obtaining a 1st in all of their assignments and therefore sailing through university on their way to a high-powered career – an image of young women that is commonly conjured in popular media accounts (see Leathwood and Read, 2009). What emerged from the data was that some women were able to produce high achievement more easily than others, and felt that they could greater 'own' their success for themselves (Allan, 2010a: 40).

In this next section, I will seek to explore how six of the women in this study sought to negotiate (high) achieving subject positions alongside 'intelligible' femininities in some depth. To aid theoretical analysis, I will draw upon Becky Francis' (2012) concept of gender monoglossia and heteroglossia in order to demonstrate how the women complexly constructed their academic identities in association with their gender identities (see Chapter 3 for theoretical discussion). In doing so, I will reveal how the women's performances of gender in Marlton University within their respective disciplines were not static and totalising, but were fluid and contradictory, differently inflecting women's experiences of, and perceptions of academic achievement.

High-achieving women – confident and assertive, yet normatively feminine

In this study, 7 out of the 14 women who participated as case studies stated that they aspired to graduate with a 1st class degree and were achieving an average of high 2:1/1st over the course of their first and second years of study (see Table 7.1). A 1st represents the highest degree classification that it is possible to achieve at Marlton University⁴³.

Name	Age	Secondary school attended	Ethnicity	Discipline	Grade on track for
Jasmine	22	All-girls' private	Caribbean heritage	Engineering	1 st
Charlotte	20	All-girls' grammar	British-Chinese	Engineering	High 2:1/1 st
Emma	20	All-girls' private	White British	Physics	High 2:1/1 st
Eleanor	19	Mixed comprehensive	White British	Anthropology and French	1 st
Callie	24	Mixed comprehensive	White British	Anthropology	High 2:1/1 st
Maxine	20	All-girls' grammar	White British	Russian and German	High 2:1/1 st
Jane	20	All-girls' grammar	White British	French and Spanish	High 2:1/1 st

Table 7.1 – Background data on the 'high-achieving' women

As Table 7.1 illustrates, the women were studying different disciplines, came from various ethnic backgrounds, and had attended different 'types' of secondary school – indicative of a range of social class positions. Yet, in line with the schoolgirls in Francis et al.'s (2012) study, it appeared that these high-achieving women were similar in that they sought to produce monological or 'intelligible' performances of femininity (i.e. normatively feminine bodily aesthetics and/or an engagement in heterosexual relationships) in order to 'balance out' their more transgressive confident and competitive study behaviours. By means of illustration, I will now introduce the cases of three of the women – Jane, Charlotte and Callie.

Jane (*French and Spanish*)

Jane made for a striking case study of academic achievement, as she really did appear to embody the emblematic 'all-star', 'have it all', 'Supergirl' of late modern times (Hey, 1997; Harris, 2004; Kehily and Nayak, 2008; Ringrose and

⁴³ Most UK universities adopt a degree classification system of pass, 3rd, 2:2, 2:1, 1st, with 1st (i.e. 70+ out of 100) representing the highest degree class it is possible for an undergraduate student to obtain.

Walkerdine, 2008). Educational researchers have sought to problematize middle-class girls' academic achievement in recent decades, seeking to highlight the often 'thin veneer' of success which masks a cacophony of anxieties and pressures to achieve (Walkerdine et al., 2001; Renold and Allan, 2006; Allan, 2010a). However, Jane's narrative was seemingly problem-free. Jane had grown up in a suburb on the outskirts of London. Her father had worked in the City, but since his retirement had run a small publishing business from home. Having taken time out to raise a family (Jane has 4 younger brothers and sisters), her mother was now training to become an accountant. Jane had attended an all-girls' grammar school in her home town, and stated that she had very much enjoyed her time there. Indeed, Jane described school as being like a fun 'bubble', as she had made a good group of friends and enjoyed balancing study alongside a wide range of enriching extra-curricular activities:

Jane: So at school I think I was, I was deputy head girl, so that was quite a hands on role organising a lot of school activities and going to meetings with staff and stuff. And it was, yeah, so I feel like at school I really, really enjoyed the fact that it was kind of my world and I knew what I was doing.

Jane had performed impressively well academically, obtaining 9 A*s and 2 As at GCSE, followed by A-level grades of A* (further maths), A* (philosophy), A (French). When I asked Jane how she felt about her past achievements, she did not downplay her success but took pride in her grades, expressing that being a high achiever was a major part of 'who she was':

Jane: I knew I worked hard and I knew that having worked hard I deserved that grades I got, so I was happy with them, I'm proud of it. And I think, yeah, it was always part of who I was, at school I was someone that worked hard but also did a lot of the sport and things, and just threw myself into everything I did.

Jane was similarly enthusiastic about her experience whilst studying at Marlton University, stating that she was both thoroughly enjoying her course and also making the most of what university life had to offer. Yet whilst Jane was averaging a high 2:1/1st in her first and second years of study, she told me that

her motivation to work hard had dipped somewhat since she had started at Marlton. Jane said that she had wanted to enjoy the social side of university life (which was why she had not applied to study at a 'highly academic' Oxbridge college) and had therefore prioritised seeing her (numerous) friends and going to society meets – Jane took part in high-performance netball which took up a good proportion of her time, and in second year was president of the French society, publicity secretary for the Hispanic society and a member of the benchball society and Christian Union. Despite all of these demanding commitments, Jane still described herself with some pride as being a 'nerd' and as someone who enjoyed completing academic work. In fact, Jane seemed to have a great deal of confidence in her academic abilities and in a highly agentic performance, felt that she was able to control her working habits, thus still aiming for an overall 1st on graduation:

Jane: Um, last year [Year 1] I felt like I could kind of walk it and like, put in the work necessary, nothing too much and still just throw myself into everything else there is in life here, which I think I really enjoyed – this is the whole difference between Oxbridge and stuff cos you would have been working so hard. Um, but I also, like it was really different for me because I've always been someone who works really, really hard at school and all of a sudden, like, 'Who am I?' (*laughs*) not doing all this work. But then this year [Year 2] I've really thrown myself into it again, and I'm working longer days on campus and putting everything in and extra time.

When I asked Jane to rank herself and her achievement in comparison with other students on her course, she replied that whilst she was not top, she could be if she wished:

Jane: I would say I'm in the top half. Um, I wouldn't put myself at the front of the pack. Um, I think if I wanted to work that hard and put in the hours of some of the girls and, well, guys do, I could be. But it is a conscious decision that I want to do other things with my time as well. Um, I do want to graduate with a 1st, and I think (*laughs*) if I work hard enough I am on track for that. Um, but yeah, I think I'd rate myself like, top half of average (*laughs*). Um, I do enjoy what I do and when I work

harder I do better and when I decide that I can take a few days off
(*laughs*) I'll take a few days off and I'll do alright.

Such confident and assertive study behaviours might be interpreted as a stereotypically 'masculine' approach to work (Thomas, 1990; Francis et al., 2003; Francis and Skelton, 2005; Jackson and Dempster, 2009). Indeed, Jane was clearly not anxious about assignments or exams and did not stress about being the best student academically. Rather, Jane saw 'success' as being about more than just good grades; it was important to be a 'well-rounded' student and to enjoy university life whilst you had the chance (see Ball, 2003; Clark, 2009; Allan and Charles, 2014). Yet whilst Jane's attitude towards study might be considered 'masculine', her embodied performance of femininity upheld the monoglossic gender order. Jane was a tall, lean student with long wavy blonde hair, whose physique was honed through high-intensity weights sessions as part of her netball training. Jane wore 'girly' sports clothes (e.g. leggings and a leopard print vest) but, somewhat contradictorily, also wore fashionable 'geek-chic' glasses, perhaps demonstrating an enduring allegiance to academics. Jane told me that she was not overly bothered about 'dressing up' and 'being seen' on campus with groomed hair and perfect make-up – thus seemingly adopting a non-hypersexualised middle-class version of 'restrained' or 'acceptable' femininity (Skeggs, 1997, 2005; Archer et al., 2012). It is also important to note that Jane overtly conformed to the heterosexual matrix, as she often mentioned her boyfriend in interview and wrote at length about spending time with him in her diary.

Whilst on the surface Jane's participation in high-performance sport and choice of sporting attire might be regarded as a somewhat masculine construction of feminine subjectivity as an interest in sport has long been linked with 'traditional' masculinity (Martino, 1999; Skelton, 2001; Swain, 2002; Clark and Paechter, 2007), it should be noted that, at Marlton University, sporting prowess was highly prized amongst both men and women students. Marlton has a country-wide reputation for sports and my participants told me that many students had applied to the University on this basis alone. As a result, a specific version of femininity appeared to be highly prized on campus – which Jane largely seemed to inhabit. In the three focus group interviews, the women stated that the 'typical' or 'ideal' Marlton girl was white, rich, tall, pretty, slender, blonde,

well-groomed and kitted out in designer sportswear – which participants told me often took the form of skin-tight Lycra leggings and vests which made the young women’s bodies ‘look good’. Such a look is thus in fact strongly heterosexualized, and could be considered a ‘grown-up’ version of the pink-loving, make-up wearing, short-skirted performances of femininity deployed by groups of popular ‘girly-girls’ found within educational studies of younger girls in primary and secondary schools (e.g. Reay, 2001; Renold and Allan, 2006; Allan, 2010a; Francis et al., 2012).

As the data presented above indicates, Jane’s performance of gender was highly complex and shot through with heteroglossic contradiction. Francis (2008) contends that girls who display an overt interest in academics (i.e. female ‘boffins’) are often constructed as a-sexual and as lacking femininity, as intellect has historically been constructed as masculine. Indeed, Francis points out that studious young women are often pejoratively positioned as ‘spinster school marm’ or ‘bluestocking’ (p.481), leading to social ostracism. In some ways, Jane embodied and *enjoyed* appropriating a studious or ‘bookish’ subjectivity, openly claiming to be a ‘nerd’, wearing geek-chic glasses and de-prioritising the importance of ‘appearance’ and ‘beauty’ in interview. This discursive space was seemingly open to Jane as she studied in a university with a relatively academic institutional habitus. However, it appeared that Jane used ‘masculine’ high-performance sport (albeit the normatively feminine sport of netball) and fashionable sportswear as a way of ‘balancing out’ her high academic achievement, thus presenting herself as being a well-rounded, popular and sociable student (Clark, 2009; Francis et al., 2012; Raby and Pomerantz, 2015).

Charlotte (*Engineering*)

Charlotte is a British-Chinese student; both of Charlotte’s parents are from China and moved to Britain when they were in their early teens. Charlotte’s father is now retired but had previously run a restaurant and worked in property, whilst her mother is a teaching assistant at a local primary school. When not studying at Marlton, Charlotte lives with her parents and her younger sister in an affluent town in South-East England. Charlotte and Jane’s biographies are

similar in that they both attended a 'top' all-girls' grammar school in their home town. However, whilst Jane held a strongly pro-school attitude, Charlotte appeared less enamoured with her schooling experience. Charlotte stated that whilst she did not 'dread going to school', she 'didn't like getting up early every morning' and being 'forced' to study subjects that she did not enjoy such as English and languages. Despite this, Charlotte performed very well at GCSE and achieved a string of A* and A grades. Charlotte had gone on to study at her grammar school's sixth-form and told me that she much preferred this; she could study the subjects that she liked, had fewer contact hours and had more freedom to spend time with her friends. Charlotte also did very well at A-level, obtaining grades of A,A,A,B in maths, further maths, physics and ICT.

Whilst being a high achiever had been central to who Jane 'was', Charlotte told me that she did not feel as if she owned that label due to the outstanding performance of the students around her, which had made her feel distinctly 'average'. However, Charlotte was highly self-reflexive and realised that, when put into perspective and set against students' grades across the country, she really *would* be considered a high achiever:

Charlotte: Um, looking back at it now you could say yes, the grades that I got were high. I mean, I can't quite remember, I think at complete A-levels I ended up with three As and a B which I would suppose you'd say is high. But because of the fact that I've always been at an academic school and an academic university, you look at my grades and are like, (*dismissively*) 'Ahhh, quite average'. Um, which sounds ridiculous I know, but it's things like from when I was at school, people were like 'Oh GCSEs? Oh I got 13 A*s'. It's like, 'Oh A-levels? Oh I got 4 A*s'. It's like '*Urgh*, OK, fine'. Um, so looking at it from an outsider's perspective I see that you would probably say I was a high achiever, but from the situations that I've always been in, it's like 'Hmmm, average.' (*Laughs*).

Charlotte was very much enjoying studying at Marlton University as she loved the even greater freedom of living independently, and also valued spending time with her friends and boyfriend. Charlotte was also largely enjoying and doing well on her engineering course – during Years 1 and 2, Charlotte had averaged a high 2:1/1st, thus maintaining top grades. However, in a similar way to Jane, Charlotte did not present herself in interview as being a keen and

eager student who was anxious to do well. Rather, Charlotte asserted that she was 'lazy' and a 'procrastinator' – someone who always left their work to the last minute:

LS: And so would you say you work hard at university?

Charlotte: (*Quietly laughs*)

LS: Do you put in lots of effort? (*Laughs*)

Charlotte: I'm really terrible at trying to do work! I'm very good at just skipping the occasional lectures and leaving my work to the last minute. Things like revision, I'm very good at leaving and not doing as much as I *should*, so in perspective, if I worked as hard as I know I should I probably could do a lot better. But I'm very good at procrastinating. (*Laughs*).

A number of educational researchers have noted how South Asian and Chinese students – particularly girls – are often constructed by teaching staff as being overly passive, conformist and diligent as a result of their perceived 'oppressive' home culture (e.g. Connolly, 1998; Archer and Francis, 2005; Shain, 2010). Thus, it was interesting to witness Charlotte actively presenting herself in interview as being at the opposite end of this spectrum. In a way, such a care-free performance of academic subjectivity is highly masculinized, encroaching upon the discourse of the 'naturally talented' student who can produce achievement effortlessly – a subject position which feminist researchers note is deeply inscribed as male (Clarricoates, 1980; Francis and Skelton, 2005; Epstein, 1998; Jackson and Dempster, 2009; Jackson and Nyström, 2015).

It could be the case that this nonchalant and relaxed attitude towards study was a strategy adopted by Charlotte in order to 'play down' her achievement, so as not to appear overly keen and 'nerdy' (see Mac an Ghail, 1994; Jackson, 2006; Jackson and Dempster, 2009). Indeed, Charlotte did tell me that when deadlines kicked in and the Easter holidays approached each year before summer exam season, she would 'step up' and work harder – indicative of a latent desire to do well. However, when we examine Charlotte's performance of academic/feminine subjectivity in the context of her discipline of engineering, it could be argued that Charlotte was appropriating a masculine approach to

academic work in order to 'fit in' with the masculinist culture of engineering. Indeed, Charlotte described herself in interview as being a very 'logical' and 'practical' student who was 'brash', 'blunt' and 'to the point' – traits commonly associated with the discipline of engineering and with engineers (Becher, 1981; Walker, 2001; Powell et al., 2009). I found this very surprising, because when I spoke with Charlotte during the course of this research project, she was always very quiet and – as I could tell from my limited time in her company – displayed no brash behaviours whatsoever. In Interviews 1 and 2 and Focus Group 3, Charlotte was polite and friendly; her opinions were considered and she did not challenge others' point of view. Thus, it appeared that Charlotte constructed herself a certain way in talk in order to match up to the stereotypical male 'high achiever' in engineering.

Whilst Charlotte constructed her personality and academic attitude in a stereotypically masculine fashion, I would not term her performance of gender 'female masculinity' (Halberstam, 1998). Like Jane, Charlotte's embodied performance of gender was normatively feminine: Charlotte had long black hair, flawless porcelain skin and wore winged cat-flick eyeliner. She also dressed in an 'appropriately' feminine yet fashionable manner (e.g. dark skinny jeans, Chelsea boots and a jumper). As indicated in her diary, Charlotte engaged in traditionally feminine pursuits such as baking, enjoyed socialising with her girlfriends, and was in a heterosexual relationship. Such conformity to heteronormative femininity again appeared to 'balance out' Charlotte's care-free approach to academic achievement (see Brickhouse and Potter, 2001; Mendick, 2005a; Renold and Allan, 2006). Thus, in some largely embodied/physical ways Charlotte conformed to the monoglossic account of gender, rendering her feminine subjectivity intelligible to onlookers (Butler, 2004). Yet heteroglossic transgression crept into Charlotte's identity-work in terms of her constructed *attitude* towards study, enabling her to successfully produce high achievement within engineering.

Callie (Anthropology)

In contrast with Jane and Charlotte, Callie was born and raised in South-West England and had attended a large, mixed comprehensive school in her home

town. As noted in Chapter 6, Callie's dad was a labourer and her mother worked as a tour guide, although both are now retired. Callie (a mature student aged 24) had long since moved out of her family home and now shares a rented house with her long-term boyfriend. When I asked Callie to recount her schooling experience, she expressed mixed feelings. It appeared that when Callie had first commenced secondary school, she had been 'teased' and ostracised by her peers due to her perceived cleverness and overt desire to achieve good grades. However, when Callie was streamed into the top sets for GCSE, she eventually found a group of like-minded people with whom she established firm friendships:

Callie: Um, I had, secondary was crap to be honest, up until Year 10. Um, which is probably a fairly standard story. I was always, I was teased mercilessly when I was younger because I was, they used to call me things like 'walking talking dictionary' because (*chuckles*) I was quite intelligent and err, a bit of a swot. And I was voted Biggest Geek in the Year – by my own friends I would like to point out.

LS: (*Laughs*) OK.

Callie: Um, but err, soon as I kind of got to GCSE level I was put into most of the top sets, so it was much easier to kind of, you found people kind of on your same (*thinking*)...wavelength. Um, and I, yeah, for the most part I probably enjoyed school.

In the above extract, Callie states that she was picked on for her intellect, yet Callie also appears to wear the 'intelligent' label as a badge of pride. When Callie laughingly states that her friends voted her 'Biggest Geek in the Year', it appears that being a geek was not an abject subject position, but could be used as a form of 'capital' within certain social circles – perhaps dovetailing with the recent explosion in popularity of 'geek chic' in popular culture (see Mendick and Francis, 2012; Mendick et al., 2009). In fact, it seemed notable that Callie sought to emphasise to me in interview her middle-class background, leading me to wonder whether Callie (and her friends) had appropriated the 'geek' label as act of empowerment, in order to set themselves apart from the mass of Other, 'feckless' working-class students at her comprehensive school who did not value academic credentials – in a similar way to some of the middle-class

schoolgirls in Francis (2009), Francis et al. (2014) and Raby and Pomerantz's (2015) studies. Indeed, like Jane, Callie appeared to strongly prize, and define herself by her high academic ability ('I've always known I'm probably quite capable and I've always been told "Oh you'll go and you'll do great things"'). This assured sense of academic self was no doubt bolstered by her attainment in formal examinations; Callie obtained solid GCSE grades of 1 A*, 4 As, 2 Bs and a Distinction in BTEC performing arts, and stayed on for sixth-form achieving A-level grades of A,A,B in English literature, art and drama.

Callie told me that now that she had settled into Marlton University, she was largely enjoying her course and was pleased with her academic progress. In Year 1, Callie had achieved a 2:1 average (65), but had climbed to a 1st (72) in Year 2. Callie appeared to relish doing well and, in contrast with Jane and Charlotte, did not attempt to 'play down' the effort it took to achieve good grades. Rather, Callie emphasised that it took a great deal of time and dedication, stating that she would often work solidly for months at a time with no breaks (even at weekends) in order to do the best that she possibly could. Not only this, but Callie told me that she had been diagnosed with dyslexia on commencing at Marlton, which meant that she *had* to work harder than many other students. Callie told me that whilst she could write well, she could also make 'silly mistakes', meaning that she would often get her parents to proof-read her essays before handing them in to be marked.

Yet despite her intense desire and drive to work hard and achieve good grades in an highly academic space such as Marlton, this was not to say that Callie felt that she could openly 'share' or enjoy her success with her peers. Callie told me that she often sought to cover up her high marks so as not to cause friction amongst her friends:

Callie: And my friends, I tend to actually try to avoid talking about [my achievement] too much because it (*sighs*), it separates you if you're consistent. If you are a high achiever and you are doing well, and other people perhaps aren't doing quite as well consistently, I've been in situations in the past where that's created a lot of resentment and awkwardness so I get very nervous talking about it with my friends. Um, just in case, you know, they haven't quite been as for, you know, as fortunate as I have been or something.

Interestingly, Callie also touched upon this again when I asked her to describe the characteristics that she thought a student needed in order to achieve highly in her chosen discipline of anthropology. Callie asserted that whilst lecturers valued students who were engaged, questioning and vocal in class, she recognised that this version of student subjectivity could make students unpopular amongst their peers:

Callie: Like all the lecturers, if you're willing to sort of stick your head, neck out on the block as it were and, you know, say something when they ask the class a question or ask your own question, um, they in turn are *much* more willing to help *you*. Because they see that you're engaged and you're curious and you're willing to learn, so it's a more, much more of a kind of recip, much more reciprocity going on. Um, but you have to also be quite kind of, it helps if you can handle the sort of backlash from the rest of the class that you get from that, because people *do* see you as a sort of, not goody-two-shoes, that's the wrong word for it, but keen. I think there is still a, a *slight* stigma on being keen, even at higher education level. I think I've always fallen into that trap of being that person. And we were talking about this [at a] massive sort of discipline-wide – I think it was actually school-wide – lecture on dissertations and we had to, quite a few people had to sort of stand up and say what you're doing. And I didn't stand up and say anything, even though I kind of had an idea, because I'd just been talking to a group of people beforehand and they were like 'Oh yeah, what are you gonna do?'. What did [one girl] say? 'I assume *you're* the sort of person who knows what they're gonna do'. Like, 'I expected you to already know' kind of thing. And there's a slight, it wasn't *nasty*, it was just, I realised I am seen in a certain way. Um, so I think you've got to have a bit of fortitude in that, you know, fortitude.

What this extract demonstrates is that even in a highly academic university such as Marlton, students still run the risk of being constructed as overly keen and consequently teased or mocked for their efforts. This resonates with the work of researchers such as Renold (2001), Jackson (2006) and Francis et al. (2012) who observe that such 'bullying' can often occur amongst boys and girls in the primary and secondary school. In this case, Callie's over-eager attitude towards

academic work appears to have been negatively interpreted by a group of friends/acquaintances who subtly imply that she is a certain 'type of person' (i.e. over-keen). As such, Callie asserts that you have to have a thick skin or 'fortitude' in order to deal with the 'backlash' you might receive from your peers if you wish to be a high achiever – arguably a 'masculinized' trait, representing transgressive heteroglossia in women students.

What is particularly interesting about the case of Callie is that she did not appear to be 'geeky' or 'nerdy' in embodied aesthetic – that is, unfashionable or asexual in dress (see Renold and Allan, 2006; Francis, 2009; Mendick and Francis, 2012). Rather, in line with Jane and Charlotte, Callie was fashionable yet not hyper-sexualised; she had mid-length brown/blonde hair, subtle make-up, and dressed in ankle boots, skinny jeans, a shirt and a parka coat. She also engaged in popular 'youth' pursuits such as TV-watching, video-gaming, cooking and crafting (e.g. sewing). However, despite her adherence to normative femininity, Callie evidently struggled to balance her strong desire to achieve alongside the maintenance of positive peer relationships.

Aspiring for a 2:1 – women's changing perceptions of academic achievement in the high-performing university

In the above section, I sought to outline how three of my case study students who were maintaining a high average (borderline 2:1/1st or 1st) negotiated gender and academic achievement within their chosen discipline. It was noted that these women appeared to blend traditionally masculine attributes (i.e. an agentic, care-free or tough-skinned attitude towards study) with normatively feminine embodied aesthetics in order to produce high-achieving subjectivities, thus hybridising and re-articulating traditional forms of femininity (Renold and Allan, 2006). However, it was noted that the women managed this with varying degrees of success in terms of social acceptance.

In this next section, I would like to move on and explore how a number of the women who were still performing well, but perhaps slightly less highly, sought to negotiate their experiences of academic achievement alongside their gender identities as women. Whilst I have split up the women's 'official' academic attainment into these two rather crude tables, this is not to say that the women's

achievements listed below are of any less value than the previous seven women's. Indeed, many of the women listed below were achieving a 1st in a number of their coursework assignments and exams. However, on average these women were achieving a solid 2:1 and/or aspired to obtain a 2:1 overall as opposed to a 1st – still a highly respected degree.

Name	Age	Secondary school attended	Ethnicity	Discipline	Grade on track for
Mandy	21	Mixed comprehensive	White British	Engineering	2:1
Joanna	19	All-girls' private	White British	Engineering	Borderline 2:2/2:1
Grace	20	Mixed comprehensive	White British	Physics	Borderline 2:2/2:1
Rachel	19	Mixed comprehensive	White British	English	2:1
Liz	20	All-girls' private	White British	English and French	2:1
Margaret	57	?	White British	Anthropology	2:1
Hannah	20	Mixed private	British-Chinese	Anthropology	2:1

Table 7.2 – Background data on the women aspiring for a 2:1

As is evident from Table 7.2, two of the students were on the borderline between a 2:2 and a 2:1 – Grace (physics) and Joanna (engineering). It is of note that these two women were studying STEM disciplines, and this is something that I will later reflect upon in greater depth. However, in the section that immediately follows, I would like to outline the cases of Grace and Joanna in some detail, as well as the case of Rachel who studied English. Whilst Rachel was averaging a solid 2:1, I have chosen to present her case here as all three women had to re-work their relationship with academic achievement as they studied at Marlton, and deal with new feelings arising from a changing sense of academic self.

Grace (Physics)

Like Callie, Grace appeared to have had a decidedly 'mixed' schooling experience. Grace is originally from Wales where she lives with her mum (a doctor's receptionist), dad (a camera-man) and younger brother – her older brother has recently trained as a history teacher and has left home. Grace attended a mixed Catholic comprehensive school in her home city, but was not enthusiastic about her time spent there. Grace told me that whilst she had one

'best friend', she did not get on with many of the other students, stating that she was 'just sort of in the background'. However, Grace did very well at GCSE, achieving 4 A*s, 4 As and 2 Bs. Grace told me that she was particularly proud of her B in English language and A in English literature, as she had 'worked *really* hard to get them':

Grace: Like I was on Ds and Es in Year 10 because I just wasn't very quick at reading and I just, I wasn't very good at spelling (*chuckles*) or anything like that. But my teacher really worked with me, I got a tutor, and I just had to work at it.

As her school did not have a sixth-form, Grace had had to find an alternative establishment to study for her A-levels, so had moved to a sixth-form attached to a different secondary school. Grace had largely enjoyed her time here as she could study the subjects that interested her the most, but still appeared to have made few close friends with fellow students on her course. Despite this, Grace seemed relatively unperturbed, and obtained A-level grades of A (maths), B (physics), and B (history).

Whilst Grace appeared somewhat socially isolated at school and sixth-form, her university experience had improved by leaps and bounds. Grace told me that she had made a solid group of friends with the other girls in physics, and that they would regularly go to classes together, attend physics society meets, study together and go on nights out. Yet whilst Grace was very much enjoying the social side of university life, her relationship with academic achievement was becoming more complex. Grace told me that in Year 1, she had '*just*' scraped a 2:1. However, Grace appeared to have experienced a number of problems in Year 2. When I spoke with Grace in Interview 1 in March of her second year, she told me that she was struggling to keep on top of the demanding workload and stated that whilst she aspired to get another 2:1, 'January exams didn't go amazingly, and I failed the programming module (*chuckles*)'. When I asked Grace how she felt about her achievement at university and where she would put herself in relation to others on her course, she stated that she saw herself as 'average'. Grace told me that she knew people who were achieving 90% in their assignments, but also saw people failing the course and dropping out, so felt herself to be 'very much in the middle'.

When I spoke with Grace again for the final time in November 2015 as she entered her third year of study, Grace told me that in second year, she had achieved a final mark of 52/53 (2:2) – just missing out on the 55 average required to be permitted entry onto the Masters. When I asked Grace how she felt about this, she did not appear particularly upset or frustrated but accepting of her grades:

Grace: Yeah, I just didn't, the exams didn't go my way really so...

LS: OK. Yeah.

Grace: (*Quietly*) Nothing you can do about it really so...just get on with it (*chuckles*).

Interestingly, Grace appeared not to have lost confidence in her academic ability, but instead seemed very relieved that she would not have to endure the stress of studying physics for an extra year:

LS: And so has that result affected the way that you see yourself and your achievement?

Grace: (*Straight away, confidently*) No, because I'm really glad I'm not on the 4 years anymore.

LS: OK (*laughs*).

Grace: I really would have loved to have done the Masters projects that they do, which is like over 2 years and they do like really in depth, I would have loved to have done that but the modules I just really don't enjoy. Like the actual physics modules I just don't enjoy them, so I'm like, I'm just happy to be finishing (*chuckles*).

When I asked Grace to reflect upon why she thought she was finding study increasingly difficult and was enjoying her modules less and less, Grace stated that she had found it hard to adjust to the fast-paced way that physics was taught at university:

Grace: I'm still not used to the way things are taught, like in a school it's very much like everyone's involved, answer questions and they go through stuff on the board and like, talk to you about it, then you do some worksheet on it, all within like your lesson, so it's like you're going over it

loads. And then here it's just like you're told it and then it's like (*downheartedly*) 'Oh, OK' (*chuckles*). And I *can't* concentrate for an hour straight, like it's just really difficult (*laughs*). So, yeah.

When I probed a little deeper, it appeared that Grace was often finding it difficult to understand complex physics concepts and that whilst staff were available to help students go through things again (Grace told me that academic support on her course was very good), she had been reluctant to see anybody:

Grace: I think my understanding, like it's lots of difficult concepts and then it's just a bit – it's just difficult. And I don't think I took advantage enough last year of having the tutor in tutorials and going to ask them questions or going to ask the lecturers questions enough. (*Quietly*) So now I'm just a bit like, on a bit of a catch up (*chuckles*).

LS: Yeah, yeah, and so why do you feel like you didn't want to go last year?

Grace: I don't know, it's just that thing of like looking stupid isn't it? I was just a bit too worried about it and now I'm like 'Ah, I don't care' (*chuckles*). I'm just gonna go ask.

In the extract, Grace states that she was reluctant to ask staff for extra help in Year 2 because she feared 'looking stupid'. This strongly resonates with the work of Carolyn Jackson (2006) who, drawing on the psychological theories of Covington (1998, 2000), observes that school pupils adopt a range of different strategies in order to protect their academic self-worth, for 'fear of failure'. Jackson argues that boys and girls in secondary schools often employ defensive mechanisms in an attempt to deflect attention away from a lack of academic ability, thus circumventing a drop in social status. Whilst Jackson links such strategies with laddish behaviours (e.g. lying, behavioural self-handicapping and self-reported self-handicapping), Grace appears to have withdrawn into herself – arguably a thoroughly 'feminine' defensive mechanism (see Osler and Vincent, 2003), in line with traditional notions of shy and passive femininity (Walkerdine, 1990; Reay, 2001; Renold, 2001; Francis and Skelton, 2005). Indeed, Grace was an extremely quiet and softly spoken student who did not exude or express great confidence in her ability; rather she seemed relatively anxious and worried. I would therefore argue that Grace's

conformance to the monoglossic account of gender inhibited her ability to reach her full academic potential as it prevented her from approaching staff to ask for help when she needed it most.

However, it became clear that Grace could not read her study behaviours as being in any way 'gendered'. At another point in the interview, Grace stated: 'It's that British thing isn't it of like, I don't wanna, one, waste anyone's time, two, just not look stupid and stuff'. In this way, Grace constructs her shyness as being a product of her 'Britishness', seemingly drawing upon the dominant discourse of the quiet and reserved British person with the 'stiff upper lip'. This resonates with the work of scholars such as Volman and Ten Dam (1998), Thomson et al. (2002) and Francis et al. (2014) who observe that, in late modern society, young people find it difficult to acknowledge the impact that structural constraints have upon their life chances, often seeing their success as dependent upon the individualized traits of hard work, effort, talent and personal responsibility.

Joanna (*Engineering*)

Joanna is originally from an affluent town in North-East England. Outside of term-time, Joanna resides with her mum (head of a private primary school), dad (works in health and safety) and grandma. Joanna also has one older sister, although her sister has since graduated from university and has left home. From the age of 11, Joanna had been educated at an all-girls' private school, and spoke fondly about her experience. Joanna appeared to have very much enjoyed studying in a single-sex environment, which she felt created a 'comfortable' atmosphere:

LS: What did you like about [school] most?

Joanna: ...I suppose I'd say I did like that it was all girls, but I didn't really have anything to compare it to because I'd been at a girls school all my life. Um, but obviously felt, like, very comfortable with myself, around everyone, it was really fun. Got on with all the teachers very well. Very relaxed atmosphere.

However, despite stating that her school had a 'relaxed atmosphere', in a similar way to Charlotte, Joanna also talked about the pressures to achieve highly, maintaining that in her school, you were not a 'true pupil' if you did not obtain top grades (e.g. see Walkerdine et al., 2001; Allan, 2010a):

Joanna: Yeah, it was quite, I'd say it was quite an academic school, like they've sort of got a reputation for doing very well, they're very high up in the league tables. So it's sort of like if you don't get As and A*s then you're not seen as, like, a true pupil at that school, but...*(laughs)*.

At GCSE, Joanna lived up to her school's high exacting standards, obtaining 5 A*s and 5 As. However, it appeared that Joanna never really saw herself as being anything more than an 'average' student. Joanna told me that her school set compulsory tests at the end of each academic year (i.e. Years 7, 8 and 9), but that she had never done 'amazingly well' in them; she had apparently found it difficult to find a method of revising which made the content stick in her mind. As such, Joanna felt that whilst she was not failing, she was certainly not 'top of the class' either. Indeed, Joanna told me that she was 'really happy' with her GCSE grades, but also 'shocked':

Joanna: My GCSEs kind of shocked me cos like, I did work hard but I didn't, didn't work *that* hard *(laughs)*. I still, like, did really well.

Because Joanna had done so well at GCSE with only a moderate amount of effort, Joanna told me that she 'got a bit cocky' and therefore worked less hard during her A-levels. However, this is where Joanna's curtailed efforts did not appear to pay off as effectively. Joanna had chosen to study for full A-levels in maths, physics and geography but stated that, after AS year, she was heading towards a C in physics and so had to focus on 'pulling up' that grade. Joanna told me that her other grades suffered as a result, meaning that she ended sixth-form with A-levels of B,B,B despite being predicted three As. Nevertheless, Joanna said that she was reasonably happy with her grades as she had obtained a place to study engineering at Marilton University, regardless of missing out on the entry requirements – the only university that she was interested in attending: 'For me the point of A-levels was to get into university, so once you're in university then it's like, doesn't really matter how much you get'.

Joanna was very much enjoying studying at Marlton as she was largely enjoying her course and had made a good group of friends. Her boyfriend also studied with her in engineering (see Chapter 6). However, Joanna's relationship with academic achievement was becoming increasingly complex. Joanna told me that in Year 1, she had '*just*' obtained a 2:1, scoring 60.1%. Joanna consequently described herself as being a 'pretty average' student, her reasoning being: 'there's a lot of people that are like, literally get like 100% in everything'. However, Joanna also told me that whilst she aspired to achieve a 2:1, she knew that she was capable of obtaining a 1st overall if she tried her best and put in maximum effort across all of her modules. Indeed, Joanna told me that in some assignments, she was achieving 80/90%. Yet it seemed that exerting concerted effort was something that Joanna was unprepared to do, as she wanted to enjoy university life whilst she had the chance:

Joanna: I believe that it's important to keep my sort of social life going as well. So like, I mean I still work hard, but I could work a lot harder than I do but, um, but like I've got sort of lacrosse matches and stuff at the weekend, and socials and other things, like just going out with friends. Um, (*quietly*) so I sort of do that instead of working.

LS: Oh OK (*chuckles*). And how does that make you feel? Are you happy to be doing OK, or do you kind of wish you were doing better, or are you happy?

Joanna: Yeah, like inside I know that if I *really* sat down and, you know, *really* worked hard, like I could get a 1st potentially. But, um, I feel like if, the amount of work that I'd actually have to put in, like the amount of time, then I wouldn't really be enjoying my university life as much as – I mean obviously the point of university is to get your degree, but I also sort of want to have a good time while I'm here. Before I enter, like, the world of work (*chuckles*). Make the most of it while I'm here so, yeah.

When I contacted Joanna again by email in June 2015 for a catch up (between her second and third year of study), she told me that during summer exam season she had broken a finger and so had to postpone one exam until August. Apparently this test would 'make the difference between getting a 2:1 and a 2:2', adding 'so there is a lot of pressure riding on me doing well in it'.

Unfortunately Joanna was unable to attend another interview with me in November and so I never found out her final mark.

Joanna's case is intriguing as she obviously has confidence in her academic ability and feels that she is capable of achieving the highest grades at university. But, as is evidenced by her actual attainment, she is obtaining an average of borderline 2:2/2:1. Whilst it might be the case that, as Joanna claims, she is putting in less work at university and prioritising her social life meaning that her grades have dipped, it could be that Joanna was struggling to achieve top grades and therefore used her lack of effort as a 'cover' – in a similar way to the younger students in Jackson's (2006) study who sought to intentionally withdraw their effort and 'self-handicap' themselves for fear of failure. Yet this is not to say that Joanna lacks academic ability; going back to Chapter 5, we can see that Joanna felt intimidated by a number of her lecturers and therefore did not feel comfortable turning up to some of her classes. She also expressed a reluctance to approach certain members of staff to ask for extra help – arguably forms of educational self-exclusion (Osler and Vincent, 2003). It is likely that these two factors will not have aided her understanding of the course content.

As we can see from the data presented above, Joanna constructs herself in talk as having a distinctly masculine approach to study; she states that she 'got cocky' following her GCSEs and does not always put in the maximum effort that she could – academic traits commonly attributed to boys (Hodgetts, 2008; Jackson, 2006; Jackson and Dempster, 2009; Francis et al., 2014). Like Charlotte, Joanna also appeared to slot herself into the dominant masculine discourse which frames engineering (Henwood, 1998). The following extract taken from Joanna's diary neatly illustrates the way in which Joanna sees herself, in direct opposition to her housemate Sally who studies English:

...two of my housemates Sally and Ben had begun one of their many debates about politics and religion and feminism (Sally's favourite topic). I don't like getting involved in these conversations for a few reasons...I have very little interest in these topics. I am an engineering student, I am very straight forward and don't see the point in talking just for the sake of talking.

(Diary extract - Joanna)

Not only this, but in Focus Group 3, Joanna explained to the group that she identified as a 'tomboy' when she was younger, which she felt might in some way relate to her interest in engineering:

Joanna: I was gonna say, growing up I was generally like, I was basically a boy because I refused to wear dresses.

Sally: Me too!

Joanna: And I had to have short hair until I went to secondary school because I wouldn't allow them to tie my hair up, I absolutely hated anything girly...

Mandy: Ahhhh, you see I wasn't like a boy at all.

Joanna: But I don't know whether that's why I've gone for some sort of – I'm not saying I grew up as a boy but... (*group laughs loudly*). I was like a tomboy when I grew up and so I sort of had the same kind of frame of mind as a boy...

However, it appeared that Joanna had learnt at a relatively young age that this masculine performance of femininity was socially 'unacceptable':

Joanna: Because I had an older sister so obviously like, she already got all the toys, you know, dolls...

Mandy: Sylvanian Families.

Joanna: ...she read Girl Talk, but I didn't really, I had K'nex, I had my little race track, I read the Beano...

Mandy: Oh I *loved* the Beano! (*Group laughs*)

Joanna: I didn't really let that, at the time I didn't really know that was a problem, but as I sort of got towards the end of primary school people would start to sort of mention it, like 'Oh you read that' and, like, make me feel very conscious that I was reading things for boys.

Group: Yeah.

Sally: Yeah a boys' magazine.

Joanna: And like, I never had a problem with it, I'd never even thought of it in that way until other people had sort of pointed it out, I mean, 'You shouldn't be reading that, it's the boys'".

(Focus Group 3 – Joanna and Mandy (engineering) Sally (English))

Perhaps in part because of this disapproval from her peers when she was young, Joanna's embodied aesthetic has changed since she was a child and she now presents herself in a normatively feminine fashion; she has long, straight blonde/brown hair and wears fashionable (if not hyper-girly) clothes and jewellery. As noted above, she also conforms to the heterosexual matrix, as she has a long-term boyfriend who studies with her at Marlton. However, Joanna clearly still identifies with a boyish 'mind-set' which she feels underpins her identity as an engineer. In this way, Joanna's gendered and academic subjectivity are deeply intertwined, producing a highly complex identity, in part upholding a monoglossic 'traditional' account of gender in order to remain intelligible as a woman (Butler, 1997, 2004), yet also inflected with transgressive heteroglossia.

Indeed, Joanna's approach to, and appraisal of her achievement is masculine in that it is highly rational and unemotional (Lloyd, 1984; Walkerdine, 1990). Yet her outward performance of academic subjectivity is traditionally feminine; like Grace, Joanna is a very quiet and softly spoken student who does not like asking for help or answering questions in class for fear of getting things wrong. In this case, Joanna's identification with aspects of traditional masculinity (e.g. an interest in engineering and a 'straightforward' personality) appear to have enabled her to see herself as a successful engineer. Yet this confidence has not spilled over into her study practices and behaviours, impacting upon her ability to fully engage with the course and achieve consistently high marks.

Rachel (English)

Rachel is originally from a working-class seaside town in North-West England, where she lives with her mum (who runs a clothing boutique) and step-siblings. Rachel's mum and dad are separated and her dad (an HGV driver) now lives in South-West England, however Rachel regularly goes to visit him. Rachel had

attended a mixed comprehensive school in her home town and told me that she had 'loved' the experience; Rachel described herself as being a very 'confident' and 'talkative' student who 'got involved with as much as I could'. As well as being a very outgoing and enthusiastic student, Rachel's teachers had identified that she was highly academically capable and, in Year 9, Rachel had been encouraged to take part in the Aimhigher initiative, an offshoot of which was being run at her school. Rachel told me that as part of the Aimhigher initiative, she had attended weekly workshops with a mentor from a top northern university and had gone on visits to local university campuses. When I asked Rachel whether this initiative had shaped her views on going to university, she replied that whilst it had been a useful source of information, she had always aspired to go to university anyway. Indeed, whilst Rachel self-identified as being 'working-class', her familial habitus was seemingly pro-education:

Rachel: Um, I kind of always wanted to go really. My mum really influenced me though. My mum had me really young, she was 19 when she had me, um, and she never got to do it, and she's so, so clever and I always say to her 'You should, you should go and do it'. Um, but I mean she's had other kids since then and it would be a bit more difficult for her and I think she kind of lives through me as well. So for her it was always, yeah well go to university. Um, so I don't know. It never felt like she was forcing it on me, I always wanted to do it, but I definitely think that she's, like, with me, when I do this.

Having achieved a string of 12 A*-B grades at GCSE level (and 1 C!), Rachel went on to study for A-levels in English literature, English language and psychology at her local further education college. Again, Rachel sought to make the most of time there and held the positions of deputy senior student, sustainability officer and council officer. Rachel's college had also allocated her into an Aimhigher group and Rachel had subsequently applied to study English at Oxford University. However, Rachel told me that she had encountered a number of personal problems whilst studying for her A-levels which had caused her grades to dip, and unfortunately Rachel had not been offered a place at Oxford. Yet Rachel appeared relatively untroubled by this disappointment and despite maintaining that her results had suffered, Rachel left college with A-level grades of A*, A, B.

Rachel appeared to be very much enjoying her time spent at Marlton University, having made a close friendship bond with one particular student, Tina, a mathematics undergraduate whom she had met in halls of residence in first year. Rachel also told me that she was largely enjoying her English course – particularly her American literature and creative writing modules. It appeared that Rachel was performing well academically, maintaining an average of solid 2:1 across Years 1 and 2. Yet whilst Rachel retained a positive belief in her academic ability based upon her past achievements at school and college, it became clear that she no longer saw herself to be quite such a high achiever:

Rachel: I *definitely* don't see myself as one of the high-achievers! It's so different, really, really different. My friend actually said to me 'I feel like I was such a high achiever and I was one of the clever people and then you come to university and you realise there's a hell of a lot more people cleverer than you'. And it's definitely like that. I wouldn't say I'm a bad student at all, I would put myself as average really. I'm happy with my grades, but I overheard someone complaining because they got like, 73, and that's just, I'd be over the moon with that! So I do feel like it's a bit of a knock. You don't see yourself as *quite* as high-achieving as you thought.

In fact, Rachel felt that, in the middle-class space of Marlton University, she was no longer perceived to be 'clever' by those around her. Whereas Rachel had always been told by her teachers and her mum that she was a gifted student (e.g. 'in sixth-form I had a tutor that *maintained* for the entire two years that I was going to be a lawyer', 'My mum always used to say "You're doing really well, you're doing really well"'. So yeah, at that stage I definitely did feel like I was one of the high-achievers'), Rachel stated that her fellow students pre-judged her regional northern accent and interpreted her as being 'a bit dim':

Rachel: I mean being northern as well, it is a bit different. Um, I do think sometimes people look at me as if I'm a bit dim. Because there's quite a lot of people that, you know, had the opportunity to go to Oxford and things, and wouldn't know that I did. Um, I feel like in seminars that I'm comfortable speaking in, people kind of give me a little bit more respect almost, like, 'Yeah, OK, you do know it'. Like in my theatre [module], it just confuses me sometimes and I just do not get it (*laughs*). And one of

the girls in my study group, she sat there and explained it to me and kind of rolled her eyes a little bit, and I was like (*unimpressed*) 'Oh, OK'.

And in fact, the two other northern students in this study – Emma (physics) and Joanna (engineering) – also recounted feeling looked down upon by other 'southern' Marlton students because of their regional accents, despite the fact that these two women came from relatively affluent backgrounds. This demonstrates the enduring discursive association between regional accents, 'working-classness' and inferiority (Wilkinson, 1965; Giles, 1970; Hiraga, 2005; Coupland and Bishop, 2007). However, Rachel also believed that her hyper-feminine embodied aesthetic was a visible signifier of her working-class background, which set her apart from the other English students:

Rachel: I do think a lot of it is like, I mean, the blonde hair (*LS laughs*), the [false] eyelashes, the fact that I'm northern. I don't, even in my head I don't look like a typical English student. A lot of the girls on my course do kind of look like a typical English student with their heads buried in books and things, and I don't know, that kind of stereotype...I mean when I first came here, when I very first started I had pink hair and it was really, really pink, and I do think that was looked upon like, 'What?', like, 'You're not meant to be here'. There's a lot of, um, one of my tutors actually described me to another seminar as, 'I teach the girl with the peroxide blonde hair from the north'.

LS: Oh OK (*laughs*).

Rachel: Like that was my characteristics! I think it would have been very different had he been describing another girl who sits next to me. Not a lot of people with dyed hair, not a lot of people that wear a lot of make-up. I do think that's more, yeah, I'm more common.

The above extract resonates strongly with the work of Skeggs (1997) and Archer et al. (2007), who observe that young working-class women often seek to produce hyper-sexualised 'desirable' and 'glamorous' performances of femininity which can be used as a form of symbolic capital within their peer group – one of the few sites available to working-class women in which they can exert some form of control and agency in order to gain social status (Hey, 1997). However, Archer et al. note that such constructions of femininity lie in

direct opposition with the hegemonic discourse of the 'good' pupil; one who minimises their preoccupation with 'trivial' bodily concerns in order to concentrate on matters of the mind (also see Francis, 2000b; Archer, 2008). At Marlton University, academic achievement was highly valorised within both official (institutional) discourse and unofficial (student) discourse, and a less overtly sexualised (chiefly sporting) style of dress appeared to be favoured by the majority of women students. As a consequence, Rachel's performance of hyper-femininity was 'read' by her peers (and certain lecturers) as being incompatible with high intellectual ability. Perhaps as a result, Rachel did not appear to socialise with many of the English students on her course.

Rachel was evidently a highly agentic and self-reflexive student as she *knew* that her working-class (monoglossic) hyper-feminine aesthetic could be misinterpreted by others and that she could be constructed as 'dim'. Yet Rachel was also strong-minded and determined, and was relatively unconcerned about the judgement of others – heteroglossic traits apparently instilled in Rachel by her mum: 'I think I'm tough-skinned... I can take what people say on the chin and just think "OK, that's fine", you know?'. This strongly links with the work of scholars such as Robb et al. (2007), Aries and Seidler (2007) and Reay et al. (2009) who observe that working-class students studying in HE often construct themselves as being resilient, single-minded and determined, seeing these traits as being essential in helping them to succeed in an unfamiliar field. However, in speaking of others 'looking down' upon her intellectual ability, Rachel clearly still retained a sense of herself as Other in a distinctly middle-class space.

Discussion

Achievement over time – women's changing perceptions of academic 'success'

It is important to bear in mind that the women presented above were all studying in a space demarcated as being for 'high-achievers' and that, in light of their 'top' GCSE and A-level grades, in policy terms, they might officially be deemed high-achieving students (e.g. BIS, 2016). Yet what the case studies demonstrate is that the women experienced academic achievement in different ways, and that their subjective feelings about their achievement were not 'fixed'

in place and static, but appeared to change over time (e.g. see McLeod, 2000; Jackson, 2003). Moreover, not all of the women – even those averaging a high 2:1/1st – considered themselves to be high-achievers. In fact, the case studies neatly illustrate how the women’s differing relationships with academic achievement were a product of their various structural positions (in terms of class, ethnicity and choice of discipline), and highlight how as the women moved through different educational contexts, their perceptions of their own achievement modified in subtle ways.

Perhaps the most significant bearing on the women’s perception of their academic achievement was their experience of secondary schooling. The women who had been educated at an ‘elite’ all-girls’ private or grammar school appeared to have spent their formative years in a highly academic space, where high achievement was greatly prized and more or less ‘expected’ of each pupil (Allan, 2010a; Maxwell and Aggleton; 2014; Forbes and Lingard, 2015). Whilst some of the women appeared to relish the challenge of academic work and confidently constructed themselves as being a ‘high achiever’ (e.g. Jane), others found it difficult to see themselves as anything other than average in light of the outstanding performance of those around them (e.g. Charlotte and Joanna). Yet this is not to say that these women were wracked with self-doubt and anxiety as they ‘failed’ to live up to their school’s demanding standards. Rather, these women were highly agentic and were able to set their achievement in context, thus retaining a positive learner identity.

The women who had attended a mixed comprehensive school tended to construct themselves as being high-achievers as they observed that, in comparison with the students around them, they were indeed obtaining top grades (e.g. Callie, Rachel and Grace). Whilst this gave the women a certain degree of confidence in their academic ability, like the schoolgirls in Raby and Pomerantz’s (2015) recent study, the women were certainly not arrogant or boastful about their achievements. However, as the women transitioned into a high-performing university, their relationships with academic achievement became increasingly complicated. Whilst some students continued to perform at a high level which appeared to re-inforce their existing sense of academic self (e.g. Callie), other students had to modify their view of their achievement in a new context in which they were no longer ‘top of the class’ (e.g. Grace and

Rachel). This resonates strongly with the work of Jackson (2003) who observes that undergraduate students' academic self-concept can change as they enter HE and become a relatively 'small fish' in a 'large pond' (p.333) – particularly female students who may lack self-confidence. There is insufficient space in this chapter to detail the impact that these changes in academic self-perception had upon the women's future aspirations and career decision-making, but this is an important avenue worth exploring in greater depth in the future.

Facilitating high achievement – balancing 'masculine' approaches to study with 'feminine' embodied aesthetics

What the data also demonstrates is that, even for those women who were performing at the highest level (i.e. high 2:1/1st), achievement was not effortlessly produced, but involved a number of complex negotiations and 'balances' in terms of identity-work. In line with previous research studies of school-age girls conducted by scholars such as Walkerdine et al. (2001), Renold and Allan (2006), Skelton et al. (2010), Archer et al. (2012) and Raby and Pomerantz (2015), the data reveals that, regardless of discipline, the women in this study felt compelled to balance qualities inscribed as masculine and feminine in order to produce successful learner subjectivities. Utilising Francis' (2012) conception of gender monoglossia and heteroglossia, we saw how all of the women sought to rupture the monoglossic account of gender and adopted empowering 'masculine' approaches to study (e.g. confidence, competitiveness, care-free study attitudes, and 'fortitude'). We also witnessed the women in engineering (Charlotte and Joanna) constructing their personalities in line with masculine qualities in order to understand themselves as 'authentic' and recognisable engineers (Henwood, 1998; Powell et al., 2009). Yet, in spite of these masculinized aspects of gender performance, all of the women sought to retain a normatively feminine embodied aesthetic and many overtly conformed to the heterosexual matrix, thus remaining intelligible as women (Butler, 2004). This highlights the crucial importance of the *embodied* performance of gender in facilitating academic 'success' (Shilling, 2008; Taylor, 2013; Ivinson and Renold, 2013).

Yet this is not to say that the women felt required to balance their achievement alongside hyper-feminine subjectivities, in line with McRobbie's (2008) notion of

the 'postfeminist masquerade'⁴⁴. Rather, at Marlton University, a more restrained, middle-class (sporty) version of femininity dominated campus, opening up discursive space for the women to 'play with' alternative, hybridised constructions of gender identity which appeared to greater facilitate an 'empowered' form of high achievement – for example, Jane blended a 'sporty' and 'nerdy' femininity apparently seamlessly. Of course, this is not to say that all women were equally able to draw upon a plethora of discursive resources in order to produce acceptable high-achieving femininities. Class difference strongly inflected Rachel's experience of academic achievement, as it foreclosed the space in which she could be 'seen' as a high achiever. Rachel performed an exaggerated form of femininity based upon her working-class 'home' culture (i.e. sequined jumpers, bleach-blonde hair and false eyelashes). Yet this hyper-feminine performance could not easily be read by her lecturers or her peers, and was regarded as incompatible with intelligible notions of 'de-sexualised' middle-class intellectual subjectivity (Mendick and Francis, 2012; Archer et al., 2012).

It should also be noted that whilst all of the women adopted 'masculinized' study habits and behaviours and described Marlton as being a relatively comfortable space in which to achieve – where they could celebrate their success without fear of rebuke – the women largely sought to modestly downplay their achievements. Even if the women told me in interview that they saw themselves as being a 'high achiever', this tended to be done awkwardly and with much hedging (although for one notable exception, see confident Jasmine in Chapter 5). Indeed, as the case of Callie demonstrates, being an overt high achiever was still a precarious subject position for the women at Marlton to inhabit. In fact, what appeared to emerge from the data was that that being clever was perfectly acceptable at Marlton University, provided that one did not 'act' clever (see also Francis et al., 2012).

⁴⁴ The 'post-feminist masquerade' refers to a discursive entrapment of compulsory choice in late modern society which compels young women to maintain demanding standards of beauty and appearance, in order to remain 'reassuringly' and unthreateningly feminine whilst assimilating into traditionally 'male' spheres. McRobbie (2008) asserts that the postfeminist masquerade thus serves to re-stabilise patriarchal gender norms.

The high-performing university as a 'liberating' space

Whilst it is important to highlight the ways in which the women were constrained within the highly regulative heterosexual matrix and sought to (often delicately) balance intelligible gender identities alongside successful learner subjectivities, this is not to say that the women were fragile individuals, exploited by resurgent patriarchy (Gonick, 2006; Renold and Ringrose, 2008; Budgeon, 2013). Rather, we must recognise the 'freedom' that the high-performing university space offered the women to construct achieving subjectivities and agentially mould their future pathways (Quinn, 2003). In interview, the women did not express the same anxieties and tensions that many boys and girls speak of in schools, who often narrate a crippling desire to fit in with their peers and be 'liked', thus rejecting or masking their engagement in academic work which is constructed as 'uncool' (Renold, 2001; Jackson, 2006; Francis et al., 2012). It became clear that, at Marlton University, the women felt that being 'academic' was a desirable subject position. Indeed, being seen as 'smart' (but not arrogantly smart) afforded the women a sense of validation and enabled them to disrupt a more passive femininity. Indeed, in line with several of the girls in Raby and Pomerantz's (2015) study, the women saw educational qualifications as a form of cultural and economic capital which they could later (hopefully) exchange for a good career (Bourdieu, 1986).

Not only this, but the women also expressed a greater sense of agency and freedom as they studied at university because they realised that they were increasingly responsible for their own success; they no longer had teachers or parents 'watching over' them and pressuring them into doing work. The women felt as if they were in an 'adult' space where there was less pressure to publically be seen as a high achiever – lecturers were largely unconcerned with individual students' academic performance, and students could keep their grades from their peers and family members if they wished. In this way, the university represented as space where the women could break free and develop independent and 'grown-up' academic selves (Furlong and Cartmel, 1997; Quinn, 2003; Finn, 2015).

Discipline and academic achievement – differing expectations of success

It is also important to highlight the impact that choice of discipline appeared to have upon the women's perceptions of, and experiences of academic achievement – something that has largely been overlooked in previous research studies (although for exceptions see Thomas, 1990; Skelton and Francis, 2012; Archer et al., 2012). It is notable that, in this study, the two students who were obtaining slightly lower grades (Grace and Joanna) were studying STEM disciplines. As the case studies presented above illustrate, neither Grace nor Joanna appeared overly concerned that they were averaging a 2.2 or a low 2:1. This lay in contrast with many of the anthropology, English and modern languages students who asserted that they were usually unhappy or frustrated if they achieved anything below a low 2:1 in a coursework assignment or exam. In fact, during the course of the research, it became clear that the women studying for a degree in engineering or physics had different expectations of their academic achievement in comparison with the arts/humanities students (Nyström et al., 2016).

In Focus Groups 2 and 3, the physics and engineering students asserted that, in their disciplines, answers were marked as either 'right' or 'wrong' according to objective criteria, and therefore whilst students had the potential to obtain a perfect score of 100% in a module, if students did not understand a topic, they could fail to pass the course. This meant that students' grades were often highly inconsistent; students could apparently do very well in certain modules and yet 'absolutely dreadfully' (Joanna) in others. This seemed to reduce the level of ontological security that the women had in their level of achievement, in turn leading the women to moderate their expectations of success. Indeed, Grace and Joanna appeared relatively unconcerned if their grades dipped in certain modules, as they knew that this was 'common' in their discipline. Thus they retained a relatively assured sense of academic self. It also appeared to be the case that the women knew that their disciplines were renowned for being 'prestigious' and 'difficult', helping the women to place their achievements into context (Becher, 1981; Thomas, 1990; Mahbub, 2015).

In contrast, the anthropology, English and modern languages students spoke of a collective desire to achieve at least a solid 2:1. In Focus Groups 1, 2 and 3, the women noted that marking in their disciplines was highly subjective, but that

arts/humanities students could likely expect a grade of 2:1 (60%+) if they put in a reasonable amount of effort⁴⁵. It might be the case that the women sought to achieve a 2:1 as they felt that such a degree was realistic and would help them to stand a better chance of obtaining a job in the competitive labour market, with many companies now setting 2:1 as a minimum graduate requirement (e.g. see The Telegraph, 2010; The Guardian, 2012). However, it could be that the women felt under pressure to 'do well' in order to demonstrate to others that they had performed well in a supposedly 'easy' discipline, thus proving their academic worth. Indeed, as Jackson (2006) notes, to fail whilst trying hard to succeed – particularly in a discipline perceived as easy – could have damaging psychological consequences, impacting strongly upon students' self-worth.

Conclusion

In this chapter, I have interrogated both the macro and micro discourses drawn upon by the women in this study which shaped the extent to which they could construct themselves as being 'clever' and 'high achieving' students in their chosen discipline at Marlton University. Having now presented all of the empirical data, in the next concluding chapter, I would like to draw out several of the key themes that emerged in this study to discuss in greater depth.

⁴⁵ However, the women did also speak of a frustration that they could never score 100% in a module, as STEM students could.

Chapter 8

Conclusion

‘I think there is a wonderful array of people that come under the banner of student...Students get kind of pigeon-holed into what you see on TV, like *Skins* or *Fresh Meat* or something – and it doesn’t mean that’s not true, it just means there’s sort of more, there’s more angles to it.’

(Callie, aged 24, anthropology student - Interview 1)

This study has sought to explore how a small number of women pursuing either a STEM or arts/humanities discipline at a high-performing British university negotiated their experiences of gender and achievement over the course of their second and third years of study. In this concluding chapter, I would like to pull together some of the key threads that run through this thesis to discuss in greater depth. However, before I commence, it is important to clarify the way in which women’s gendered and academic subjectivities have been theorised in this study. Such an approach has implications for the truth claims made in this study, and therefore the use of the research findings.

Theorising gender in the high-performing university – the diversity and complexity of women’s lived experience

The aim of this research was not to identify and document *the* definitive ‘female’ university experience in STEM and arts/humanities disciplines; rather, this study has attempted to explore the complex processes and practices which contextualise women’s experiences (Connolly, 1998). In particular, I have sought to draw attention to the wider discursive processes which shaped the ways in which the women could see themselves as ‘successful’ and ‘achieving’ students – both inside and outside of their course (Youdell, 2006b). However, I have also sought to narrow the analytical lens and have considered in some detail how individual women differently took up, and cited these discourses for themselves in different times, contexts and spaces. This multi-level analytical technique was used in order to understand the agentic ways in which the women in this study negotiated discourse in practice, emphasising the complex,

fluid and contingent nature of women's gendered and academic subjectivities (McLeod and Yates, 2006; Thomson, 2007).

The women who participated in the research are undoubtedly connected as they have all obtained a place at the same high-performing British university – Marlton. However, the diversity of the structural positions that the women inhabited in terms of class, ethnicity, 'home' country of residence, age and dis/ability mean that there is an inherent messiness and complexity to the data. Indeed, no two women's experiences were identical; the younger women lived with their peers in shared houses in the city of Marlton, whilst the mature students resided in their familial homes. Some women came from relatively modest backgrounds and were educated in mixed comprehensive schools, whilst others were raised in 'wealthy' families and attended some of the best all-girls' grammar schools and private schools in the country. The women also represented a wide range of ethnic backgrounds, with the International Students attending Marlton from various countries across the globe.

In this study, I have attempted to capture the range of subject positions and perspectives from which the women speak and any apparent contradictions and ambivalences in their feminine subjectivities in different times and spaces. It is therefore important to emphasise that this study is not one in which a neat and simple set of conclusions might be drawn (Ball et al., 2000). No concrete statements can be made about women's university experience that might automatically be generalised to multiple sites. However, this is not to say that the findings in this study are of no use to HE policy makers, practitioners and other educational researchers. Indeed, a critical motivation behind feminist research is that conclusions might be generated that improve women's lives (Harding, 1991; Lather, 1991; Skeggs, 1992; Hesse-Biber and Leckenby, 2004).

Trowler (2014: 1729) asserts that researchers working from a constructivist and relativist perspective can make a contribution to knowledge by offering 'conceptual clarity' as opposed to the generalisability of findings:

'...pick[ing] out the factors at play in one site...can offer conceptual clarity about the kinds of factors that are significant, what others could be in other circumstances, and why. Generalisation of findings to a much bigger population, at least in any simple sense, is not possible. However,

research can offer findings which are illuminative in nature and so allow improved conceptualisation of the factors at work in other contexts.'

What this final chapter aims to do, then, is to pick up on and discuss several motifs that emerged in this study in order to better conceptualise the broader set of discursive processes which gave shape to the women's lived university experience. At the end of this chapter, tentative policy recommendations will be outlined and futures avenues for research will be explored.

Women in science/arts fields – the significance of academic disciplines

One important theme running throughout this thesis is the significance of academic disciplines for theorising and contextualising women's experiences in HE. At present, there is some debate over the extent to which disciplines retain a relevance in HE (see Trowler et al., 2012). Krishnan (2009: 4) notes that 'interdisciplinarity' has become a new buzzword in both HEIs and research funding organisations, as increased economic pressures – alongside the growing massification, consumerisation and marketization of the HE sector – compel universities to create new and diverse degree programmes so that they might survive in the highly competitive HE marketplace. Indeed, Trowler et al. (2012) observe that, in many universities, the traditional structures that once defined disciplines are increasingly being eroded, with students now encouraged to choose from a 'modularised smorgasbord' in order to pick'n'mix their own interdisciplinary degree (p.1). However, other scholars argue that disciplines retain a key power and relevance today, offering an important framework for thinking about, and theorising processes and practices in HEIs. In fact, many HE researchers are beginning to realise that greater attention needs to be paid to the significance of academic disciplines, and how these disciplinary contexts shape teaching, learning and assessment practices in universities (see, for example, Mathieson, 2012; Trowler et al., 2012; Trowler, 2014; Nyström et al., 2016).

To date, HE researchers have largely focused their attention upon examining how the epistemological structures of different disciplines affect academics' attitudes, outlooks and pedagogical practices on 'ground level' – simultaneously constituting and maintaining disciplinary cultures (e.g. Becher and Trowler,

2001; Neumann, 2001; Mathieson, 2012). Very few studies have sought to explore these processes from a student perspective – that is, how student ‘micro-cultures’ are both produced by, and produce distinct disciplinary identities (for notable exceptions, see Becker, 1961; Thomas, 1990). This is an important omission, for if we do not critically self-examine HEIs and prioritise an understanding of students’ lived experience, we cannot hope to eradicate persistent inequalities (Alvesson, 2003; McLeod, 2011; James, 2014).

This study has sought to go some way towards addressing this gap in the literature by bringing women’s experiences within a range of different science/arts disciplines into sharper relief – thus demonstrating how gender contours students’ negotiations of the cultures and structures of HE. In Chapter 5, I examined how women’s classroom experiences were both physically and discursively structured by the organisation of their degree programme, the pedagogical practices and attitudes of academic staff, and women’s interactions with their peers. In Chapter 6, I widened the research focus and examined the ways in which women’s chosen discipline shaped their experiences of friendship, leisure and work. And in Chapter 7, I also considered how the women differently negotiated academic achievement within their chosen discipline. In doing so, this study has highlighted how disciplines have certain knowledge features and cultural characteristics that are both dominant and *generative* in that they provide a discursive framework which informs students’ thoughts and actions (Becher and Trowler, 2001).

Of course, this is not to say that women’s university experiences are wholly determined by their chosen discipline, and that disciplines have essentialized qualities which prescribe women’s engagement in, and satisfaction with university life (Trowler, 2014; Hodkinson et al., 2007). For example, whilst closely related in terms of epistemological and methodological orientation, in this study, the ‘masculinized’ STEM disciplines of engineering and physics appeared to offer the women at Marlton a different learning environment, with the physicists seemingly more content with the taught and social aspect of their course. In fact, this study has simultaneously highlighted how structural axis such as women’s gendered, classed, ‘raced’, and aged subjectivities also have a strong impact upon women’s university experience, often ‘cutting through’ the disciplines.

It therefore appears that academic disciplines act as an important organizational axis which informs or 'drives' women's university experience. However, disciplines' generative properties are contextually contingent, with their causality 'playing out differently in different locales' (Trowler, 2014: 1728). We must therefore be perceptive to Marilton University as a unique context, with its distinctive management structures, staff profiles, policies and curricula melding together differently in different academic departments to shape to women's study experiences. As such, in the future, researchers investigating the significance of disciplines in educational establishments must pay careful attention to local context, highlighting the institutional structures that govern students' disciplinary experiences.

Place and space – moving beyond the confines of the university classroom

Another theme running throughout this thesis is that of place and space. Ball et al. (2000) assert that, at present, one of the key problems with youth research and educational policy is that a relentless focus upon the formalised arenas of 'education, training and work' obscures what is really important in the lives of young people – 'leisure and pleasure' (p.146). In this project, I have widened the remit of study and have sought to examine women's 'personal lives' (Smart, 2007; May, 2011; Finn, 2015); that is, their friendship relations, family ties, social activities and engagements in part-time employment. In doing so, I have attempted to provide a holistic understanding of women's student lives – illustrating how women's learner identities are not solely forged in academic spaces. Indeed, all of the 'places' through which women travel on a daily basis and over time (e.g. university halls, shared houses, lecture theatres, seminar rooms, the laboratory, the university gym, campus cafés, nightclubs, the city of Marilton, etc.) must be read in conjunction in order to provide a comprehensive account of women's university experience.

Marilton University itself also acts an important 'space' in this study – one that should not be overlooked or underestimated (Massey, 1994; Rose, 1995; Tamboukou, 1999; Quinn, 2003). Feminist scholars have argued that space is not a static, neutral and absolute entity, but 'is constructed out of social relations which themselves are saturated with an internal dynamism' (Tamboukou, 1999: 127). The particularities of Marilton University as a high-performing,

predominantly white, upper/middle-class institution are highly significant; Marlton University did not act as a mere backdrop to the women's student lives, but strongly informed the ways in which the women perceived and evaluated their time spent as students.

In this study, it became clear that many of the women felt either happy or unhappy with their course because of their social experience, as opposed to their formal learning experience. Perhaps because many of the women spent a relatively small proportion of their week in the classroom, or because dominant discourses of student life so heavily prioritise sociality and hedonism, the women's social lives appeared to take on an increased significance. However, as documented in Chapters 5, 6 and 7, the women's sense of 'belonging' to Marlton University was strongly governed by their class, ethnicity and age – namely, the extent to which the women felt able to match up to the 'ideal' white, young, rich, sporty Marlton student who appeared to dominate the student body. This suggests that, in the future, HE researchers need to pay greater attention to the impact of students' out-of-classroom/social experiences upon their negotiations of powerful/powerless student subject positions. This widens the narrow definition of student 'success' currently embedded in policy discourse, which is based solely upon students' academic attainment and employment outcomes (e.g. BIS, 2016).

Academic achievement in the high-performing university

Another theme to emerge strongly in this study was the contingent, precarious and changing nature of academic achievement experienced by the women at Marlton University. As noted in Chapter 1, women are widely regarded as being the main beneficiaries of the expansion of HE, with current media accounts depicting women as outnumbering and outperforming men in British universities (Quinn, 2003; Dyhouse, 2006; Leathwood and Read, 2009). Such media portrayals feed into what Walkerdine and Ringrose (2006: 33) term 'a post-feminist and post-class discourse of unambiguous female success, where celebrations of 'presumptive' gender equity are taken as proof that meritocratic principles for attaining bourgeois success have worked'. However, as we saw in Chapter 7, achievement was not effortlessly produced by any of the women in this study, in spite of them all having gained a place at a relatively 'prestigious'

university. Rather, achievement was negotiated in multifarious ways by the women and was strongly shaped by their respective class and ethnic backgrounds – and educational biographies. Through the use of Becky Francis' (2012) concept of gender monoglossia and heteroglossia, we witnessed how all of the women in this study felt compelled to balance high-achieving subjectivities against hetero-normative constructions of femininity, regardless of whether they were studying a 'masculine' STEM discipline or a 'feminine' arts/humanities discipline. For example, Joanna shed her childhood 'tomboy' look in order to fit in with her peers whilst also succeeding in engineering. This finding serves to extend existing studies of high-achieving pupils in primary and secondary schools, further problematizing the notion that 'boundless success' really is open to all women equally today (Renold and Allan, 2006; Allan, 2010a; Skelton et al. 2010; Pomerantz and Raby, 2015).

Also emerging as a significant finding in this study was that women's negotiations of academic achievement at Marlton University were strongly governed by their choice of discipline. It became clear that the discourses of 'success' open to the women were uneven, and powerfully shaped by the science/arts divide. The women studying engineering and physics could struggle in assessments and still retain a 'good student' identity as their (masculine) disciplines are widely perceived to be 'hard' and 'difficult'. In contrast, the women in anthropology and English (and to some extent modern languages) often found it difficult to position themselves as 'clever students' because their (feminine) disciplines tend to be inscribed as 'easy' and 'lacking rigour'. Previous studies investigating issues of gender and academic achievement have tended to neglect the importance of disciplines, seeing students' achievement as static and monolithic – as either consistently 'high' or consistently 'low' (e.g. Rogers and Hallam, 2006; Han et al., 2015). This thesis thus calls for greater complexity to be introduced into current debates, highlighting the need for researchers to complicate students' gendered negotiations of academic achievement by discipline, and over time.

Women students' resistance and agency

Whilst this study has highlighted areas where gender inequalities in HE persist, the picture I have painted of HE should not be read as overly pessimistic. All of

the women in this study expressed that they gained a general sense of happiness and fulfilment from attending a relatively prestigious university such as Marlton, and enjoyed the 'freedom' of university life where they could decide what to do, when they wanted to do it – resonating with the work of scholars such as Quinn (2003) and Hey and Bradford (2004) who argue that the university can be constructed as a 'safe' space and place of refuge by women. Indeed, a key finding that emerged in this study was that Marlton University appeared to offer the women a variety of discourses of student 'success', and for many this was liberating and empowering (e.g. 'sporty' and 'nerdy' Jane who constructed herself as being 'well-rounded'; 'lazy' and 'procrastinating' Charlotte who constructed herself as being an 'effortless' achiever; and 'confident' Jasmine who constructed herself as being focused on 'academics'). It is also notable that the women students were not the unreflexive 'rational calculators' or 'human capitalists' currently embedded in HE policy discourse (Ball et al., 2000: 147), opting to study at Marlton University simply because they wished to furnish themselves with a qualification that might help them to succeed in the competitive labour market. Rather, all of the women expressed a great passion for their chosen discipline and appeared to gain a strong sense of satisfaction from acquiring a new depth of knowledge

The women in this study also appeared to be highly self-aware and were often perceptive to the ways in which social structures continued to determine their university experience, highlighting the salience of gender, class, ethnicity and age in shaping their negotiations of student 'success'. For example, the majority of the women in engineering were perceptive to the historical legacy of gender inequality that they inherited in their discipline, and were critical of some of the pedagogical practices that they had experienced at Marlton. And Margaret and Callie (the mature students) emphasised how age shaped their ability to establish friendships and take part in enriching social activities whilst studying.

In line with postmodern and post-structural conceptualizations of power and agency, the women's resistance to structural inequality was not, however, understood as being collective and organized, but as fragmented, temporary and localized (Raby, 2005; Harrison and Dobson, 2015). Indeed, agency and resistance were exerted by the women in this study in a multiplicity of localised and individualised ways including: disengagement with pedagogy (e.g. Joanna

skipping class); bodily disconformity (e.g. Rachel colouring her hair shocking pink/bleach-blond and wearing false eyelashes); and countering dominant discourse in speech (e.g. Eleanor critiquing capitalist, bourgeois Marlton University in interview). Whilst the conscious intent of these subversive acts might be questioned, such dis-identifications and discursive ruptures served to pierce dominant 'good girl student' power relations (Raby, 2005; Youdell, 2006b). Some scholars have criticised postmodern theorisations of power for emphasising the narrow, localised and haphazard nature of resistance (e.g. Markula, 2003). However, collective and organised resistance emerged perhaps more clearly and solidly in the actions of engineering student Jasmine who established her own outreach group at Marlton designed to foster schoolgirls' interest in engineering – thus mobilizing a political movement in an attempt to transform the gendered status quo.

It is also of note that a number of feminist researchers have documented how young women today often seek to detach themselves from feminism and its ideological moorings due to the association between feminists and 'butchness', 'ugliness' and 'man-hating' (Budgeon, 2001; Giffort, 2011; Pomerantz et al., 2013). It is argued that women are also reluctant to draw on 'sexism' as an explanation behind any unequal treatment that they experience due to the 'common-sense' postfeminist assumption that women are no longer oppressed in Western nations (Pomerantz et al., 2013). Whilst the women in this study did not explicitly use the term 'sexist' to describe their experiences – even engineering students such as Mandy who had clearly been subjected to sexist abuse – the majority of the women in this study were highly receptive to feminist principles. Indeed, several of the women described themselves as being feminists (e.g. Liz, Maxine, Hannah, Jane, Sally), and/or were entirely willing to acknowledge the role that gender inequality played in their student lives. This resonates with an emerging body of literature which suggests that feminism is currently experiencing something of a revival in youth culture, with some young women taking an increasing interest in feminist politics and feminist activism (Taylor, 2011; Edell et al., 2013; Guillard, 2016).

It is, however, important to point out that the women did not present themselves as being 'victims' of a patriarchal system or as disempowered (Baker, 2010).

Yet, unlike the girls in Pomerantz et al.'s (2013: 187) study, they likewise did not draw upon postfeminist 'Girl Power' or 'Successful Girls' rhetoric which works to obfuscate power relations and 'explain away' persistent gender inequalities as individualized. Instead, the women rewrote their own narratives in complex ways, often drawing upon contradictory and conflicting discourses in an attempt to understand their lived experience. In particular, the women were keen to actively intersect and disrupt their gendered experience with dominant discourses of class, 'race' and age (Raby, 2005).

Using gender monoglossia and heteroglossia to theorise women students' gender identities

This study has also served to highlight the potential value of using the concept of gender monoglossia and heteroglossia to theorise women students' gender identities in HE. During the course of this research project, I gained a heightened awareness of some of the complexities and difficulties of applying theoretical concepts of gender to, as Francis (2008: 478) terms it, "living' data'. It was whilst I was speaking with the women in person during interview that a number of concerns began to creep into my mind about how I could feasibly make sense of their gender 'performances' in the university. I listened carefully to the women describing their academic attitudes, study habits and everyday behaviours whilst studying at Marlton, and tried to make mental notes of how they presented themselves in bodily aesthetic (e.g. clothing, jewellery, make-up, hairstyles). Yet I found it challenging, and experienced a growing sense of unease about categorising the women's study behaviours and bodily presentations as either 'masculine' or 'feminine'. I started to question whether (and why) academic traits such as drive, determination, procrastination and laziness should be constructed as masculine in a young woman, and I deliberated upon what actually constitutes a feminine or masculine article of clothing on a woman's body. I consequently wondered whether that by claiming certain behaviours/traits/aesthetics to be masculine or feminine in my written research account, I would in fact be reinforcing a male/female binary. This led me to reflect more deeply upon how I might profitably theorise gender in this study and retain it as a workable analytic category, without resorting to

biological essentialism – that is, as ‘seeing’ gender as tied to the sexed body, or as reifying traits and behaviours as masculine or feminine (see Paechter, 2006).

Turning back to the theoretical literature, I felt that Becky Francis’ (2008, 2012) concept of gender monoglossia and heteroglossia offered a potentially productive way of navigating through this complex maze of gender ascription. Francis’ (2008: 478) theory seemed to facilitate a more ‘disembodied’ analysis of gender, whereby individuals discursively constructed as male do not have to ‘do boy’, and individuals discursively constructed as female do not have to ‘do girl’. Rather, it enabled our gender identities to be seen as less totalising and as shot through with contradiction – i.e. gender as a fluid, multifaceted and inconsistent blending of masculine and feminine depending on circumstance and context. In practice, then, gender monoglossia and heteroglossia enabled me to add nuance to way in which the gender identities of the women students in this study were theorised, with gender seen as being unstable and powerfully intersected with commensurate discourses of class and ethnicity.

Of course, as Francis (2008) readily admits, the problem of ascribing particular characteristics, attitudes and behaviours as masculine or feminine still arguably besets the concept of gender monoglossia and heteroglossia, which retains these (albeit discursively produced) terms in order to facilitate the theoretical analysis of individuals’ identity work. Perhaps if gender researchers are to ultimately move beyond a binaristic and thus potentially essentialist account of gender, the terms ‘masculinity’ and ‘femininity’ need to be replaced altogether in our written research accounts, in order to lose all gender connotations or ‘gender-baggage’. However, it could be counter-argued that researchers still need to retain at least some sense of the terms so that the readers of their texts understand to what they are referring, and the residual patriarchal power relations historically embedded within both the expressions and the wider gender system. Thus, the situation is complex.

At present, I feel that the concept of gender monoglossia and heteroglossia seems the most productive way of theorising gender in practice, and I have demonstrated its promise in this thesis. I feel that Francis’ conceptualisation of gender is advantageous as it allows us to see agency and resistance (i.e. heteroglossia) as operating at different analytical levels: within individual gender ‘attributes’, within individual performances of gender, and within the wider

(monoglossic) gender order (p.488). This, Francis argues, resolves a critical tension between micro and macro-scale theories of gender which run through much existing feminist work.

Representing women's lives – recognising the importance of the time

Finally, this study has also sought to challenge the ways in which we currently conceptualise, investigate and re/present educational issues and phenomena such as subject choice and academic achievement in educational research. In recent decades, post-structural and postmodern theorisations of identity have gained increasing popularity amongst educational researchers, with scholars seeing the 'self' as a social construct or fiction (Giddens, 1991; Butler, 1993, 2004; Beck, 1992; Rose, 1994). Whilst emphasising the fluid and contingent nature of the self, current educational studies have tended to focus upon assessing young people's experiences in education at specific points in time, providing a 'snapshot' of the social world 'as is'. However, this research project has adopted a qualitative longitudinal approach in order to trace women's lived experience at university over time. By introducing time as a structuring variable, we are able to introduce greater complexity into the research account, highlighting how student subjectivities are dynamically formed and subject to change (McLeod, 2000; McLeod and Yates, 2006).

Indeed, time played out in this study in two distinct ways. First, in terms of the research design, I sought to trace the women's experiences over their second and third years of study so that I might understand their engagements in university life more deeply. However, time was also significant as I asked the women to recount their lived educational biographies, with a particular focus on their previous experiences of, and perceptions of academic achievement. I felt that this biographical element was crucial, as women's gendered and academic subjectivities are not solely constructed in the present. Rather, women's past experiences in education strongly affect how they see themselves in the present, in turn shaping their envisaged future selves and careers (McLeod and Yates, 2006; Thomson, 2009).

Of course, this focus on the temporal has implications for how one might profitably write up the research account (Henderson et al., 2012). In the last

decade, a number of sociologists have come to question the way in which scholarly work within the field is re/presented (e.g. Smart, 2007; 2010; Back, 2007; Gordon, 2008; Finn, 2015). These scholars argue that qualitative sociological writing has grown staid, with old guidelines no longer suited to capturing human life in a sufficiently 'evocative and compelling way' (Gordon, 2008: 22). These writers assert that 'storytelling' techniques incorporating highly detailed description, and literary devices such as metaphor, motif and register better enable the researcher to bring their data to life (Back, 2007; Smart, 2010; Henderson et al., 2012). As noted in Chapter 4, in this thesis, I have attempted to utilize a relatively novel write-up approach, introducing horizontal and cross-cutting themes which emerged from the data in certain chapters, but also combining these themes with detailed narrative case studies or 'life stories' about several of the women who participated in the research. The purpose of doing so was to 'flesh out' the women's lives and more accurately and engagingly capture the complex processes involved in the production of gendered/academic subjectivities over time:

'The distilling process and the way the case history is constructed enables small incidents and details, descriptions of places and people, historical facts, policy issues, and analytical commentary to be woven into the document surprisingly easily.' (Henderson et al., 2012: 31)

One question that might be raised in the mind of the reader on finishing this thesis is: why these women? Why have I, as the 'authoritative' author, chosen to write about these particular women out of all of those who took part in the research? It is important to emphasise that I have not 'cherry-picked' the women discussed at greatest length in this thesis because they are particularly interesting, different or 'attention-grabbing' cases. Indeed, all of the women in this study had incredibly fascinating stories which would merit inclusion in this final written account (Smart, 2010). In fact, it was a struggle deciding which of the women to devote greatest attention to, and an ethical issue as I had to ask myself whether it was ethically sound to include some women's life stories and not others. In response, I have tried to incorporate *all* of the women's voices across all three data chapters, although it is inevitable that some voices will emerge more clearly than others. The women who are re/presented in this thesis as detailed life stories were selected as they touch on some of the wider

themes that emerged in this study, yet particularly clearly illustrate the multifarious ways in which the women were either drawn into, re-worked or rejected the broader set of discursive processes which governed their lived realities.

Implications for policy and practice

Whilst I stated above that no unitary and definitive conclusions might be drawn in this study due to the inherent complexity of the data, this is not to say that the research findings have no implications for policy and practice (e.g. see Connolly, 1998; Ball et al., 2000; Jackson, 2006). Indeed, it has been deemed particularly important that researchers provide policy recommendations that might improve women's experiences in STEM, with a view to increasing women's retention in such fields (Barnard et al., 2010). Consequently, in this next section, I would like to suggest some ways in which persistent gender inequalities in HE might be challenged, for the benefit of all women and men studying in universities.

Possible ways forward for women in STEM

Over recent decades, many universities – including Marilton – have sought to demonstrate their commitment to the principles of equality and social justice by adhering to equal opportunities policies and practices. In STEM fields, the Athena SWAN Charter guidelines have proved a popular resource, setting out a range of strategies designed to tackle gender-based inequalities. STEM policy frameworks have generally been targeted at addressing structural concerns, such as fostering female staff progression, increasing the presence of female role models amongst students and staff in HE, and publicising STEM degrees in sixth-forms and colleges to attract a higher number of young women to the disciplines. Barnard et al. (2010) assert that whilst such policies might have some beneficial impacts in the long-term, they tend to be grounded in an essentialist understanding of gender which highlights the difference between men and women, serving to reinforce an 'us and them' mentality (p.373). Barnard et al. (2010: 367-8) also point out that such rigid top-down policies have limited effect on the 'persistent masculine cultures' which constitute 'the unspoken rules of SET'. Thus, Barnard et al. advocate the use of bottom-up

strategies in order to address masculine cultures – although they unfortunately provide no concrete recommendations as to how ground-level cultures might be challenged.

This study has pointed to some issues or concerns in relation to student cultures and student-staff relations in the university. Whilst it is difficult to recommend any ground-level changes or strategies in light of the data collected in this study, the findings do gesture towards key areas that require further thought and investigation in order to develop different practice.

Classroom-level changes

Whilst not the only site in which women construct their academic subjectivities, STEM classrooms represent an important space in which women are taught and socialised into their discipline. In this study, it became clear that – particularly in engineering – the STEM classroom was not always experienced as a positive space in which to learn. ‘Laddish’ behaviours amongst some male students emerged as a problem for some of the women in this study.

Furthermore, whilst teaching staff should certainly not be blamed for causing a ‘chilly climate’, in this study, the teacher-centred, authoritarian pedagogical styles adopted by some lecturers did appear to be negatively interpreted by many of the women in this study (e.g. picking on students to answer questions in lectures, responding curtly to those who answer questions incorrectly, reprimanding individual students in front of the class). Indeed, Martin (2003), Lucey et al., (2003) and Jackson (2006) all highlight how important ‘safe’ and co-operative learning environments are for reducing students’ fear of failure and in helping students to develop positive learner identities.

Research from the primary school and secondary school literature suggests that educators need to push past individualised approaches to teaching and learning and establish a culture of relationships, fostering an ethos of understanding and dialogism (Warrington et al., 2001; Martino et al., 2004; Jackson, 2006; Francis et al., 2012). These researchers argue that, in these positive learning cultures, both teachers and students should be made aware of the constructed nature of gender and achievement – working to counteract gender differentiation and stereotyping. This is of course no easy feat, and further research is necessary to establish how these cultures might be fostered in university departments

in practice.

Possible ways forward for all women (and men) in HE

What also emerged as a strong indicator of women students' happiness and satisfaction with their course across both STEM and arts/humanities disciplines was the nature of their social experience, and whether they managed to make strong friendship bonds with peers on their course. For example, the women studying physics at Marlton spoke incredibly enthusiastically about their physics society which was strongly integrated with their course (which offered students weekly social events, sports activities and trips abroad). The women felt that this social space (which also included a physics common room on campus) offered them an opportunity to bond with other physics students in different years, meaning that they felt a welcoming sense of community – a place where they could go to ask others for advice about academic work and life problems more generally. Whilst it is difficult to recommend how similar ventures might be implemented in other disciplines and in other university sites, this finding suggests that educators need to think carefully about the social aspect of effective pedagogy. This might help women and men of various class and ethnic backgrounds – and particularly mature and International Students – to integrate more effectively with their fellow course-mates, facilitating collaborative approaches to learning and potentially decreasing feelings of loneliness and isolation amongst the student body (also see Lehmann, 2012; Taha and Cox, 2016).

Final conclusions, key contributions and future avenues for research

This thesis has made a number of contributions to both the educational and HE literature. First and foremost, this thesis has worked to highlight the significance of academic disciplines for contextualising students' experiences in education, bringing them into the foreground of analysis. In particular, this thesis has sought to illustrate the complex ways in which disciplinary discourses – as grounded in the ontological and epistemological orientations of academic fields, and their unique (and gendered) historical formations – and the physical properties and structures of academic disciplines (e.g. contact hours, workload, modes of assessment) work to shape women's gender and learner

subjectivities in the high-performing university. This thesis has also explored women's experiences in both male-dominated STEM disciplines *and* female-dominated arts/humanities disciplines – something which remains relatively under-examined in the current HE literature. In doing so, this thesis has widened the research lens and has taken a more holistic and well-rounded approach to understanding women's participation in HE today. Indeed, this thesis has documented the diversity and complexity of women's student lives, and has worked to highlight continued gender in/equalities across all disciplines.

This thesis has also sought to contribute to, and extend the flourishing body of research that has been conducted by feminist academics working with younger girls in compulsory schooling, who have sought to problematize the simplistic notion that girls and young women today experience academic achievement 'effortlessly' (e.g. Walkerdine et al., 2001; Renold, 2001; Renold and Allan, 2006; Allan, 2010; Skelton et al., 2010; Ringrose, 2012; Pomerantz and Raby, 2015). Whilst educational researchers are beginning to focus greater attention upon exploring women's experiences and negotiations of achievement in the university (e.g. Leathwood and Read, 2009; Francis et al., 2014; Nyström et al., 2016), at present, this remains somewhat under-researched. In particular, this thesis has worked to draw greater attention to the underlying tensions that many women feel in inhabiting a 'high achieving' student subject position whilst also performing femininity intelligibly.

Of course, whilst I have attempted to provide a comprehensive account of the women's lives as they went about their studies at Marlton University, I have inevitably had to make some omissions. Due to constraints of space, I have not been able to document in significant depth the women's experiences of, and perceptions of 'laddism' on campus – particularly in university halls, society meets and wider social spaces such as local nightclubs. As noted in Chapter 2, this is a growing area of interest in the HE literature, in light of current media concerns about 'lad culture' dominating British university campuses e.g. sexual harassment, misogyny, homophobia and racism (Phipps and Young, 2013; Jackson et al., 2015). The data I collected in this study has again pointed to the existence of laddish campus cultures, but also a new and currently under-investigated aspect of this trend – heavy-drinking and sexually promiscuous 'laddish' constructions of femininity performed by upper/middle-class women in

sports societies. Hopefully this is an avenue for me to explore in future articles, and a phenomenon for other researchers to pursue in greater depth.

This study has also pointed to new directions for feminist researchers working with younger pupils in compulsory schooling. In recent years, less attention has been paid to the significance that 'subjects' play in primary and secondary schools, and how the (gendered) epistemological orientations of subjects and their related pedagogical processes and practices shape girls' and boys' identifications with particular subjects (although for notable exceptions see Ball, 1981; Paechter, 2000; Skelton and Francis, 2012). Moreover, pupils' subjective negotiations of gender and academic achievement *within* different subjects have also been relatively under-researched. This study indicates that greater attention should not only be paid to girls' and boys' lived realities in STEM subjects, but a wide range of subjects including the arts and humanities. Such 'rounded' insights are necessary if we are to more fully understand how young people identify with, and experience different subjects today.

As Callie states in the opening quote, there are numerous 'angles' to being a student that are not always well documented, particularly in light of popular and media discourses which appear to either further an image of student sociality and hedonism, or fuel a 'moral panic' about the recent feminization of HE. This study has gone some way to shining a light on the lived experience of high-achieving women students from an array of social backgrounds studying either a STEM or arts/humanities discipline in Britain today. In doing so, this study has highlighted women students' multifarious relationships with academic disciplines and 'success'.

APPENDICES

Appendix 1

	Percentage of part-time students	Percentage of female students	Percentage of non-UK students	Percentage of non-EU students
Medicine & dentistry	16.3%	56.6%	16.0%	11.9%
Subjects allied to medicine	41.4%	79.4%	7.7%	4.8%
Biological sciences	19.1%	60.9%	10.8%	5.7%
Veterinary science	7.9%	76.2%	18.9%	16.1%
Agriculture & related subjects	28.5%	61.7%	12.4%	8.5%
Physical sciences	11.1%	39.6%	15.8%	9.9%
Mathematical sciences	16.5%	37.6%	21.6%	15.8%
Computer science	19.3%	17.2%	20.4%	13.2%
Engineering & technology	19.4%	16.7%	33.1%	25.4%
Architecture, building & planning	26.8%	36.0%	25.4%	18.5%
Total - Science subject areas	24.7%	50.6%	16.4%	11.2%
Social studies	20.5%	62.8%	19.8%	13.5%
Law	19.1%	61.1%	26.3%	19.4%
Business & administrative studies	21.3%	49.4%	38.4%	30.9%
Mass communications & documentation	8.3%	59.2%	23.0%	15.2%
Languages	21.5%	69.5%	17.7%	11.5%
Historical & philosophical studies	26.7%	53.4%	10.9%	6.7%
Creative arts & design	8.3%	63.4%	16.2%	10.1%
Education	47.9%	76.0%	6.1%	4.2%
Combined	92.6%	61.6%	6.0%	4.4%
Total - All subject areas	25.1%	56.2%	19.3%	13.8%

Table A1.1 – Percentage of HE students by subject area, mode of study, sex and domicile 2014/15 (Higher Education Statistics Agency, 2016)

Appendix 2

	% part-time	% female(#2)	% non-UK	% non-EU
Medicine & dentistry	17.8%	56.6%	15.6%	11.4%
Subjects allied to medicine	44.0%	79.5%	7.7%	4.9%
Biological sciences	21.0%	61.7%	9.8%	5.1%
Veterinary science	8.5%	75.3%	18.3%	15.2%
Agriculture & related subjects	31.9%	58.5%	11.4%	7.0%
Physical sciences	16.7%	40.4%	13.7%	8.4%
Mathematical sciences	22.0%	39.2%	18.9%	13.9%
Computer science	22.0%	17.8%	22.3%	16.0%
Engineering & technology	22.6%	15.7%	32.0%	23.9%
Architecture, building & planning	31.4%	32.5%	19.6%	12.6%
Total - Science subject areas	28.1%	50.9%	15.5%	10.5%
Social studies	26.7%	62.4%	17.4%	11.5%
Law	21.5%	59.7%	22.2%	15.6%
Business & administrative studies	28.5%	48.9%	35.9%	28.1%
Mass communications & documentation	10.5%	57.5%	19.0%	11.4%
Languages	28.8%	67.9%	17.1%	10.7%
Historical & philosophical studies	33.0%	53.3%	9.3%	5.5%
Creative arts & design	9.5%	61.8%	13.9%	7.9%
Education	56.0%	75.9%	5.8%	3.7%
Combined	94.4%	61.7%	3.0%	2.0%
Total - All subject areas	31.1%	56.4%	17.4%	12.1%

Table A2.1 – Percentage of HE students by subject area, mode of study, gender and domicile 2011/12 (Higher Education Statistics Agency, 2013)

Appendix 3

Timeline of Research

- October 2014** Emails sent to the Deans of the Colleges 'housing' the original six disciplines under study to seek permission for the study to be conducted. Emails sent to the Directors of Education in each of the six disciplines to negotiate access to students.
- November 2014** Overview of study presented at Marlton University's Athena SWAN Working Group meeting to introduce STEM staff to the project. Emails continue to be sent to the Directors of Education in each of the six disciplines to negotiate access to students.
- December 2014** Emails sent to various student society presidents to request that they advertise the study to their members – prospective participants asked to contact me via email.
- January 2015** Access granted to enter two lectures to advertise the study to students. Names/email addresses taken of women interested in participating in the research. Women contacted via a follow-up email and those interested are booked into focus group/one-to-one interview slots.
- February 2015** Administrative staff in the six disciplines emailed and asked to send a mass email to their students publicising the study. Women students begin to email me requesting to take part in the research. Women booked into focus groups via email. Interview slots arranged with the case study women via email. Diary activity booklets either emailed or posted to participants. Three focus group interviews held.
- March 2015** First one-to-one interviews (i.e. Interview 1) conducted with the 14 women who participated as case studies.
- April 2015** Initial transcription and analytical work of focus group interviews and one-to-one interviews.
- May 2015** Continue initial transcription and analytical work. Develop email interview question schedule.
- June 2015** Email interviews sent to the 14 case study women. Women begin to email back their responses.
- July 2015** Final few email interviews received from case study women.

- August 2015** Continue initial transcription and analytical work. Develop second one-to-one interview schedules.
- September 2015** Continue initial transcription and analytical work.
- October 2015** Email contact made with the 14 case study women. Second interview slots arranged. Second one-to-one interviews (i.e. Interview 2) commence with the case study women. Interview 2 questions emailed to the four case study women on their year abroad. Women begin to email back their responses.
- November 2015** Continue conducting final interviews (i.e. Interview 2) with the case study women. Year abroad women continue emailing back their responses.

Appendix 4

Emails Requesting Consent

Email sent to the Deans of the Colleges under study:

Dear

My name is Lauren Stentiford and I am an ESRC (SWDTC) funded PhD student currently studying within the Graduate School of Education at the University of Exeter. I am planning to undertake a small-scale qualitative research study within the University in the coming academic year (2014-2015), designed to explore young female undergraduates' educational experiences across both STEM and arts and humanities disciplines and their wider experiences of university life. The purpose of the research will be to illuminate the ways in which such experiences affect their academic achievement and career planning. This study aligns closely with the work already being conducted at the University by Athena SWAN, which aims to promote gender equality within STEM disciplines and ensure that women are adequately represented in STEM professions.

My main research question is as follows:

How do young women negotiate their experiences of gender and achievement in a STEM or arts and humanities discipline at one high-performing British university?

I would like to undertake my study within the disciplines of physics, engineering, computer science, English, modern languages and sociology. I will be seeking to recruit 18 students across the disciplines listed above to participate as case studies over a period of one year.

I am therefore emailing you to seek your permission for me to approach the Director of Education to ask them whether they are able to identify a module leader who might be willing to let me use 5-10 minutes of a lecture or seminar in order to raise your students' awareness of the project. If you think that the Director of Education is not the most appropriate person for me to talk to, please let me know.

Thank you for taking the time to read this email. For your information, I have attached a short document explaining the research in greater depth.

I will contact you again by the end of next week (Friday 24th October) to find out whether you are happy for me to approach your Director of Education. If you have any further queries about this study, please don't hesitate to email me (ljs212@exeter.ac.uk) or give me a ring on:.. My supervisors for my PhD are Dr Alexandra Allan and Dr Gill Haynes. Dr Allan is currently on study leave but Dr Haynes (g.s.haynes@exeter.ac.uk) would be happy to talk to you, if you would find that helpful.

Yours sincerely,

Lauren Stentiford

Email sent to the Directors of Education:

Dear

My name is Lauren Stentiford and I am an ESRC (SWDTC) funded PhD student currently studying within the Graduate School of Education at the University of Exeter. Last month I contacted and requested their permission for me to contact you as part of a small-scale qualitative research study that I will be conducting within the University in the coming academic year (2014-2015). The main purpose of this study is for me to explore a small sample of female undergraduates' educational experiences across both STEM and arts and humanities disciplines and their wider experiences of university life, in order to illuminate the ways in which such experiences affect their academic achievement and career planning. This study aligns closely with the work already being conducted at the University in relation to the Athena SWAN Charter, which aims to promote gender equality within STEM disciplines.

In the main phase of the research (which will commence in late January 2015), I will be seeking to recruit 18 female second-year students across the disciplines of physics, engineering, computer science, English, modern languages and sociology to participate as case studies over a period of one year. I will also be conducting three focus group interviews with a small number of female second-year students studying these disciplines. I am therefore emailing you to enquire whether you might be able to identify a module leader who would be willing to let me use 5-10 minutes of a lecture or seminar in order to raise your students' awareness of the project, so that I might recruit participants to the study.

Thank you for taking the time to read this email. For your information, I have attached a short document explaining the research project in greater depth.

If I do not hear from you in advance, I will contact you again by the end of next week (Friday 21st November) to find out whether you might be interested in taking part in the research. If you have any further queries about this study, please do not hesitate to email me at ljs212@exeter.ac.uk or give me a ring on. My supervisors for my PhD are Dr Alexandra Allan and Dr Gill Haynes. Dr Allan is currently on study leave but Dr Haynes (g.s.haynes@exeter.ac.uk) would be happy to talk to you, if you would find that helpful.

Yours sincerely,

Lauren Stentiford

Appendix 5

Information Sheets for Participants

Focus Group Interview - Information Sheet

Project title

Femininity and academic discipline: Female undergraduates' experiences whilst studying either a STEM subject or an arts and humanities subject at a high performing university.

What will participation in the focus group interview involve?

I would like you to attend one focus group interview in either February or March 2015. I will be running three focus group sessions and you will be able to choose which of the sessions you would like to attend. These focus groups will be held on Campus in a private study room and should last no longer than 1½ hours. At the beginning of the focus group interview, you will be asked to sign a consent form indicating your agreement to take part in the study.

Who else will be taking part in these focus groups?

I will invite approximately 4-6 female students to each of the focus group interviews. You will all be in your second year and will be studying across different STEM and arts and humanities disciplines.

What will we discuss?

I will ask you to discuss your common perceptions of different subjects, and to reflect on why subject choice in higher education remains 'gendered'. I will also ask you to talk about your experiences whilst studying at university. It should be noted that you can give as much or as little information as you wish in these focus group interviews.

Anonymity and confidentiality

The focus group discussions will be recorded so that I do not miss any of your comments, however all contributions will be made anonymous – any written or published research will have changed names and no one will be identifiable. In order to ensure that participants' comments remain confidential, I will also ask those taking part in the focus group not to divulge anything that was said during the session to anyone outside the group.

What will happen to the information that I give?

After the focus group interview has taken place, I will produce an anonymised transcript of the interview for the purpose of data analysis. This transcript will only be accessible to myself and my supervisors and will be stored securely, in accordance with the Data Protection Act. An analysis of the information will form the basis of my PhD thesis and may be published in academic journals or used in presentations and research reports. You are welcome to see a copy of the thesis/journal articles prior to publication.

Are there any disadvantages or risks in taking part?

It is not anticipated that you will be put at any risk of harm by participating in this study. Any comments that you make during the focus group interview will be made anonymous, and therefore no university staff will be able to identify your views.

What if I wish to withdraw?

Your participation is entirely voluntary and you can withdraw at any time, without giving a reason.

Contact details

Thank you for taking the time to read this information sheet. If you have any further questions about the focus group interviews, please contact me by e-mail at ljs212@exeter.ac.uk

As a thank you for taking part in a focus group interview, you will receive a £10 Amazon voucher. You will receive this voucher at the beginning of the focus group session.

Lauren Stentiford (PhD student – Graduate School of Education, University of Exeter)

Diary Activity / Interviews – Information Sheet

Project title

Femininity and academic discipline: Female undergraduates' experiences whilst studying either a STEM subject or an arts and humanities subject at a high performing university.

Research aims

The purpose of the diary activity/interviews is for me to explore your experiences whilst studying either a STEM (science, technology, engineering and maths) or an arts and humanities discipline in some depth, so that I can understand the ways in which your everyday experiences impact upon your academic achievement and future plans.

What will participation involve?

If you choose to participate in this phase of the research, you will be asked to take part in the following activities:

1. Keep a week-long paper or electronic diary

In February/March 2015, I would like you to keep either a paper diary or an electronic diary briefly documenting a typical week in your life whilst you study at university (e.g. your daily lectures/seminars, hobbies, part-time work, socialising, etc). You can write as much or as little as you like in your diary.

- If you choose to keep a paper diary, I will post you a blank diary to fill in by hand, along with full instructions on how to complete it. I will ask you to bring your completed diary along with you to your first interview.
- If you choose to keep an electronic diary, I will email you a blank copy of the diary activity in the form of a Word document, along with full instructions on how to complete it. I will ask you to email me your diary once you have completed it.

2. Attend an initial one-to-one interview

I would then like you to attend an interview which will take place in March 2015. This interview will take place on Campus in a private study room, and can be scheduled to fit in with your other commitments. In this interview, I will ask you questions about yourself and about your (gendered) experiences whilst studying at university. I will also ask you to briefly talk me through your diary. This interview should last no longer than 1½ hours.

3. Email Interview

In June 2015, I will send you an email with a Word attachment containing a short set of questions. I will ask you to reflect on how your course has been going over the past few months since we last met. All you need to do is answer the questions and email the document back to me.

4. Attend a follow-up interview

Finally, I would like you to attend a follow-up interview which will take place October 2015. Again, this interview will take place on Campus and can

be scheduled to fit in with your other commitments. I will ask you to reflect on how your second year at university has gone, and I will also ask you about your plans for the future. This interview should last no longer than 1 hour.

How will information be recorded and stored?

With your permission, both interviews will be digitally recorded so that I can produce written transcripts for data analysis. I would also like to take copies of portions of your diary to use in my write-up, although you will have full control over which pages I am allowed to use. All information that you provide will be made anonymous and I will not use any data that would identify you in any way. Interview transcripts and diary excerpts will only be accessible to myself and my supervisors and will be kept securely, in strict accordance with the Data Protection Act.

What will happen to the information that I give?

An analysis of the information will form the basis of my PhD thesis and may be published in academic journals or used in presentations and research reports. You are welcome to see a copy of the thesis/journal articles prior to publication, if you wish.

Will my taking part be confidential?

I have designed this project using online research methods – namely, email. Hopefully this will make it more convenient for you to participate, as you have the option of completing and sending me your diary and email interview in your own time. Unfortunately, I am not able to *guarantee* that any information you provide via online communication will not be accessed by others (i.e. 'hacked'). However I should stress that your data is very unlikely to be unscrupulously accessed, and that I will configure robust privacy and confidentiality settings on email software to try and prevent this from happening.

I should also highlight that you are not compelled to use any online methods as part of this project if you are concerned about confidentiality. You can opt to keep a paper diary rather than an electronic diary which you can store safely at home, and you are also completely free to opt out of the email interview if you wish.

Are there any disadvantages or risks in taking part?

It is not anticipated that you will be put at any risk of harm by participating in this study. If you are not comfortable with any of the questions that I ask you during your interview, you do not have to answer them. I should also emphasise that all information you provide will be made anonymous, and therefore no university staff will be able to identify you and your views.

What if I change my mind about taking part?

You can change your mind about taking part in the project at any time. It doesn't matter at what stage in the project you wish to withdraw - all you have to do is let me know.

Who is conducting and funding the study?

My name is Lauren Stentiford and I am a PhD student at the University of Exeter. I will be supervised throughout the project by two senior researchers at the Graduate School of Education, and the research has been approved by the University's Ethics Committee. This study is funded by the Economic and Social Research Council (ESRC).

Contact details

Thank you for taking the time to read this information sheet. If you have any further questions about the project, please email me at ljs212@exeter.ac.uk.

As a thank you for taking part in the diary/interviews, you will receive a £20 Amazon voucher. You will receive this voucher at the beginning of your initial interview.

Lauren Stentiford (PhD student – Graduate School of Education, University of Exeter)

Appendix 6

Participant Recruitment Email

Email sent to administrative staff in the six disciplines, which was forwarded to students:

Dear Modern Languages Office,

My name is Lauren Stentiford and I'm an ESRC funded PhD student currently studying at the Graduate School of Education at the University of Exeter. Over the coming months I will be conducting a small scale research study within Marlton University. I am seeking to explore female undergraduates' everyday experiences whilst they study either a STEM (science, technology, engineering, maths) subject or an arts/humanities subject, in order to understand the impact that these experiences have upon their academic achievement and future planning.

I was wondering whether it would be possible for you to circulate via email the following message to all **Modern Languages students in their 2nd year** so that I might recruit participants to my study? I am specifically seeking to recruit **female students**, but I'm not sure if it's possible to filter emails and target specific genders in such a way? I have already obtained permission from the Dean of the College of Humanities, Professor....., for the research to be conducted.

Thank you,

Lauren

Would you like to take part in a small-scale research study?

Hi,

I'm Lauren Stentiford and I'm a PhD student currently studying at the Graduate School of Education at the University of Exeter. I am looking for a number of **female Modern Languages students in their 2nd year of study** to take part in a small-scale research study that I will be conducting in the coming months. I am seeking to explore female undergraduates' everyday experiences whilst they study at university within their chosen discipline, in order to understand the impact that these experiences have upon their academic achievement and future planning.

I am looking for students to take part in either or both of the following:

1. Attend a focus group interview
2. Keep a short diary for one week documenting your experiences whilst studying, and attend two follow-up interviews.

You will receive a £10 Amazon voucher if you take part in a focus group interview and a £20 Amazon voucher if you take part in the diary/interviews - £30 worth of Amazon vouchers for participation in both.

If you are interested in taking part in the research and would like further details, please email me at ljs212@exeter.ac.uk with your name and discipline.

Thank you.

Appendix 7

Focus Group Interview Schedule

Introduction

- Introduce myself and the research project.

Anonymity, confidentiality, recording the interview

- Tell students about anonymity and confidentiality.
- Check that students are happy for the interview to be digitally recorded/transcribed.
- Get students to sign consent form.

This interview

- Tell students about the structure of the interview. Ask if students have any questions.
- *Outline focus group 'ground-rules':*

INTRODUCTION

1. Ask each participant to briefly introduce themselves, i.e. name, discipline studied.
2. Why did you opt to study your chosen discipline/s at university? (Prompts: Was it their first choice? Who did they speak to about this? What were the perceptions of families and friends? Did they think about their future careers or were other factors more important?)

THE DISCIPLINES

Section A:

A set of cards will be laid out on the table in front of the participants, each stating a discipline studied by the participants (i.e. physics, engineering, anthropology, English, modern languages).

3. What are your common perceptions of these disciplines? Which students do you think might typically study these disciplines?

(If necessary, prompt about common perceptions held by different groups such as students, teachers, parents, employers, the media / the traits of 'typical' students

e.g. personality, gender, class, ethnicity). How do these perceptions make them feel as students studying the disciplines?

4. To what extent are these disciplines seen as being for ‘high achievers’ (or not)?

(Prompts: what might prevent people from applying to them? Is it grades/perceptions of achievement? Are all people on these courses high achievers – why/why not? How do they know? What does high achievement look like in these subjects? Is it the same thing?)

Section B:

“The Higher Education Statistics Agency (HESA) is the official body which collects and analyses statistical information about higher education in the United Kingdom. They collect statistical data on, for example, the number of students enrolled on courses, the destination of leavers, the number of staff employed in HE, and the income and expenditure of universities”.

A further set of three cards will be laid out on the table, each with one statement printed on it.

5. Please have a look at the following statements. Please take each card in turn and talk about the statement. Is it in line with what you thought and have experienced?

The most recent statistics compiled by the Higher Education Statistics Agency (2012-2013) show that:

- Of those currently studying in higher education in the UK, 56.2% of students are female and 43.8% are male.
- The subject areas with the highest proportion female students are: subjects allied to medicine (79.4%), education (76.1%), veterinary science (75.5%), languages (68.6%), creative arts and design / social studies (60%).
- The subject areas with the lowest proportion of female students are: engineering and technology (15.8%), computer science (17.4%) architecture, building and planning (33.7%), mathematical sciences (39%), physical sciences (40%).”

6. Can you suggest any reasons why more women than men are now choosing

to go to university? (Prompts: what makes you think this? What about in your experience?)

7. Can you think of any reasons why the subject choices made by students in higher education remain strongly gendered? In particular, why do you think that significantly fewer female students opt to study STEM subjects (science, technology, engineering and mathematics)?

8. Why do you think that, though predominantly science based, subjects allied to medicine and veterinary science are now dominated by female students? (Allied to medicine = nursing, psychology, pharmacy, physiotherapy, etc.)

WOMEN STUDENTS' UNIVERSITY EXPERIENCES

Section A (In class experiences)

Each participant will be handed a sheet of paper with the following list of statements: motivation to study, perception of achievements, relationships with peers, level of engagement with the course, learning, tutorial interaction, study outside of lectures/tutorials, relationship with tutors, grades achieved, curriculum content, course materials, teaching styles/methods.

9. How have your experiences of being in a gender minority/majority affected you in relation to these different aspects? Please talk about those which are relevant to you.

Section B (Out of class experiences)

I'd now like to move on and look at your experiences in the wider university and how this has impacted on your studies.

- **10. What is it like to study at Marlton University?**
- **11. What is it like in leisure time at Marlton University?**
- **12. What impression would someone get of Marlton University if they were to walk into the University's nightclub on a Saturday night?**
- **13. Do you see yourselves as typical Marlton students?**

WOMEN STUDENTS' EXPERIENCES OF 'LADDISM' IN THE UNIVERSITY

Finally, participants will be handed a card with the following extract:

A number of recent studies suggest that some UK university campuses are becoming increasingly dominated by a 'macho' or 'laddish' culture. For example, in 2012 the NUS published a report on women's experiences of 'lad culture' in higher education. Please read the following summary of the report's findings:

'Our qualitative study of 40 women students found that they defined campus culture as largely located in the social side of university life, led by undergraduates and significantly shaped by alcohol. Campus cultures were also defined as gendered, and strongly connected with if not inseparable from 'lad culture'. 'Lad culture' was seen as a 'pack' mentality evident in activities such as sport and heavy alcohol consumption, and 'banter' which was often sexist, misogynist and homophobic. It was also thought to be sexualized and to involve the objectification of women, and at its extremes rape supportive attitudes and sexual harassment and violence.'

(Phipps and Young, 2013: 53)

14. Do you feel that there is a macho or 'laddish' culture at Marlton University? If so, how has this affected your experience at university?

15. And what about the reverse...is there a typical way of being a girl at Marlton, e.g. pressure to act/look in certain ways? How have you experienced this? Is this a problem? Is this to be expected at university?

16. If there has been a negative impact, could anything be done to address this? What? By whom?

Thank you very much for answering all of the questions! I'd just like to end by asking:

Closing Questions

17. Does anyone have anything else that they would like to add?

18. Were any questions/points particularly important to you?

Debriefing

Thank you very much for taking part in the focus group – you've provided me with some really valuable data.

Before you leave, please let me know if you have said anything during the focus group that you would like to be removed from the transcript.

Appendix 8

Focus Group Participants

Focus Group 1	Focus Group 2	Focus Group 3
Beth, French and Russian	Gemma, film and art history	Mandy, engineering
Jane, French and Spanish	Helen, anthropology and film	Sally, English
Liv, Spanish and international relations	Zoe, German and Russian	Joanna, engineering
Hannah, anthropology	Carly, anthropology and Spanish	Jasmine, engineering
Tess, French, Spanish and international relations	Emma, physics	Charlotte, engineering
Selina, French and Chinese	Becky, physics	
	Poppy, physics	
	Jess, physics	

(The women highlighted in grey also took part in the project as a case study)

Table A8.1 – Focus group participants and their disciplines

Appendix 9

Blank Diary Activity Booklet

Diary Activity

Name:

Discipline:

One-Week Diary

Thank you for agreeing to keep this diary. I have asked you to keep a one-week diary as I am particularly interested in finding out about *your* day-to-day experiences whilst you study at university. This includes **both your experiences on your course and your experiences outside of the university** (e.g. socialising with friends, extra-curricular activities, part-time work etc.).

In the pages that follow, you will see that I have provided you with a blank academic timetable for you to fill in with your current lecture and seminar sessions. I have then included an example diary entry to give you an idea of the types of information you might want to write about, followed by a blank week-long diary for you to fill in.

Please try to fill in the diary every evening and look back over the day, documenting:

1. Any key events – what you did each day and when (e.g. which lectures and seminars you attended and what you studied, where you went for lunch, what you did in the evening, who you were with).
2. Your feelings – what you enjoyed or didn't enjoy doing, and why.

In addition, please write about any times, places or events where you **became aware of your gender**, in either a positive or a negative way. This may have arisen through comments said to you, something you heard or saw, a look from someone, your reaction to a textbook, image, etc.

Remember that you can provide as much or as little detail in your diary as you feel comfortable with. However, please rest assured that I will only take copies of pages of your diary that you are happy for me to use, and that you and your diary entries will be made anonymous. And please don't worry about grammar or spelling.

If you have any questions or queries about your diary, please contact me at ljs212@exeter.ac.uk

Thank you very much for your participation. Once you have completed your diary, please email it to me at the above address.

My Academic Timetable

Please fill in the blank timetable below indicating all of your weekly lecture and seminar sessions for this term.

	Monday	Tuesday	Wednesday	Thursday	Friday
8 am					
9 am					
10 am					
11 am					
12 pm					
1 pm					
2 pm					
3 pm					
4 pm					
5 pm					
6 pm					

My One-Week Diary - Example

On this page I have provided you with an example diary entry (written by a sociology student) to give you an idea of how you could structure your diary and the types of information you could include. This example is just meant as a guide, so please do feel free to fill in your diary in any way you wish!

MONDAY

Date: 23/02/2015

Morning:

Today I had a lecture at 10am, so I had to get up relatively early and walk into Uni. The lecture was part of my Sociology of Culture module which I'm really enjoying at the moment. The content is really interesting and the lecturer is really enthusiastic and knowledgeable about the topic. Today's lecture was about Bourdieu's theory of cultural reproduction. I've learnt about Bourdieu's theories before at A-level (which is always helpful), but it was good to learn about them in greater depth and actually read some of the texts.

I then had a seminar session straight after the lecture from 11am-12pm. Last week I was chosen to prepare a short PowerPoint presentation to give to the group on the construction of 'genius'. I really don't like giving presentations, so I wasn't looking forward to it. I hate speaking in public as I'm not particularly confident, and I don't really know anyone in the class very well so I was a bit worried about how it would go. However, standing up in front of everyone I did notice that out of about twenty of us, only three were male, which I thought was quite interesting...Reflecting on it now, I suppose this might have made me feel a bit more comfortable presenting to the group, as the other female students seemed quite supportive and two of them asked some good questions after my presentation. I suppose the presentation went okay in the end, and I was pleased I managed to remember everything!

Afternoon:

After the seminar, I grabbed a sandwich from the Uni shop for lunch and then went to the library to start work on an essay I have to complete for my Sociology of Religion module. The library still had a few books from the reading list on the secularisation thesis, so I've decided to answer a question on that. I drew up a quick plan of the essay, but I really need to do some more reading on the topic.

Evening:

In the evening, I went back home (to a house in Exeter which I share with three friends from first year – Cara, Lucy and Chloe) to drop off the books I'd picked up from the library. It's Lucy's birthday tomorrow so I quickly walked into town to get her a top I'd seen that I knew she's like as a present before the shops closed. I'm really looking forward to tomorrow as a whole group of us are going out for dinner to celebrate!

My One-Week Diary

MONDAY

Date: / / 2015

(Same page format as this for one week i.e. Monday-Sunday)

Appendix 10

Case Study Women - Interview Schedules

Interview 1

Introduction

- Introduce myself and the research project.

Anonymity, confidentiality, recording the interview

- Tell student about anonymity and confidentiality.
- Check that student is happy for the interview to be digitally recorded/transcribed.
- Get student to sign consent form.

This interview

- Tell student about the structure of the interview. Ask if student has any questions.

Biographical information: age, year of study, degree programme.

I'd like to start by asking you a bit about yourself so that I can find out a bit more about you and your life.

PART 1

FAMILY, FRIENDS AND BACKGROUND

Can you tell me a little bit about your home town/city? Where are you from and where are your family based?

Where did you go to school and college? Did you enjoy school/college? What did you study at A-level? Why?

Why did you decide to go to university? Did you ever consider not going? Why?

UNIVERSITY COURSE

Why did you choose to study your chosen discipline? (Prompts: good at it as a child, career aspirations, friends studying it, good teacher, good classroom atmosphere, didn't like arts/science?).

What discipline did your parents/family/friends want you study at university? Were their opinions important to you? Why/why not?

Why did you choose to study at Marlton University?

How has your course been going over the past two years (i.e. first year and last semester)?

What do you like most and least about your course?

What are your thoughts/opinions on the following aspects of your course:

*curriculum content

*teaching

*academic support

*behaviour/attitudes of students in class?

What traits do you value most in lecturing staff on your course?

Are there any differences in your experience between Year 1 and Year 2? If yes, what are these? Have they been positive or negative? In what way?

Can you tell me a little bit about you as a student? For example, are you quiet or do you like to speak up? Do you like to contribute in seminars? Why/why not? Were you the same at school/college?

Are there particular types of assignment that you prefer (e.g. essays, presentations, exams, multiple-choice/essay questions, lab-based assessments)? Why?

Are there particular types of teaching session that you enjoy (e.g. lectures, seminars, lab work)? Why?

How do you feel about working on your own? Why?

How do you feel about working collaboratively with your peers? Why?

ACADEMIC/GENDER IDENTITY

What does it mean to be a female student on your course? Is there anything that stands out in your experience as different?

Do you feel that you are treated the same as the male students? (Prompts: by staff, other students?) Can you think of any examples/incidents to illustrate?

Would you say that you talk/interact with lecturers in the same way as the male students? (Prompt: who asks most questions in seminars?)

Do you feel as though you 'belong' or 'fit in' on your university course in general? Why/why not?

Do you feel a sense of 'belonging' to Marilton University? What role, if any, do you feel your class, gender and ethnic identity play in this feeling of belonging/not belonging?

Have you found this to be similar/different in the past? (Trying to get a feel for how they feel university has shaped their identity).

ACADEMIC ACHIEVEMENT

Tell me a bit about your experience of studying for GCSEs and A-levels. What were your grades? What sort of student were you at school/college? How did you feel about your achievements?

Did this affect how you saw yourself? In what way?

How well do you feel you are doing at university? Where would you put yourself in relation to others on your course in terms of academic achievement? How does that make you feel?

Would you say that you work hard at university? Do you put in effort to achieve highly? How does this manifest itself?

What does it mean to do well at university? What would this look like? (Prompts: just grades? Experiences/skills learned?)

What degree classification do you hope to obtain? Is this important to you? Why?

Do you think of yourself as a 'high achiever'? Why/why not?

Do you feel under pressure to do well? Why/why not? If yes, from whom?

Do you talk about your academic achievement/grades with anyone else (e.g. family or friends)? What do they say? What impact, if any, does this have on you?

Do you feel competitive with friends/other students on your course? Why is this? Does this affect your behaviour? If yes, how?

Do you feel that it is more 'acceptable' to want to achieve highly at university than it was at school/college?

INTERESTS AND EXTRA-CURRICULAR ACTIVITIES

Do you engage in university life/university activities outside of your course? If yes, in what way? (E.g. societies, student representative positions, university events).

Why did you decide on these particular activities/societies? If you don't engage in university activities, why not?

Do you have a part-time job? If yes, what is the job and do you enjoy it? Why do you work part-time? Does it impact on your studies at all? If yes, in what way? How do you feel about that? If you don't have a part-time job, why not?

Can you tell me a bit about the people you spend time with at university? How/where did you first meet them? What sort of people are they?

Are these relationships central to your university experience? If yes, how/why? If no, why not?

What do you enjoy about university life? (Prompts: studying, socialising, campus 'culture', study-home life balance, financial aspects of being a student).

What, if anything, don't you enjoy about university life?

What do you like to do in your 'leisure time'?

Going on nights out and socialising is seen by some as a distinctive component of university life. Do you engage much in these activities? Why/why not? If yes, what is your experience on nights out? Do you feel safe?

Do you feel that Marlton University has a 'laddish' campus culture? If yes, how does it manifest itself? (Prompts: on nights out, on campus, during lectures/seminars, online interactions such as social media – Facebook, Twitter, Instagram?) Can you think of any incidents?

Was it something you expected to encounter here? Why/Why not? Does it affect your university experience? If yes, how?

Are there any dominant ways of being a 'girl' at Marlton University? Are there any pressures to 'fit in' with certain groups of people? If yes, how? (E.g. styles of dress, make-up, buying certain things?). Are these pressures discipline specific?

Are there pressures online e.g. Facebook, Instagram, Snapchat, Twitter?

ASPIRATIONS FOR THE FUTURE

What job did you want to do when you were at secondary school/college? Why?

What are your current career aspirations? What is it about this career that attracts you?

Have your career plans changed in any way since being at university? If so, how and why?

Do you think that your degree is preparing you to reach your career goals? In what way? If not, why not?

Do you feel that your chosen discipline will lead to good job prospects? On what are you basing this judgement? Are you glad that you chose to study your discipline?

What are your future plans outside of work in the few years after you graduate (e.g. travel, further study, work-life balance)? What about in 10-15 years' time?

Do you think your chosen career will be compatible with/will accommodate your future work-life plans? If yes, how? If no, will this matter?

Before we move on to look at your diary, is there anything else you would like to add?

PART 2 – DIARY ACTIVITY

How did you find keeping the diary?

Were there any problems with the diary (Prompts: keeping it, structure, layout, presentation)?

Do you normally keep a diary?

Did knowing that I'd be reading the diary affect the content? Is there anything you didn't include?

Would you say that the week you kept your diary for was fairly typical of your life whilst studying at university? Why/why not?

CONTENT

Are there any incidents in your diary that you feel are particularly important or noteworthy?

What do you think your diary says about you as a student?

What do you think it says about gender, and the significance of a person's gender whilst they study at university, if anything?

Do you have anything else that you would like to add?

Looking back over the interview, are there any points that you felt were particularly important or interesting?

Closing questions/practicalities:

Is there anything that you would like me to remove from the transcript?

Would you like to choose a pseudonym that I will use in my write-up?

Am I allowed to take copies of any parts of your diary? Just to assure you, all names will be changed and all identifying information will be removed.

Are you happy to take part in the email interview in June?

Which email address should I use to contact you in the future, e.g. to arrange a final interview in October?

Email Interview

Dear,

Many thanks for taking part in an interview with me back in March. I hope all has been going well with you and your studies since we last met. Now that your exams are drawing to a close, I am emailing you with a few questions, as a sort of catch up interview. I'd really appreciate it if you would email me back some responses when you have a few spare moments. The questions are posted below the body of this email.

The easiest way to respond to the questions would be to press 'reply' to this email, and then to type your own response to each question directly underneath it. However if you would prefer to work offline, you could alternatively copy and paste the questions into a Word document and email the completed document back to me as an email attachment.

Please feel free to write as much or as little as you wish in response to the questions – but as much detail as you can manage would be great. Just to reassure you, there are no right or wrong answers to the questions, and you can answer them in any way you like. It doesn't matter if you feel like you are going off topic – all responses are really valuable. These questions are all aimed at finding out what is important to you. Also, you may feel that not much has changed in your life since March, however it's absolutely fine for you to say this in response to the questions.

It's been a while since we met, so just to remind you, in this project I'm exploring female undergraduates' everyday experiences whilst they study at a high-performing university. The project has a particular focus on gender and academic achievement, and I'm also aiming to explore similarities and differences in the experiences of STEM (*science, technology, engineering or maths*) students and arts/humanities students.

Please do email me with any questions you might have about the task, or if you have any problems answering any of the questions.

Best wishes,

Lauren Stentiford

PhD Student, Graduate School of Education

University of Exeter

QUESTIONS

- 1. What is occupying your thoughts and your time at present? You could think about this in relation to university, your social life, your work commitments, family, friends, summer plans, or anything else which seems relevant.**

- 2. How has your degree course been going since we last met (e.g. lectures/seminars/labs, coursework, revision, exams, teacher-student relationships, peer relationships)?**

- 3. Can you describe one event/incident/issue that stands out as memorable since we met back in March – particularly in relation to the themes of the project (i.e. gender and academic achievement)?**

- 4. Now that you have reached the end of your second year, how would you describe or summarise your experience? What are your thoughts on your achievements?**

Thank you

Interview 2

Introduction

- Introduce myself and the research project.

Anonymity, confidentiality, recording the interview

- Tell student about anonymity and confidentiality.
- Check that student is happy for the interview to be digitally recorded/transcribed.
- Get student to sign consent form.

This interview

- Tell student about the structure of the interview. Ask if student has any questions.

INTRODUCTORY/CATCH-UP QUESTIONS

How was your summer break? Has anything particularly interesting or memorable happened since we last caught up by email?

(Personal questions developed in light of their previous interviews – e.g. how have summer internships/jobs gone?)

How did your final assessments go? Did you get the results you hoped for? Why/why not?

Have these results affected the way you see yourself and your achievement? How did this make you feel? Did you discuss your results with others? Have these results affected your plans in any way?

COURSE/ACHIEVEMENT

How has your course been going since you started back after the summer? (Prompts: **lectures/seminars/tutorials/labs/workshop sessions, coursework, revision, exams, teacher-student relationships, peer relationships**).

Coming into your third year of study, have you noticed any differences in terms of:

- **Your own motivation/attitude towards work?**
- **Your friends'/classmates' motivation/attitudes towards work?**
- **Your relationships with teaching staff?**

Talk me through what you would like to achieve this term. What is important to you in your last year of university?

Do you currently feel happy with/on top of the work?

What are you most looking forward to this year? (You could think about this in relation to academic study or your wider university experience.)

What are you least looking forward to/most worried about this year? (You could think about this in relation to academic study or your wider university experience.)

EXTRA-CURRICULAR QUESTIONS

Who are you living with this year? Why did you decide to live with these people? How are you finding it?

(Alternative question for the 2 mature students who live in their own homes and commute in) How well do you feel that you are managing to balance the 'demands' of university and home life this year?

Coming into your third year of study, which relationships are most important to you right now (e.g. friends, family, boyfriends)? Why?

What are you doing in your spare time?

Have you got a part-time job, or do you intend to work at any point during the coming year? Why/why not? If yes, does this fit with study?

I would now like to move on and ask you a few questions about your chosen discipline.

DISCIPLINE/IDENTITY QUESTIONS

What personal qualities do you think that a student needs to successfully study (engineering/physics/English/modern languages/anthropology) at university? Why?

Would you say that you possess these personal qualities?

I'd now like to hand you a sheet with a short list of personal qualities. Which of the following do you feel most accurately describes yourself:

Creative, outgoing, self-critical, reserved, a worrier, rational, sensitive, logical, practical, tough-skinned, quiet, forth-right, self-confident.

(Ask them to give a couple of examples why)

Do you feel that your discipline is an important part of who you are, or is it just something that you study? How do you identify with your discipline? Will you in the future?

I'd now like to move on and explore certain aspects of your course in greater depth.

DISCIPLINE/DIFFICULTY/GENDER QUESTIONS

Are there any modules or years of your course (i.e. Year 1, 2 or 3) that are known for being particularly difficult? Who says they're difficult? Why are they considered to be difficult?

How does this impact upon the way in which you view/approach the course?

Do you think that there are any modules/fields/tasks/activities in (engineering/physics/English/modern languages/anthropology) that are seen as 'for male students' or 'for female students'?

How does this impact upon the way in which:

- You engage with these modules/activities?
- Other students engage with these modules/activities?

As my project is designed to explore similarities and differences across arts/humanities students' and STEM students' experiences at university, I also wanted to ask your opinions on the two fields of study.

ARTS/HUMANITIES AND STEM

Do you think that arts/humanities students and STEM students are different 'types' of people? If yes, in what way? (Prompts: do they share similar interests, outlooks, skills etc.?).

What about *female* arts/humanities students and female STEM students? Are they different 'types' of people? If yes, in what way? (Prompts: do they share similar interests, outlooks, skills etc.?).

Do you think that female arts/humanities and female STEM students have a similar experience whilst they study at university? Why/why not?

Do you think it is easier being an arts/humanities student or a STEM student? (Prompts: academic achievement, respect afforded, workload, classroom experience?)

I'd now like to move on and ask you a couple more questions about your career plans and plans for the future.

CAREER/FUTURE PLANS

Have you had any further thoughts about what you want to do after you finish your degree? E.g. jobs, time out, further study, work experience/internships?

Do you hope to use your degree in some way, or do you think you would like a change of direction? Why?

Are there any jobs you definitely wouldn't want to do? Why?

When do you think you will start applying for jobs/internships/further study?
What is your timeline for the year?

TIMELINE ACTIVITY

As a final activity, I'd like to get you to fill in this blank timeline (*give participants sheet*), jotting down any plans/hopes you might have for the future. On the bottom bar, I'd like you to write down and career aspirations you might have. On the top bar, I'd like you to write down any key 'milestones' that you want to achieve/obtain in your life, e.g. learning to drive, buying a house, travelling, etc.

CLOSING QUESTIONS

What will you take from or remember most about your time spent at Marlton University?

(Questions to fill gaps from last time e.g. parents' occupations, GCSE/A-level grades obtained etc.).

Is there anything that you would like me to remove from the interview transcript?

Are there any other questions you would like to ask me about the project before you go?

End

Thank you very much for agreeing to participate in this project – I really appreciate you taking the time to help me with this.

TIMELINE – FUTURE PLANS/GOALS

Life



AGE

Career

Alternative Interview 2 Questions for the Year Abroad Students (*used instead of the course/extra-curricular questions and timeline activity listed above*)

Your experiences so far during your year abroad

1. In which country are you currently based? How are you currently spending your time (e.g. studying, working, teaching)?
2. Why did you choose to spend your year abroad doing this?
3. What are your plans for the rest of the year? Are you intending to stay in the same place or are you intending to travel/study/work in another area/country later in the year?
4. How are you finding your time spent abroad? What things are most different?
5. What are you most enjoying so far on your year abroad?
6. What are you least enjoying so far on your year abroad?
7. What contact do you have with the university (if any)?
8. Do you feel that this year is ultimately helping you with your studies? How is it preparing you for the future?

Your experiences outside of your course

9. Where are you living this year and who are you living with? How are you finding it?
10. Which relationships are most important to you right now (e.g. family, friends, course mates, partners, new acquaintances)? Why?
11. What are you doing in your spare time?

Future plans

12. What are you **most** and **least** looking forward to next academic year, during your final year of undergraduate study (i.e. Year 4)?
13. What will be your key priorities in Year 4? (E.g. getting good grades, extra-curricular activities, socialising with friends, planning for a career/further study etc.)
14. Have you had any further thoughts about what you want to do after you finish your degree? (E.g. the types of jobs you might want to do, further study, work experience/internships, time out, etc.)
15. In your opinion, what makes a student a 'success' in the university? (E.g. getting high grades, making good friends, obtaining work experience, developing other skills...)

Appendix 11

The Five Disciplines – Course Structures and Assessment Practices

Contextual information about the five ‘learning cultures’ at Marlton University in which the women were studying.

Engineering

Marlton University’s engineering department offers undergraduate students a number of different pathways and specialisms. Students can opt to study for a BEng in Engineering which gives students a broad understanding of their chosen discipline, or can opt to specialise in a sub-field of engineering such as civil, mechanical, electronic or materials. In Year 1, students are expected to study a set of core modules which are designed to provide students with a good base knowledge of key topics and concepts, totalling 120 credits⁴⁶. Modules range from engineering mechanics and mathematics to professional and management studies. In Year 2, students are required to study another set of core modules and are permitted to choose a small number of optional modules being run by the department. In Year 3, students have to complete a final set of core and optional modules and, depending on their chosen specialism, are usually required to complete an individual project under the supervision of lecturing staff on a topic of interest. If students average a sufficiently high mark in Year 2, they are permitted entry onto a Masters course in their sub-specialism and can stay on at Marlton for an extra year (Year 4) in order to gain further accreditation, if they wish.

Engineering students can expect to study at least four modules per term, for which they have to attend lectures and tutorials every week. These normally last for one hour respectively. In addition, students are required to collaborate with their peers on a number of engineering projects throughout the year, working in the department’s laboratories (‘labs’) and workshops. These ‘spaces’ are kitted out with specialist machines and computers loaded with dedicated engineering software. Marlton’s engineering programmes seek to link strongly with industry, and students therefore have occasional talks from professionals working within their field, are required to take part in residential field-trips, and sometimes have to attend conferences and networking events. After these events, students are often required to write up a report evaluating their experience. In terms of formal assessment, engineering students are continually assessed via coursework assignments spread throughout the year (which include projects, essays and presentations), and have exams in both January and the summer term. Formal

⁴⁶ 120 credits is the standard number of credits that a student must complete each academic year when undertaking an undergraduate degree at an HEI in England.

contact hours can be as high as 32 hours per week.

Physics

In Year 1, Marilton University's undergraduate physics and astrophysics students are required to complete a set of compulsory core modules, which aim to provide students with a good understanding of key concepts in physics and mathematics. Students have to study approximately four modules per term – two in physics, one in mathematics, and one in a related field such as computing. These compulsory modules total 120 credits. In Year 2, students are again required to study a number of compulsory core modules, but can also choose a small number of optional modules which match their specific interests. In Year 3, students are required to complete a number of modules in advanced topics such as quantum physics, high-energy particle physics, condensed matter and cosmology, and have to undertake a substantial project based upon an extended laboratory experiment. As with engineering, if students average a sufficiently high mark in Year 2, they are permitted entry onto the Masters programme.

In terms of learning and assessment, students are required to attend hour-long weekly lectures and tutorials for each module. Students also have to complete weekly 'problem sheets' and maths homework sheets to bring their maths skills up to scratch, and attend problem classes with tutors who talk them through the sheets. Each term, physics students have to spend time a considerable number of hours in the teaching laboratory supervised by staff and postgraduate research students. During these 'lab' sessions, students must complete an experiment, often with one or two 'lab partners'. These experiments can run for many weeks at a time, and students are then expected to write their findings up into a lab report. These lab reports are then submitted to be formally assessed – although students are sometimes required to complete an oral presentation instead. Students can expect to spend approximately 15 hours in class per week, but are also required to complete at least 20 hours of independent study. In terms of formal assessment, physics students are continually assessed via coursework assignments spread throughout the year (which include projects, lab reports, problem sheets and presentations), and have January and summer exams, as well as mid-terms.

Anthropology

Marilton's anthropology degree programme is run by a small department within the University. Each academic year, students are required to study several core modules which introduce them to fundamental theories, topics and methods in anthropology. Topics covered normally include archaeology, artefacts, traditional cultures, contemporary anthropology and ethnographic methods. Unlike undergraduate students in engineering and physics, anthropology students have much greater choice over the content of their course. Each term, students can choose from a number of optional modules that are being run by the anthropology department, led by academics with various different research

specialisms. Students can even opt to study modules in disciplines closely aligned with anthropology such as modern languages, sociology, philosophy and archaeology, provided that students consult with staff beforehand and that timetabling permits.

Anthropology students are expected to attend weekly lecture and seminar sessions for each module, which usually last for an hour. In total, students are required to spend approximately 8-10 hours in class each week, but are expected to complete around 30 hours of independent study. Anthropology students are formally assessed through a combination of essay-based coursework assignments and spoken presentations that are spread across the academic year, and must complete exams in both January and the summer term. In Year 3, students are also expected to complete a dissertation on a topic of their choosing, supervised by research staff.

English

Marlton University's English course is structured in a similar way to anthropology. In Year 1, students are required to study a number of core modules which aim to provide students with a good foundational knowledge of key concepts and texts in English. Topics covered usually include pre-1800s literature, contemporary literature, poetry and critical theory. Students can then choose from a range of optional modules run by academics with various research specialisms, totalling 120 credits. In Year 2, students have greater choice over their modules and can pursue the modules that interest them most from a list offered by the department. Students can also opt to study modules in departments closely aligned with English (e.g. film studies). In Year 3, students are again expected to study a number of core and optional modules, but are also required to complete a dissertation under the supervision of staff. English students spend approximately 8-10 hours in class each week, but are expected complete around 30 hours of independent study.

Teaching in English is conducted via weekly lecture and seminar sessions which can last between 2-3 hours (including a short break to ensure that students do not get too fatigued). In addition, students are expected to attend study groups with a small number of their peers. In these study groups, students are required to discuss set texts and prepare for seminar presentations. English students are continually assessed via essays and oral presentations throughout the year, and have exams in January and the summer term.

Modern Languages

Marlton's modern languages students can choose to study up to three languages that the department offers, which include French, Spanish, German, Russian, Italian and Chinese. For each of these languages, students have to study a combination of 'language' modules and 'culture' modules each academic year. Language modules teach students the linguistic specificities of

their chosen language/s, including grammar and pronunciation. Culture modules aim to provide students with an overview of the evolution of the culture of their chosen country, and often focus on aspects of literature, theatre, music or politics. Language modules are compulsory, but students can choose to study the culture modules that interest them most from a range offered by the department.

Modern languages students are taught through a combination of lectures, seminars/tutorials, grammar classes and oral speaking classes. In the oral speaking classes, small groups of students meet with a native speaker of their chosen language and discuss different topics, to help students learn correct pronunciation and develop fluency. Each of these teaching sessions normally last for one hour, and students have approximately 10 hours of contact time each week. Students can also attend additional conversation classes run by a student society for each language, and have the use of specialist facilities in Marlton's dedicated Modern Languages Centre, which houses satellite TV channels and computers loaded with language-learning packages.

Modern languages students are assessed through essay-based coursework assignments, spoken exams and written exams which are spread across each academic year. In Year 3, modern languages students are also required to spend a year abroad either studying at a partner university, teaching at a local school, or working within their chosen country of interest. Modern languages students are obliged to arrange this year themselves (including travel, finance and accommodation). Students are then expected to return to Marlton in Year 4 and complete a final year of language and culture modules, totalling 120 credits.

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