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Understanding progression into higher education for disadvantaged and under-represented groups

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The views expressed in this report are the authors own and do not necessarily reflect those of the Department for Business, Innovation and Skills.

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## **Executive Summary**

#### **About this Report**

This report presents the findings from a study commissioned by the Department for Business, Innovation and Skills and carried out by CFE Research and its Associates with support from the Avon Longitudinal Study of Parents and Children (also known as the 'Children of the 90s' study), University of Bristol. The research was undertaken between March 2014 and January 2015 and explores the reasons, beyond educational attainment, for differential rates of participation in higher education by gender and ethnicity, particularly among lower socioeconomic groups.

#### **Background to the research**

The expansion of higher education has become a notable feature of the education system in England in recent years as the number of young people entering higher education has steadily increased since the early 1990s. However, the likelihood of participation varies significantly by age, gender, ethnicity, socioeconomic status and attainment. Successive governments have adopted policies for widening participation that have sought to raise aspirations and remove barriers to higher education for under-represented groups. Although the gaps in participation are narrowing, some groups continue to be under-represented, and significant gaps between groups remain that are not yet fully understood.

Prior attainment has been identified as a key determinant of whether or not an individual will progress into higher education; however this does not explain all the differences that exist by key groups, and in particular, by ethnicity and disadvantage. This research adds to existing evidence by investigating what other factors might determine progression to higher education, with particular attention paid to the role of aspirations, attitudes and behaviours displayed by young people and their parents. The objectives of this research are to:

- identify gaps in current understanding of the reasons why some groups are less likely to progress into higher education than others;
- establish the key points in a young person's life when their learning and career aspirations are shaped and the factors that influence this process at each stage;
- explore the individual factors, including hidden influences and motivations that determine the likelihood that an individual will successfully progress into higher education; and
- explore barriers that inhibit and enablers that facilitate progression into higher education in order to identify issues for consideration in the development of strategies for addressing under-representation by certain groups of individuals.

#### **Method**

This research was designed primarily as a qualitative study to explore in-depth the factors that influence progression to higher education amongst different groups. The research was undertaken in three inter-related stages and drew on existing research literature and secondary data analysis of national and regional longitudinal datasets in addition to primary qualitative research.

#### (i) Literature Review

Two inter-related literature reviews were completed at the outset of the project. The first specifically examined factors that influence gender participation in higher education; the second was broader and took account of the wider personal, dispositional and situational factors impacting on progression. The purpose was to identify any gaps or potential ambiguities in the existing evidence and to inform our approach to the secondary data analysis and primary research.

#### (ii) Secondary data analysis

Data from the Longitudinal Study of Young People in England and Avon Longitudinal Study of Parents and Children was analysed to explore the role of aspirations and attitudes towards education amongst young people and their parents in influencing the likelihood of progression to higher education. The disparities in aspirations and attitudes exhibited by different groups were initially explored through summary statistics and cross tabulations. Econometric modelling was then used to further investigate the role of aspirations and attitudes, which enabled a number of potential determinants to be controlled for jointly.

#### (iii) Primary Qualitative Research

A sample of young people and parents was selected from the Avon Longitudinal Study of Parents and Children for the primary qualitative research. The young people were aged 22-23 and had achieved a minimum of 5 GCSEs at grades A\*-C. The young people were from the lowest tertile of the Index of Multiple Deprivation in the Survey sample. The parents included those with as well as those without experience of higher education. A total of 43 depth interviews were conducted with young people to explore in detail the individual circumstances, situations, and experiences that impacted upon and influenced decisions about higher education. Three focus groups were conducted with parents. Participants were encouraged to reflect on their experiences of and attitudes towards higher education, the importance attached to higher level study and their aspirations for their children. This qualitative research was not longitudinal, however, participants were explicitly asked to reflect *retrospectively* on their decisions about higher education at certain time points, and the factors that impacted upon these decisions.

#### **Key findings**

There is an extensive existing literature that examines the factors that influence progression to higher education. However, research to examine the way in which these factors interact and the relative influence they have on different groups is more limited. This research adds considerably to this literature by exploring the interplay between

gender, ethnicity and socioeconomic status and wider social, cultural, personal and economic factors and the intersectionality of influences.

#### Role of attitudes and aspirations in the decision making process

The results from our analysis of the Longitudinal Study of Young People in England add to our understanding of the reasons why White disadvantaged young people and boys in particular, are less likely to progress into higher education than disadvantaged individuals from Black and Minority Ethnic groups. Our analysis revealed that White disadvantaged young people were more likely than Black and Minority Ethnic disadvantaged individuals to:

- state that they did not intend to apply for higher education during Key Stage 3;
- aspire to leave full-time education at the end of Year 11<sup>1</sup>;
- have poorer attitudes towards school and their academic work;
- indicate that the best jobs did not necessarily go to those who had been to university; and
- believe that university wasn't for people like them and that it was harder for them to improve things for themselves when compared to their parents

Parents of White disadvantaged pupils were also more likely to believe that leaving school at 16 did not necessarily limit an individual's career opportunities and aimed for their child to begin an apprenticeship or full-time work at the end of Year 11.

Our analysis of the Avon Longitudinal Study of Parents and Children also found that disadvantaged White individuals and their parents generally displayed less desire to continue with their education after compulsory schooling and enter higher education than their advantaged peers.

The findings from our econometric model indicated that aspirations and attitudes do have a significant impact on whether one applies to university and they play a part in explaining gaps in application levels by gender, ethnicity and disadvantage. The major determinant of higher education applications is attainment at Key Stage 4. In the final model, significant gaps by ethnicity still remain even after controlling for school effects, aspirations and attitudes, as well as prior attainment.

#### When decisions about participation in higher education are made

The qualitative research explored the key points in time when decisions about education and future careers come in and out of focus for disadvantaged young people. The findings suggest that from a very young age individuals begin to explore their interests and motivations about a wide range of activities, and that these have the potential to develop

Respondents in the Longitudinal Study of Young People in England data were not affected by the raising of the school leaving age and had the option to leave compulsory education at the end of Year 11.

into career and education aspirations over time in complex, situated ways. The table below outlines the timeline for and the process of decision-making about higher education.

Timeframe	Decision making process
Pre-GCSE	Secondary data analysis suggests that even by Year 9, young people were already engaging with ideas about their chosen career path. At this point, participants in our research suggested that motivations and aspirations associated with education and careers took the form of expressing enjoyment or an aspiration to explore an area of particular interest in more detail.
	At school, and when making choices about their GCSEs, participants started to move from concepts of interest and enjoyment into potential concrete educational and career opportunities.
At School (GCSE choices)	Findings from our qualitative research suggested that those individuals with strong career aspirations and self-motivation tended to progress into higher education, whilst others tended to leave education post GCSEs. Those who chose to leave formal education aged 16 were more interested in gaining employment than more qualifications. These decisions were, however, sometimes the result of a lack of clarity about the opportunities available and the possible benefits of higher education, rather than an active choice.
College or 6 <sup>th</sup> form	At this stage, participants suggested that they had formulated general views about their plans for when they left formal education. This does not necessarily mean that an individual followed this pathway, but it is the point where decisions about whether to participate in higher education or not came into sharp focus. Those who did go to college or 6 <sup>th</sup> form had more deeply engaged with longer-term career planning and viewed participation in higher education as providing increased career opportunities, the acquisition of useful, employability skills, and valuable life experiences.
Final year of college or 6 <sup>th</sup> form	Employability and financial security often came into sharp focus for young people at this stage when a final choice about higher education needed to be made. Those who might be considered more 'risk averse' or without a specific career plan in mind were most likely to leave education at this point with a view to moving into employment.

#### Key influencing factors on decision making

The barriers facing young people entering higher education are well-defined in existing research. In contrast, less is known about the success factors, beyond educational attainment, that help young people to realise their educational ambitions, including progression to higher education. Our research highlights that despite the apparent barriers experienced by disadvantaged groups, many do progress to higher education. This suggests that the removal of barriers alone does not facilitate progression. According to our findings, the key drivers of success include the support of family, peer and education networks, positive attitudes toward education, the provision of relevant and timely information, advice and guidance and an appreciation of the cost and benefits of a chosen pathway. These drivers provide the conditions necessary for an individual to attain and achieve as well as to progress and are in many ways of equal importance.

#### Support networks: Family, friends, education professionals

Respondents consistently spoke about the influence of *support networks* in making active decisions about higher education participation. Support networks were among the most influential factors in establishing specific choices made by young people we interviewed. Parental involvement in particular, often led to changes in the attitudes and behaviour of their children, which had a positive (and negative) impact on their chances of participating in higher education. A number of factors were important in shaping parental attitudes towards higher education. It was common amongst the young people interviewed who had progressed to higher education to report:

- one or more parent was in an occupation where a university education was the norm (even if this particular occupation did not historically require a degree);
- one or more parent had higher education experience and felt it was valuable for their children to study at this level; or
- although neither parent had higher education experience they strongly encouraged their children to take up the opportunity they never had.

In contrast, it was common for the parents, or wider family networks, of the young people who did not go to university to have little or no higher education experience. Although these young people still had the support of their families (and parents in particular), they were more often encouraged to make decisions based on what they felt they wanted to do, rather than being encouraged down a particular path.

Participants also stated that their peer network was an important influence on their decisions about higher education. For example, most who went had peer groups who also went. However, it is important to note that young people can also go against their peers if their motivation and aspirations are strong enough.

Teachers were also instrumental in sparking an interest in a particular subject of study, or helping the young people we spoke to realise their potential. Many participants stated that an inspirational teacher encouraged them to follow a particular career or educational path.

#### **Institutional Habitus**

The concept of institutional habitus, or the ways in which an institution (in this instance schools and colleges) exhibit expectations of who and what its students are expected to be, is also an important influence on higher education decision-making. For the majority of participants in the research, the school or college they attended gave them a sense of what might be expected of them. While some schools were perceived to exhibit little in the way of expectations of education and career progression for their pupils, others were perceived to view university attendance as an expectation for their students and the academically able in particular. Respondents suggested that schools had a broad (although not completely pervasive) view that educational success broadly related to higher education participation. This was reinforced by a lack of formal information about alternative pathways including vocational education and training.

#### **Economic and financial influences**

Participants stated that while economic and financial factors were two of a range of influences that informed their decisions regarding participation in higher education, they were not always critical or defining factors. Those who went into higher education were not deterred by paying tuition fees and the associated costs (living expenses for example). However, they were concerned by whether a university offered value for money and whether they would achieve a return on their investment.

In contrast, the majority of respondents who did not enter higher education reported that they had been deterred by the cost. They suggested that the financial impact of participation was 'not worth the risk' if there was not a job guaranteed at the end of it, or (more frequently) if they were not exactly sure of what they wanted to study or achieve by entering higher education.

The majority of participants interviewed in the depth, including those who attended higher education, had remained local to where they grew up. This was partly due to the positive associations many had about Bristol and the South West in general (and how it formed part of their cultural identity), but for many it also provided a financial safety net – this may be understandable given the socio-economic background of respondents.

#### Making decisions about higher education: Does it feel right?

Within higher education decision-making, prospective students, whatever their background, deal with varying degrees of uncertainty as neither the costs nor the benefits of various options can be entirely known, and depend on many factors outside the individual's control. This often means that satisfying one requirement (studying at a particular university because of its reputation, or geographic location for example) can bring other issues into focus (such as the expense of moving away from home or the debts incurred).

Participants in our research often stated that a final decision about whether, or where, to participate in higher education came down to whether or not it *felt right* for them at that time. This reasoning is heavily influenced depending on the complex interplay of sociocultural, economic and personal motivational and aspirational influences. The importance of *familiarity* is significant amongst participants in our study and specifically important

across personal support networks. The young people we spoke to were often more likely to give information provided by 'someone who knows them' or their own information searches more authority than more formal sources of support from 'someone who knows'. Where personal support networks lack cultural capital, then decisions can be made on misinformation, or a lack of understanding about the benefits of taking part in higher education. Helping young people and their support networks to understand what is needed in order to make an informed decision about whether to participate in higher education would seem to be a critical issue.

#### Conclusion

The findings in this report offer some challenges for policymakers seeking to identify interventions to help support young people to progress in their chosen pathways. The *intersectionality of factors* means that it is impossible to determine the extent and relative influence of the range of factors affecting a young person at a given point in time with any certainty. As it is unlikely that lack of progression can be attributed to a single barrier (beyond lack of attainment) it is not possible to develop a corresponding intervention to address it. Therefore, potential interventions which look to widen access to higher education are likely to be most effective if developed within a coherent framework or programme. Such a programme would look to incorporate interventions that have both 'push and pull' features, addressing barriers while simultaneously promoting the benefits for different groups of individuals. This can be achieved by:

- Understanding that different young people will have different requirements at different times in their lives and that support should be tailored accordingly.
- Raising awareness of the financial and non-financial benefits of higher education and the opportunities available to people with higher level qualifications amongst young people and their support networks particularly during the transition from Key Stage 3 to Key Stage 4.
- Supporting young people to access and make effective use of information, advice and guidance in order for them and their families to build a relevant *choice* architecture for their career and education preferences.
- Empowering young people and equipping them with the skills to make their own decisions, acknowledging that participation in higher education may not be the right pathway for everyone.
- Recognising that interventions will be required across the entire student lifecycle, from an early age right through to the point at which decisions about higher education participation are made. Strategies will necessarily cross government departmental boundaries, with higher education institutions playing a vital role

While further research is needed to evaluate specific approaches for widening participation, the report shows when the conditions are right there is a greater chance that an individual will enter higher education irrespective of their gender, socioeconomic status or ethnicity. However, it is important to recognise that the leap a disadvantaged young person has to take in order to participate in higher education and to reap the benefits can be quite profound, and as such the following potential interventions should be considered.

#### Age and stage appropriate interventions

Young people's interests, attitudes, motivations and aspirations start to form at a relatively young age and these along with the views of their parents have an impact on whether or not an individual eventually applies to university. Whilst disadvantaged White individuals do not have the lowest attainment levels at Key Stage 2, by Year 9, they are far more likely than any other ethnic group to be aspiring towards leaving full-time education and finding an apprenticeship or full-time job. Interventions which engage young people, and particularly White disadvantaged boys during early stages in their lives, could help to break down the negative norms associated with higher education and provide the conditions needed to normalise participation. Alongside this, better quality information from a young age on the types of jobs available in today's labour market, as well as the qualifications required for such positions, may be needed to support progression into higher education amongst under-represented groups.

#### Outreach by higher education institutions at all school ages

Ensuring that higher education institutions play a stronger role earlier in the decision making process and establish a pervasive and positive presence in local communities, particularly in areas of disadvantage, is key. For those young people and their parents who have had very limited or no contact with higher education, the impact of these activities has the potential to be transformative and challenge entrenched family views and perceptions that higher education is not for 'people like them'.

#### Changing the status quo

The more habitual a behavioural pattern is, the less likely a young person is to weigh up the costs and benefits of alternatives in a rational way. For potential higher education students from non-traditional backgrounds, non-participation is potentially more likely to be taken as the default position and many of the young people in our study who did not attend higher education describe their educational choices as *going with the flow*. Many young people describe their decision not to attend university in terms of being unsure about what they want to do and the longer term benefits of a higher education. Making a commitment to a long-term goal or activity can therefore be powerful in helping young people from non-traditional backgrounds plan and come to terms with career and educational choices that may differ from their immediate support networks or personal experiences.

#### Framing participation in higher education

The ways in which higher education is presented to young people has the potential to affect the extent to which they view higher education as a choice for them. Previous research suggests that those from more disadvantaged backgrounds are more likely to view participation in higher education as a *loss* rather than a *gain*. This has also come through strongly in our research; the young people who did not attend university were much more concerned with the cost of higher education, in terms of fees, and the opportunity cost in terms of lost earnings, than those who did attend. Interventions that frame the short- and long-term benefits of higher education are required to encourage those with the ability to progress to move from a position of loss aversion and view the investment in higher education in terms of the potential gains.

### 1 Introduction

This report presents the findings from a study commissioned by the Department for Business, Innovation and Skills and carried out by CFE Research and its Associates with support from the Avon Longitudinal Study of Parents and Children (also known as the 'Children of the 90s' study), University of Bristol. The research was undertaken between March 2014 and January 2015 and explores the reasons, beyond educational attainment, for differential rates of participation in higher education by gender and ethnicity, particularly among lower socio-economic groups.

#### 1.1 Project Background

Following the expansion of the UK higher education system, the Robbins report established the principle that "courses of higher education should be available for all those who are qualified by ability and attainment to pursue them and who wish to do so." Subsequent governments have sought to implement Robbins' vision through reforms to UK higher education, including most recently lifting the cap on student numbers and a new system for student finance. The number of young people overall entering higher education has been steadily increasing; however, some groups have been and continue to be under-represented. *Widening* as well as *increasing* access to higher education remains a critical issue, particularly in the context of government policy priorities around social justice and social mobility.

Economic theory highlights social mobility as being vital to the growth prospects of an economy. Economic growth is boosted when individuals are able to work in those industries where they are most productive. 4 Low levels of mobility can inhibit growth through a misallocation of human resources, that is where individuals are not able to access the opportunities and jobs that would make best use of their skills and abilities. Conversely, high levels of mobility can enable those with the most promise to become entrepreneurs, resulting in faster technological progress, and consequently, stronger levels of growth. Additionally, in instances where individuals believe there is minimal chance of them entering certain career paths, there is likely to be an adverse impact on labour supply, as motivation and effort levels fall. The knock-on effect of this is reduced productivity amongst workers. Higher education can play a key role in improving social mobility. Over recent decades, the UK economy has become increasingly service based, with a growing number of jobs in the service industries requiring higher level qualifications. Hence, attending university can enable those from less affluent backgrounds to enter the professions that make best use of their skills and talents. Furthermore, there appears to be a rising number of graduates today who begin their own businesses<sup>5</sup>, with such

The Robbins Report. (1963). Higher Education: Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins. London: Her Majesty's Stationery Office, p8
<a href="http://www.educationengland.org.uk/documents/robbins/robbins1963.html">http://www.educationengland.org.uk/documents/robbins/robbins1963.html</a>

BIS (2015). Grant letter to HEFCE. <a href="http://www.hefce.ac.uk/media/hefce/content/news/news/2015/Higher Education">http://www.hefce.ac.uk/media/hefce/content/news/news/2015/Higher Education</a> Funding Letter 2015-16.pdf

Murphy K, Scheifer A & Vishny R. (1991). The Allocation of Talent: Implications for Growth. Quarterly Journal of Economics, Volume 106(2): 503-530

http://www.independent.co.uk/student/career-planning/getting-job/the-rise-of-the-graduate-entrepreneur-8598949.html

entrepreneurial activity likely to have a positive impact on economic growth and job creation. The Government's current strategy, *Improving social mobility to create a fairer society*, aims to "make it easier for young people to successfully move from school to work" by:

- improving the quality of further education and skills training;
- reforming qualifications and the curriculum to better prepare pupils for life after school;
- increasing opportunities for young people and helping them to achieve their potential; and
- making the higher education system more efficient and diverse.

In order to address under-representation and support the diversification of higher education, the Government has allocated funding for institutions to help meet the additional costs associated with recruiting and retaining students from disadvantaged groups through the Student Opportunity Fund and previous initiatives, such as Aimhigher and the National Scholarship Programme, which have delivered direct benefits to students. In addition, institutions are now required to utilise a proportion of their fee income to enhance access and improve retention and success. Although these initiatives appear to be having a positive impact as the participation gaps between the most and least advantaged groups are narrowing, access to higher education remains inequitable and some groups continue to be under-represented, particularly in high-tariff institutions and in certain subject disciplines.<sup>7</sup>

#### 1.2 Research Aims and Objectives

Prior attainment has already been identified as a key determinant of whether or not an individual will progress into higher education, however this cannot explain all the differences that exist by key characteristics, such as ethnicity and disadvantage. This research adds to existing evidence by investigating what other factors might determine higher education progression, aside from attainment, with particular attention paid to the aspirations, attitudes and behaviours displayed by young people and their parents. The objectives of this research are to:

- identify gaps in current understanding of the reasons why some groups are less likely to progress into higher education than others;
- establish the key points in a young person's life when their learning and career aspirations are shaped and the factors that influence this process at each stage;
- explore the individual factors, including hidden influences and motivations that determine the likelihood that an individual will successfully progress into higher education; and

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See <a href="https://www.gov.uk/government/policies/improving-social-mobility-to-create-a-fairer-society">https://www.gov.uk/government/policies/improving-social-mobility-to-create-a-fairer-society</a>

Milburn, A. (2012). University Challenge: How Higher Education Can Advance Social Mobility, pp 1-2. https://www.gov.uk/government/publications/independent-reviewer-s-report-on-higher-education

 explore barriers that inhibit and enablers that facilitate progression into higher education in order to identify issues for consideration in the development of strategies for addressing under-representation by certain groups of individuals.

#### 1.3 Methodology

The method employed for this study used secondary data analysis of national and regional longitudinal datasets with primary in-depth qualitative research. The research was undertaken in three inter-related stages as set out below.

#### 1.3.1 Review of existing literature

The research team completed two inter-related literature reviews as part of this project. The first examined personal, dispositional and situational factors impacting on participation in higher education; the second specifically took account of factors that influence gender participation. The reviews draw on material from a range of sources including published academic and applied research, policy documentation and unpublished/grey literature. The literature was gathered using a hierarchical set of search terms (see Appendix 1) which returned more than 300 individual sources. These were then subject to a process of summary and review, with sources classified by subject, and ranked by relevance and methodological quality. The purpose of the analysis was to *identify any gaps or potential ambiguities in the existing evidence and to inform our approach to the quantitative data analysis*. The literature review also informed the primary research by helping to refine the research instruments and the topics for investigation. We draw on this evidence from both the gender and wider literature review throughout the report in order to contextualise the findings. Appendix 2 provides an overview of the key findings from the gender specific literature review. This should be read with the main report in mind.

#### 1.3.2 Secondary data analysis

#### Longitudinal Study of Young People in England

The Longitudinal Study of Young People in England, which began in 2004, followed a sample of young people born between September 1989 and August 1990. Young people in England were asked to complete a questionnaire annually up until 2010, resulting in a panel dataset consisting of seven 'waves'. Parents were also interviewed as part of the study; however data was collected from them in the first four waves only.

The Longitudinal Study of Young People in England dataset was utilised to produce summary statistics and cross-tabulations that highlighted the differences in aspirations and attitudes which existed by gender and ethnicity amongst disadvantaged groups of young people and their parents. An econometric model was then developed to ascertain the role of aspirations and attitudes in decisions about higher education, when other variables known to have an impact were controlled for.

#### Avon Longitudinal Study of Parents and Children

The Avon Longitudinal Study of Parents and Children, known to participants as 'Children of the 90s', is a multi-generational birth cohort study. It was established to build a databank

that could be used to investigate influences on health, development and wellbeing. The study families were recruited during the pregnancy of the index child in the early 1990s. The variables relating to aspirations and attitudes in the databank are similar to those contained within the Longitudinal Study of Young People in England. The data were analysed to identify whether patterns emerging from the analysis of the Longitudinal Study of Young People in England were evident in the Avon region specifically.

A more detailed description of our approach to analysing these datasets is presented in Chapters 3 and 4. More information about the Avon Longitudinal Survey of Parents and Children, its history and use, can be found in Appendix 3.

#### 1.3.3 Primary Qualitative Research

This project was primarily designed to explore the reasons for differential rates of participation between different groups of young people and in particular to understand how different factors intersect to influence the likelihood of a young person progressing to higher education. The fieldwork comprised in-depth one-to-one interviews with young people and focus groups with parents to explore:

- the key points in a young person's life when their learning and career aspirations are shaped and the factors that influence this process at each stage;
- the individual factors, including hidden influences and motivations, that determine the likelihood that an individual will successfully progress into higher education;
- the barriers that inhibit and the enablers that can facilitate successful progression to higher education in order to identify issues for consideration in the development of strategies for addressing under-representation by certain groups of individuals.

The Avon Longitudinal Study of Parents and Children provided the sample frame for the primary qualitative work which comprised young people aged 22 to 23 with a minimum of 5 GCSEs (or equivalent) at grades A\*-C and their parents living in households located in the most deprived neighbourhoods<sup>10</sup> in Avon. It is acknowledged that the characteristics of the panel members are not necessarily representative of the population as a whole - typically the Avon area is less ethnically diverse and exhibits lower levels of deprivation than England as a whole. To counter these issues recruitment was stratified and participants were only selected from those living in the third most deprived English neighbourhoods, rather than the third most deprived in the Avon area. Utilising the panel for the qualitative as well as the quantitative aspects of the project provided a unique opportunity to identify

Throughout this report we use the term 'Avon' as shorthand for the areas of the four counties (Bath & North East Somerset, the City of Bristol, North Somerset and South Gloucestershire) which used to comprise the County of Avon.

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Boyd, A, et al. (2012) Cohort profile: the 'Children of the 90s'—the index offspring of the Avon Longitudinal Study of Parents and Children. *International journal of epidemiology*: dys064.

Neighbourhoods were classified as 'deprived' if they were in the most deprived third of UK neighbourhoods as indicated by the Index of Multiple Deprivation 2007 (IMD). Neighbourhood IMD score was linked to participants household using their ALSPAC held residential postcode on the 1<sup>st</sup> September of the 'Year 9' (age 12/13) academic year and 1<sup>st</sup> June of the 'Year 11'.

which factors are influencing decisions about higher education and explore the reasons why.

#### Depth Interviews with Young People

Participants were recruited by Children of the 90s using a postal and telephone campaign and gave their full and informed consent to take part<sup>11</sup>. The majority of interviews were conducted at the Avon Longitudinal Study of Parents and Children study centre and lasted approximately 45 minutes. In total, 43 depth interviews were conducted. Figure 1 describes the breakdown of these interviews by:

- Those that participated in higher education, by male and female, and White and Black or Minority Ethnic respondents.
- Those that did not participate in higher education by male and female and White and Black or Minority Ethnic respondents.

Higher education participants

Male/Female

White/Black or Minority Ethnic

Male/Female

Figure 1: Breakdown of interviews conducted

#### Focus Groups with Parents

The participants were recruited in the same way as the young people and gave their full and informed consent to take part. The group discussions also took place at the Avon

Both the in-depth interviews and focus groups were recorded onto an encrypted device and transcribed by a University of Bristol vetted transcription company whose employment contract included confidentiality commitments. Young people taking part in depth interviews and parents taking part in focus groups received £10 in compensation for the time spent providing data and travel costs were reimbursed.

Longitudinal Study of Parents and Children study centre and lasted 90 minutes. The groups comprised a total of 16 participants (all white, 12 female and four male). The participants had a mix of higher education and non-higher education experience, and had children with a mix of experience as well. Participants were encouraged to explore their own experiences of higher education, their attitudes towards higher education, including the importance they attach to higher level study, and their aspirations for their children.

#### 1.4 Structure of this Report

Following this introduction, Chapter 2 presents an overview of current trends in higher education participation, comparing participation rates overall by socio-economic status, gender and ethnicity. The remainder of the report looks to build an understanding of why there might be differences in participation within these groups, beyond educational attainment. Chapters 3 and 4 present analysis of secondary data from the Longitudinal Study of Young People in England and the Avon Longitudinal Study of Parents and Children. These chapters illustrate the variations in attitudes and aspirations that exist by gender, ethnicity and socioeconomic status, with Chapter 3 also presenting an econometric model highlighting the impact of aspirations and attitudes towards education on university application decisions, once we control for other key determinants. Chapters 5-7 outline the main findings from the in-depth qualitative study of young people and parents in the Avon area. Chapter 5 concentrates on how decision-making regarding participation in higher education takes place and specifically identifying key points in young people's lives and how these key moments manifest themselves. Chapter 6 looks to understand what factors influence the decision whether to participate in higher education and what impact these factors have on these individuals. It focuses primarily on the cognitive/performative aspects of decision-making around higher education participation including motivations, aspirations, enjoyment and interests. Chapter 7 presents the conclusions and a series of recommendations for policy-makers.

## 2 Trends in Higher Education Participation

This chapter draws on existing research and national data on higher education participation rates in order to identify trends in participation by socioeconomic status, gender and ethnicity. The wider literature on the specific factors that have been shown to influence progression to higher education is referenced throughout the remainder of the report in order to contextualise the findings from the primary research and secondary analysis undertaken as part of this project.

#### 2.1 Current Patterns of Participation and Progression

The official measure of participation of English students is the Higher Education Initial Participation Rate. <sup>12</sup> The measure is an estimate of the actual entry rate in the current year of people who had not previously entered higher education at each age from 17 to 30, based on the current entry rate of previous non-entrants. Overall participation in higher education has been steadily increasing since the 1990s reaching a peak of 49.5 per cent in 2011/12. The latest provisional estimate of the Higher Education Initial Participation Rate for 2012/2013 is 43 per cent, a 6.5 percentage point drop from the previous year and the lowest level since 2006/7 (Figure 2 overleaf). Higher level fees were introduced in 2012/13 and the drop in the initial participation rate is largely explained by a higher proportion of applicants in 2011/12 choosing to progress immediately into higher education rather than deferring entry and thus avoiding the higher level fees. <sup>13</sup> Deferral rates have since returned to more typical levels and the latest data from UCAS indicates that the HEIPR figure is likely to show an increase in the next 2013/14 data.

The UCAS data shows that application rates for 18 year-olds have increased, reaching a record high of 35 per cent for the 2013/14 academic year (from 23.9% in 2012/13). Participation amongst disadvantaged groups has grown in line with this overall increase and the gap between the most and least advantaged has narrowed. However, the likelihood that a young person will participate in higher education continues to vary significantly between these groups.

This report is commissioned to explore the reasons for the differential rates of participation between different socioeconomic and ethnic groups as well as between men and women. The following sections in this chapter, therefore, examine higher education participation rates by socioeconomic status, gender and ethnicity.

The statistic covers English domiciled first-time entrants to UK Higher Education Institutions and English, Welsh and Scottish Further Education Colleges who remain in higher education for at least six months

BIS (2014). Participation Rates in Higher Education: Academic Years 2006/2006 – 2012/2013 (Provisional).

UCAS (2015). January Deadline Analysis: Sex and age. <a href="https://www.ucas.com/corporate/news-and-key-documents/news/2015-cycle-applicant-figures-january-deadline-2015">https://www.ucas.com/corporate/news-and-key-documents/news/2015-cycle-applicant-figures-january-deadline-2015</a>

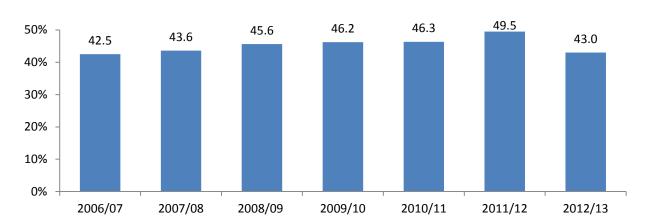


Figure 2: Participation rates (per cent, HEIPR). [Data source: BIS, 2014<sup>15</sup>]

#### 2.2 Socioeconomic Status

Socioeconomic status indicates an individual's position within a social structure defined in terms of access to resources including money, materials, power, social networks, free time and educational opportunities. As such, categories of socioeconomic status are often based on measures of income, professional status, education and deprivation. A range of measures of socioeconomic status are commonly used based on, for example, household income <sup>16</sup> or free school meal status <sup>17</sup> and although there are subtle differences in the way in which terms such as socioeconomic status, social class and disadvantage are defined, they are often used interchangeably. However, whatever measure of socioeconomic status is used, the evidence demonstrates that those in lower socioeconomic groups exhibit lower demand and progression rates into higher education.

Anders (2012)<sup>18</sup> finds that a far greater proportion of individuals in the top income quintile (66%) apply to university compared to young people in the bottom quintile (24%). Similarly, although the eligibility criteria for free school meals has evolved over time, large differences in participation rates by free school meal status have been consistently observed, with the gap remaining steady between 2005 and 2012 at just less than twenty percentage points. Other studies that have explored the determinants of higher education participation associated with socioeconomic status have shown that home ownership and higher levels of parental education have a positive impact on the probability of a young person applying to university, even after controlling for income and social class.<sup>19</sup>

BIS research on higher education participation at age 18 or 19 finds that participation has risen more rapidly amongst those from more deprived backgrounds. This has resulted in participation differences amongst the highest and lowest socioeconomic groups falling by

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BIS (2014). Participation Rates in Higher Education: Academic Years 2006/2006 – 2012/2013 (Provisional). <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/347864/HEIPR\_PUBLICATION\_2012-13.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/347864/HEIPR\_PUBLICATION\_2012-13.pdf</a>

Department for Business, Innovation and Skills (2010). *Full-time young participation by socioeconomic class*.

Department for Business, Innovation and Skills. (2014). Widening participation in higher education.
 Anders. (2012). What's the link between household income and going to university? Department of Quantitative Social Science, Institute of Education, London.

Oliveira T & Zanchi L (2004). Participation in higher education in Britain: The effect of ability and parental income.

around 2 percentages between the 2003 and 2008 GCSE cohorts. However, substantial differences in higher education participation between socioeconomic groups remain. Pupils from the highest socioeconomic quintile group are around 40 percentage points more likely to go to university than those in the lowest socioeconomic quintile group. Furthermore, young people from the highest socioeconomic quintile group are around 7 times more likely to go to a high status institution than those from the lowest socioeconomic quintile group. <sup>20</sup>

We return to the debate about effective measures of socioeconomic status in Chapter 3 where we define the measure used within our analysis of the Longitudinal Study of Young People in England and the rational for our approach.

#### 2.3 Gender

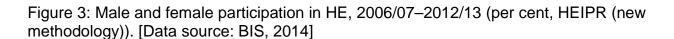
The proportion of women entering higher education has gradually increased since the late 1970s, with a particularly dramatic rise in the late 1980s. In 1992, the female rate of participation in higher education rose above the male rate for the first time, and, it has continued to rise to the present day. Figure 3 illustrates recent trends in the male and female Higher Education Initial Participation Rate from 2006/07 to 2012/13. The gap in 2012/13 stood at almost 9 percentage points. Appendix 2 outlines additional analysis of gender specific literature and higher education participation. This appendix looks at the differences in men and women's participation trends and provides a review of some of the key factors which have the potential to influence participation.

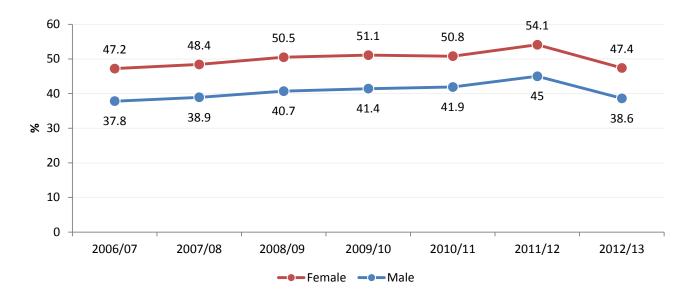
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<sup>20</sup> BIS (2015). Socio-economic, ethnic and gender differences in HE participation.

Broecke, S. & Hamed, J. (2008). Gender Gaps in Higher Education Participation: An Analysis of the Relationship between Prior Attainment and Young Participation by Gender, Socio-Economic Class and Ethnicity. London: Department for Innovation, Universities and Skills. http://dera.joe.ac.uk/8717/1/DIUS-RR-08-14.pdf

BIS (2014). Participation Rates in Higher Education: Academic Years 2006/2006 – 2012/2013 (Provisional). <a href="https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/347864/HEIPR\_PUBLICATION\_2012-13.pdf">https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment\_data/file/347864/HEIPR\_PUBLICATION\_2012-13.pdf</a>





#### 2.4 Ethnicity

There has been a significant amount of research into the effects of ethnicity on university access and a highly complex pattern emerges. The proportion of Black and Minority Ethnic students participating in higher education gradually increased between 1996 and 2006. Ethnic minorities represented 11 per cent of young higher education entrants in the academic year 1996/97, and this proportion had risen to 18 per cent by 2005/06. Furthermore, a series of studies of admissions data since the early 2000s demonstrated that Black and Minority Ethnic groups are *over*-represented in higher education. Despite high levels of participation amongst Black and Minority Ethnic Groups overall, Thomas and Berry report that this headline figure "masks a picture of differential rates of access and routes of entry into higher education by sub-group, variations in profile and very uneven patterns of distribution by subject, location and type of higher education institution".

According to UCAS, the entry rates of Asian and, in particular, Chinese students are considerably higher than other groups. Participation among the Black ethnic group rose from 17 per cent in 2006 to 30 per cent in 2013 and moved marginally above the White British population for the first time in 2010.<sup>26</sup> Figure 4 shows higher education participation at age 18 or 19 by ethnic group compared to White British pupils.<sup>27</sup> The figure highlights

HEFCE (2010). Student Ethnicity: Profile and Progression of Entrants to Full-Time First Degree Study. Bristol: HEFCE. p8 <a href="http://www.hefce.ac.uk/pubs/year/2010/201013/">http://www.hefce.ac.uk/pubs/year/2010/201013/</a>

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Connor, H. et al. (2004). Why the Difference? A Closer Look at Higher Education Minority Ethnic Students and Graduates. London: Department for Education and Skills. <a href="http://www.bristol.ac.uk/media-library/sites/ethnicity/migrated/documents/educationreport.pdf">http://www.bristol.ac.uk/media-library/sites/ethnicity/migrated/documents/educationreport.pdf</a>: UCAS (2013). 2013 Application Cycle: End of Cycle Report. Cheltenham: UCAS. <a href="http://www.ucas.com/sites/default/files/ucas-2013-end-of-cycle-report.pdf">http://www.ucas.com/sites/default/files/ucas-2013-end-of-cycle-report.pdf</a>

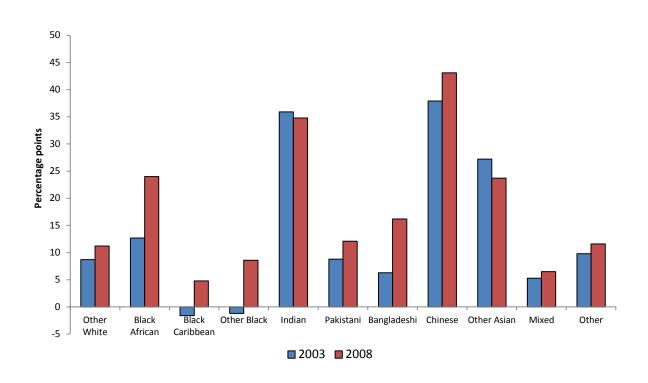
Thomas, L. & Berry, J. (2010). Understanding Widening Participation, p14 in: Weekes-Bernard. (ed.) *Widening Participation and Race Equality*. London: The Runnymede Trust.

UCAS (2013). 2013 Application Cycle: End of Cycle Report. Cheltenham: UCAS. http://www.ucas.com/sites/default/files/ucas-2013-end-of-cycle-report.pdf

<sup>&</sup>lt;sup>27</sup> BIS (2015). Socio-economic, ethnic and gender differences in HE participation.

for example, that in 2003 there were 1.6% fewer Black Caribbean students in higher education relative to White British Students and in 2008 there were 8.6% more. This trend is particularly striking given that a number of studies have indicated that ethnic minority candidates are less likely to receive an offer from elite institutions than equally qualified White candidates (although it should be noted that the extent of this and the reasons behind it remain very much a matter of debate among higher education researchers). 30

Figure 4 Difference in HE participation at age 18 or 19 relative to White British pupils amongst the cohorts taking their GCSEs 2003 to 2008, by ethnic group [BIS, 2015]



<sup>28</sup> It should be noted that ethnic groups are still in the minority overall, these figures are relative to the group they are in.

Minority ethnic groups make up around a fifth to a quarter of the student population.

For contrasting studies see: Ivy, J. (2010). 'Choosing Futures: Influence of Ethnic Origin in University Choice', International Journal of Educational Management 24, no. 5: 391–403; Higher Education Funding Council for England (2005). Higher Education Admissions: Assessment of Bias (Bristol: HEFCE). http://dera.ioe.ac.uk/5843/1/05\_47.pdf.

See for example: Shiner, M., & Modood, T. (2002). 'Help or Hindrance? Higher Education and the Route to Ethnic Equality', *British Journal of Sociology of Education* 23, no. 2: 209–32; Boliver, V. (2013). 'How Fair Is Access to More Prestigious UK Universities?', *The British Journal of Sociology* 64, no. 2: 344–64; Parel, K., & Boliver, P. (2014). 'Ethnicity Trumps School Background as a Predictor of Admission to Elite UK Universities', *Economics of Higher Education*. <a href="http://economicsofhe.org/2014/05/09/ethnicity-trumps-school-background-as-a-predictor-of-admission-to-elite-uk-universities">http://economicsofhe.org/2014/05/09/ethnicity-trumps-school-background-as-a-predictor-of-admission-to-elite-uk-universities</a>; Noden, P., Shiner, M., & Modood T. (2014). 'University Offer Rates for Candidates from Different Ethnic Categories', *Oxford Review of Education*: 1–21.

#### 2.5 Intersection between socioeconomic status, gender and ethnicity

#### 2.5.1 Gender and socioeconomic status

The socioeconomic gap in participation interacts with the gender gap in participation.<sup>31</sup> Although the absolute participation gap between disadvantaged males and females (6ppts) is lower than the overall participation gap between males and females (8ppts), the gender gap is proportionally larger for disadvantaged students. In general, females are 22 per cent more likely to enter higher education than males, however amongst the most disadvantaged socioeconomic groups, women are 35 per cent more likely than men to participate in higher education.<sup>32</sup>

#### 2.5.2 Ethnicity and socioeconomic status

Within every major ethnic group, students from lower socioeconomic groups, defined in terms of those in receipt of free school meals, have considerably lower entry rates than those from more advantaged groups. However, the differences in entry rates between the non-free school meal and free school meal groups vary substantially between ethnic groups. According to UCAS, White non-free school meal pupils are 3.4 times more likely to enter higher education than White free school meal pupils. This compares with a rate of 1.6 for Asian pupils and 1.5 for Black groups. BIS research finds the socioeconomic gradient is steepest for White British people; those in the highest socioeconomic status group are 42 percentage points more likely to go to university than those in the lowest socioeconomic status group. Furthermore, participation amongst the lowest socioeconomic group of White British people is more than 10 percentage points lower than any other ethnic group.

#### 2.5.3 Ethnicity and Gender

For all ethnic groups, participation of females is greater than that of males but the size of the gap varies. BIS research shows that participation overall has continued to increase amongst ethnic groups in recent years.<sup>35</sup> Specifically:

- Ethnic groups with the highest participation are Indian and Chinese advantaged females:
- Lowest participation is among White disadvantaged males

Since 2005, the Participation of Local Areas (POLAR) measure has been used to classify UK geographical areas into quintiles (Q), with the lowest HE participation rates in Q1 and the highest rates in Q5 (HEFCE, 2012). The Higher Education Funding Council for England (HEFCE) publishes POLAR data as a series of data sets and maps at national and local levels. The most recent version of this measure, POLAR3, is based on the participation rates of cohorts of people who were aged 18 between 2005 and 2009 and who entered HE between 2005/06 and 2010/11. This version also extends the scope of the classification to include part-time study and other factors. A new version of this classification is currently in development, known as IPOLAR, which is based on *individualised* POLAR data, and which combines data from 5 cohorts of 18 year-olds from 2006-07 to 2010-11.

HEFCE (2013). Trends in young participation in higher education. Bristol: HEFCE, pp 12-13 http://www.hefce.ac.uk/pubs/year/2013/201328/

UCAS (2013). 2013 Application Cycle: End of Cycle Report. Cheltenham: UCAS. http://www.ucas.com/sites/default/files/ucas-2013-end-of-cycle-report.pdf

<sup>&</sup>lt;sup>34</sup> BIS (2015). Socio-economic, ethnic and gender differences in HE participation.

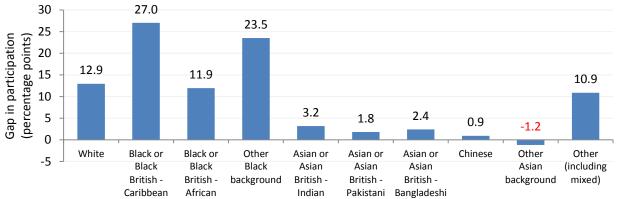
<sup>່</sup> lbid

 The greatest difference between males and females is amongst the advantaged Other Black and Bangladeshi groups.

Analysis of HESA data on full-time first-year students in 2012/13 provides similar results, but also allows us to quantify the gender gaps within ethnic groups (Figure 5). The only ethnic group with a negative gap (that is, more males than females) is 'Other Asian'. The largest gap is amongst 'Black/Black British Caribbean' students, where nearly twice as many females (63.5%) participate in higher education than males (36.5%), resulting in a gender gap of 27 percentage points.

(percentage point gap between sexes = female - male). [Data from: HESA, 2013]<sup>36</sup>

Figure 5: UK domiciled first-year full-time HE students by ethnicity and sex



#### 2.5.4 Gender, socioeconomic status and ethnicity

BIS research examines the gender gap by socioeconomic status *and* ethnicity, in order to explore how these three factors interact.<sup>37</sup> The analysis reveals that in the highest socioeconomic groups, females from all ethnic minority groups are more likely to participate in higher education, on average, than White British females. Similarly, in the lowest socioeconomic groups, both male and female ethnic minorities have significantly higher participation rates than their White British counterparts, and the differences are larger for girls in all cases. Black Caribbean, Other Black, and Bangladeshi male students from the highest socioeconomic status group have lower participation rates, on average, than White British male students from similar socioeconomic backgrounds. In addition, the growth in participation rates of ethnic minorities compared with White British people is generally stronger within the lower socioeconomic groups. Overall, the lowest participation across all ethnic groups, when taking into account gender and socioeconomic status, is for White British males in the lowest socioeconomic status group at 10.5 per cent.

### 2.6 Factors affecting Progression to Higher Education

Evidence suggests that access to higher education is principally determined on the basis of ability, which is signified by attainment of qualifications. Because prior attainment of

HESA (2013a). *UK domiciled HE students by level of study, sex, mode of study, first year identifier and ethnicity 2012/13*. <a href="http://www.hesa.ac.uk/dox/dataTables/studentsAndQualifiers/download/Ethnic1213.xlsx">http://www.hesa.ac.uk/dox/dataTables/studentsAndQualifiers/download/Ethnic1213.xlsx</a>

<sup>&</sup>lt;sup>37</sup> BIS (2015). Socio-economic, ethnic and gender differences in HE participation.

qualifications is the main entry requirement of most higher education institutions, this accounts for most of the difference in participation rates of different groups. But when prior attainment is controlled for, significant gaps remain between groups, particularly in terms of ethnicity and socioeconomic status.<sup>38</sup> Recent research<sup>39</sup> shows that, for example, after accounting for prior attainment gender differences are not observed (again see Appendix 2 for more information on differences in participation between men and women).

Quantitative literature on the factors that determine higher education participation are rather limited. One of the earliest studies to be conducted in this area was by Gayle et al (2002), who investigated whether determinants such as social class, gender and ethnicity influenced an individual's decision to participate in higher education. <sup>40</sup> The authors utilised the Youth Cohort Study, which is a longitudinal survey of young people aged 16 to 19. In particular, they focus on the cohort that were born in either 1969 or 1970, with their dependent variable being whether or not the person was studying for a degree at the age of 18 or 19. By developing a logistic regression model and using sample enumeration as a means of interpreting the results, the researchers found that gender, ethnicity and social class were all factors that impacted on the decision of going to university, even after attainment had been controlled for. However, the Youth Cohort Study only tracks individuals from the age of 16, whereas decisions regarding higher education may begin to be formed at a younger age, which cannot be investigated using such a dataset.

More recently, Chowdry *et al.* (2010) examined the determinants of university participation using individual-level administrative data for pupils who sat their GCSEs in 2001-02 and 2002-03. They created a measure of socioeconomic status that considers both pupil and neighbourhood characteristics, such as free school meal eligibility and index of multiple deprivation score. One limitation of administrative data is the lack of detailed information on socioeconomic background at the individual level. However, checks on the validity of their measure against available data in the Longitudinal Study of Young People in England suggest that they have generated an appropriate indicator. The authors construct linear probability models in which the dependent variable is whether an individual attends university at the age of 19 or 20. They find that gaps in higher education participation by socioeconomic status fall quite markedly once prior attainment is accounted for, with performance at Key Stage 4 appearing to be particularly important.

The remainder of this report looks to understand what factors play a role in substantiating these gaps. Where possible, the report outlines barriers (and enablers) for entry into higher education, through an assessment of the socioeconomic status of participants in the qualitative study, and through analysis of the Longitudinal Survey of Young People in England and the Avon Longitudinal Study of Parents and Children. The following chapters discuss these findings.

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Chowdry, H., Crawford, C., Dearden, L., Goodman, A. and Vignoles, A. (2008), *Understanding the determinants of participation in higher education and the quality of institute attended: analysis using administrative data*, London: Institute for Fiscal Studies, p6.

<sup>&</sup>lt;sup>39</sup> BIS (2015). Socio-economic, ethnic and gender differences in HE participation.

Gayle V., Berridge D., & Davies R. B. (2002). Young People's Entry in Higher Education: Quantifying Influential Factors. *Oxford Review of Education*, Volume 28, No 1, pp 5-20

<sup>&</sup>lt;sup>41</sup> Chowdry, H., Crawford, C., Dearden, L., Goodman, A., & Vignoles, A. (2010). *Widening Participation in Higher Education: Analysis using Linked Administrative Data.* IFS Working Paper W10/04, London

# 3 Analysis of the Longitudinal Study of Young People in England

This chapter highlights findings from our analysis of the Longitudinal Study of Young People in England dataset. We begin with a brief introduction to the study and how utilising this dataset adds to existing evidence. Prior to discussing the results of our analysis, we set out our chosen measure of disadvantage and seek to validate the suitability of this variable.

#### 3.1 The Longitudinal Study of Young People in England

Existing analysis demonstrates that prior attainment is the major factor in explaining the differences in higher education participation by key demographic characteristics; however, there are other influences that are likely to also impact on this choice. To date, very little research has been conducted on these other determinants of participation. It is this gap in the evidence base that we seek to address by analysing the Longitudinal Study of Young People in England.

The focus of the analysis in this research is the university participation choices made by those from less affluent backgrounds. Whilst administrative data fails to provide much data on an individual's socioeconomic background, the Longitudinal Study of Young People in England is an especially rich source of information, supplying a wide range of indicators regarding an individual's socioeconomic status, therefore enabling a more nuanced definition of disadvantage to be created. This will be discussed in more depth later in this chapter. Furthermore, all young people who took part in this study consented for their responses to be linked to National Pupil Database records, which contain each pupil's attainment level from Key Stage 2 to Key Stage 5, as well as the characteristics of their school.

The study, which ran between 2004 and 2010, interviewed young people between the ages of 13 and 20, with a number of questions in the surveys aiming to explore attitudes towards education, subject choices and future aspirations. Parents were also asked about their attitudes towards education, as well as their future expectations for the child. These additional variables allow us to examine whether, alongside attainment and demographic characteristics, attitudes and aspirations play any significant role in higher education decisions. Hence, the Longitudinal Study of Young People in England enables us to carry out quantitative analysis that will add to the existing literature in the area. Before we go on to discuss our measure of disadvantage, Table 1, outlines the age and school year a particular wave of the study corresponds to.

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Please note that in this table we are assuming a pupil continues directly into further and higher education, without taking any gap years.

Table 1: Background information on each wave of the Longitudinal Study of Young People in England

Wave	Age of pupil	Academic year	Are parents surveyed?		
1	13-14	Year 9	Yes		
2	14-15	Year 10	Yes		
3	15-16	Year 11	Yes		
4	16-17	Year 12	Yes		
5	17-18	Year 13	No		
6	18-19 1 <sup>st</sup> year HE No		No		
7	19-20	2 <sup>nd</sup> year HE	No		

#### 3.2 Our Measure of Disadvantage

Frequently, in reported statistics about higher education participation, the eligibility of a pupil for free school meals is used to distinguish between advantaged and less advantaged pupils. However, research by Kounali et al. (2008) highlights that using free school meal status as an indicator of disadvantage can lead to a significant proportion of families with minimal economic capital being classified as advantaged. 43 Additionally, not all families who can claim free school meals will do so and as such will be missed in this measure. Family income potentially represents an alternative measure of disadvantage. Household income data is collected between waves 1 and 4 in the Longitudinal Study of Young People in England, but in the majority of waves, the income measure is banded as opposed to being a continuous variable. In order to calculate the average income for a household across the waves, assumptions and/or econometric analysis must be used to transform banded data for households into a more precise income value. For instance, Anders (2012) utilises interval regression to do this. When he assesses the accuracy of income reporting from households in the Longitudinal Study of Young People in England by comparing the figures to similar data in the Family Resources Survey, he finds evidence of under-reporting of income within this dataset. Given the limitations of income and free school meal eligibility, we have decided against using these as potential measures of disadvantage.

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Kounali D, Robinson T, Goldstein H & Lauder H (2008). The probity of free school meals as a proxy measure for disadvantage. Education Department, University of Bath

Our measure of disadvantage combines data on parental occupation and education (see Appendix 4 for further detail). A young person is deemed to be from a disadvantaged background if they meet both of the following criteria;

- a) Their main parent was employed in a semi-routine/routine occupation or had never worked/was long-term unemployed at wave 1 of the study.
- b) Their main parent held no qualifications, other qualifications or qualifications at level 1 and below, as reported in wave 1 of the survey.

Having generated this variable, we found that 20% of young people in our sample were classified as disadvantaged.<sup>44</sup>

#### 3.3 Descriptive statistics

#### 3.3.1 The dependent variable

The dependent variable within our study is whether or not the young person applied to a higher education institution at the first opportunity to do so during wave 5 of the survey, at the age of 17 or 18. Past studies have generally focused on university attendance. In this research, we are especially interested in finding those factors that are related to whether or not a young person believes higher education is their preferred career pathway and thus attempts to progress into university. There will however be some young people, who despite aspiring towards higher education, are unable to secure a place in the first instance. Hence, we focus on application rather than attendance, to ensure this group are captured within our analysis.

Table 2 presents the differences in application rates by ethnicity amongst advantaged and disadvantaged young people. For each ethnic group, the proportion of advantaged young people who applied to university exceeds the corresponding figure for disadvantaged individuals. In particular, disadvantaged White individuals display very low application levels to university compared to other disadvantaged ethnic groups, aside from the Black Caribbean group. We therefore formulate further summary statistics and cross tabulations to try and identify the potential reasons behind these variations by ethnicity amongst disadvantaged individuals.

In 2004, when the survey was conducted for the first time, 14.3% of pupils were eligible for FSM at a national level according the Sutton Trust.

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Table 2: Proportion of young people from advantaged and disadvantaged backgrounds who applied to a higher education institution during wave 5 by ethnic group

Ethnic group <sup>45</sup>	Advantaged (%)	Disadvantaged (%)
White	37	12
Indian	69	51
Pakistani	51	29
Bangladeshi	43	38
Black Caribbean	38	14
Black African	54	42

#### 3.3.2 Pupil attainment

Before looking at the differences in attitudes and aspirations by ethnicity amongst disadvantaged young people, it is useful to explore the variation in attainment that exists between the groups at both Key Stage 2 and Key Stage 4. We focus here on statistics related to the Longitudinal Study of Young People in England cohort only, as opposed to the full national statistics release. For this cohort, Key Stage 2 tests will have taken place in 2001, whilst GCSE examinations will have been sat in 2006. Attainment data has been sourced from National Pupil Database records. Our measure of attainment at Key Stage 2 is average point score across English, Maths and Science, where a score of 27 would indicate that a pupil achieved an average of level 4 at the age of 11. For Key Stage 4, we use total capped GCSE and equivalents point score. In each subject taken, a pupil is allocated a score between 58 (A\*) and 28 (E). The sum of the individual's eight best GCSEs or equivalent results is used to determine the total score. Whilst disadvantaged White pupils are not the group with the lowest average attainment levels at Key Stage 2. we can see from the table below that, at Key Stage 4, they are now the group with lowest average attainment and falling some distance behind their peers in other ethnic groups (bar Black Caribbean pupils).

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<sup>&</sup>lt;sup>45</sup> Please note that all statistics reported from the Longitudinal Study of Young People in England are weighted.

Table 3: Average Key Stage 2 and Key Stage 4 attainment amongst disadvantaged young people by ethnic group

Ethnicity	KS2 score	KS4 score
White	24.6	227
Indian	25.7	308
Pakistani	24.0	258
Bangladeshi	25.4	286
Black Caribbean	24.0	230
Black African	23.5	261

#### 3.3.3 The attitude and aspirations of young people

In each of the first four waves of the survey, respondents are asked about the likelihood of them applying for higher education. In Table 4, we present wave 1 findings, which highlights the variation by ethnicity amongst disadvantaged individuals. Even by the age of 13-14, disadvantaged White pupils demonstrate much less desire to apply for higher education than any other ethnic group, with 52% of disadvantaged White individuals stating that they are not very likely or not at all likely to apply for university.

Table 4: Likelihood of applying for university amongst disadvantaged young people at wave 1 by ethnic group

Ethnicity	Very likely (%)	Fairly likely (%)	Not very likely (%)	Not at all likely (%)	Total
White	16	32	25	27	2, 559
Indian	52	36	8	4	119
Pakistani	41	42	10	7	181
Bangladeshi	38	45	13	5	101
Black Caribbean	44	30	18	8	40
Black African	56	38	5	1	78

Indeed, over time, this percentage follows an upward trajectory, reaching 72% by wave 4, as we can see from Table 5. Looking more closely at disadvantaged White individuals, we find a large discrepancy between the aspirations of boys and girls. At wave 1, almost three-fifths of disadvantaged White boys state that they are not very or not at all likely to apply to university, with this proportion rising to almost four-fifths by wave 4. In contrast, disadvantaged White girls demonstrate a higher level of interest in applying for university, however even for girls, the percentage not intending to apply steadily increases over time.

Table 5: Proportion of disadvantaged White young people who stated that they are not very likely or not at all likely to apply to university between waves 1 and 4

Gender <sup>46</sup>	Wave 1 (%)	Wave 2 (%)	Wave 3 (%)	Wave 4 (%)
Female	46	57	59	65
Male	58	68	75	79
Overall	52	62	67	72

This analysis led us to examine the aims of the individual after Year 11 and specifically whether they expected to remain in full-time education or leave on a permanent or temporary basis. Whilst leaving school at 16 was a possibility for this Longitudinal Study of Young People in England cohort, this is no longer an option, following changes in legislation meaning all pupils will now remain in education until at least the age of 18.

Table 6, reveals that, at the age of 13-14, over 30% of disadvantaged White pupils planned to leave school at the end of Year 11, compared to a figure of less than 10% amongst all other ethnic groups. <sup>47</sup> Again, we explored the variation between the ambitions of disadvantaged White boys and girls, with a big disparity being found. Nearly forty per cent of boys were looking to leave full-time education after Year 11, compared to 22% of girls.

<sup>&</sup>lt;sup>46</sup> See table 1 for age groups and year groups for each wave.

<sup>&</sup>lt;sup>47</sup> If one were to consider all other ethnic groups as a whole and thus create a Black or Minority Ethnic group, the figure for those looking to leave full-time education or leave full-time education, but return later is 5%.

Table 6: The intentions of disadvantaged young people after Year 11 as reported at wave 1 by ethnic group

Ethnicity	Stay in full- time education (%)	Leave full- time education (%)	Leave full- time education, but return later (%)	Total
White	69	29	2	2, 549
Indian	97	3	1	120
Pakistani	93	6	2	186
Bangladeshi	95	5	0	105
Black Caribbean	93	6	1	40
Black African	98	2	0	80

These statistics do begin to provide an insight into why we observed differences in the likelihood of applying to university by ethnicity, but also between disadvantaged White boys and girls. A large proportion of disadvantaged White pupils aspire to leave education after Year 11, hence they are unlikely to complete the qualifications necessary to apply to university, such as A-levels, with disadvantaged White boys showing a higher preference to leave education at 16 than girls. When we considered the plans of disadvantaged White pupils looking to leave education, we found that most individuals were either aiming to secure a full-time job or start learning a trade, as illustrated in Table 7.

Table 7: The intentions of disadvantaged White young people looking to leave fulltime education after Year 11 at wave 1

Gender	To start working full- time (%)	Start learning a trade / work-based training (%)	Be unemployed/sign on (%)	Something else (%)	Total
Female	51	41	0	8	149
Male	43	50	0	7	307
Overall	45	47	0	8	456

The Longitudinal Study of Young People in England also enables exploration of attitudes towards school, with one of the sections of the wave 1 survey solely considering this topic. Young people are asked to state how strongly they agree or disagree with twelve statements relating to their feelings towards school and academic work. Each of these twelve responses has been given a score between 0 and 4, with a higher score indicating a more positive attitude towards school. The scores for the twelve statements have been summed to create a continuous variable that ranges from 0 to 48, thus generating an overall derived school attitudes variable for each individual. More information on the questions included in generating this variable can be found in Appendix 4. For the majority of ethnic groups, we can see that the general pattern is for school attitudes to decline between waves 1 and 2, before picking up slightly in wave 3. Disadvantaged White pupils demonstrate the most negative attitudes towards schooling across all three waves, with boys demonstrating less positive attitudes towards their academic work and school than girls amongst the disadvantaged White group (Table 8 and Table 9).

Table 8: The mean school attitudes score amongst disadvantaged young people by ethnic group

Ethnicity	Wave 1	Wave 2	Wave 3
White	31.3	29.2	29.3
Indian	36.9	35.3	35.9
Pakistani	36.1	34.5	34.9
Bangladeshi	35.6	34.0	34.8
Black Caribbean	33.4	32.7	32.3
Black African	36.7	34.0	35.6

Table 9: The mean school attitudes score amongst disadvantaged White young people

Gender	Wave 1	Wave 2	Wave 3
Female	31.9	29.5	29.7
Male	30.7	28.9	29.0

During wave 4 of the survey, respondents are supplied with more detailed questions about their views on higher education. Firstly, individuals are asked whether they think that the best jobs go to those who have been to university, with Table 10 illustrating the findings for disadvantaged individuals. More than half (55%) of disadvantaged white pupils disagreed or strongly disagreed that the best jobs go to those individuals who have been to university, whereas a much lower proportion from other ethnic groups did not hold the view that the best jobs go to those who have gone through higher education, aside from the Black Caribbean group. This may indicate that disadvantaged White pupils have very different perceptions of what a great job would be and/or the value they place on a university education. In this instance, we found there to be very little difference between the views of disadvantaged White boys and girls towards this statement. Disadvantaged White pupils were far more likely to agree with the statement that people like them don't go to university, compared with other ethnic groups (Table 11). In this instance, there was

disparity between the views of disadvantaged White boys and girls, with 30% of boys agreeing or strongly agreeing that university wasn't for people like them, compared to 21% of girls.

Table 10: The level of agreement with the statement 'The best jobs go to people who have been to university' amongst disadvantaged young people by ethnic group

Ethnicity	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)	Total
White	14	31	43	12	1, 735
Indian	31	37	28	3	82
Pakistani	26	36	32	6	130
Bangladeshi	31	38	27	3	76
Black Caribbean	10	27	60	3	29
Black African	41	30	19	10	59

Table 11: The level of agreement with the statement 'People like me don't go to university' amongst disadvantaged young people by ethnic group

Ethnicity	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)	Total
White	8	18	52	22	1, 656
Indian	1	5	42	52	77
Pakistani	4	11	50	35	127
Bangladeshi	4	8	50	37	73
Black Caribbean	2	14	51	33	27
Black African	5	9	41	44	58

Finally, in our exploration of the attitudes and aspirations of young people, we investigated the responses and level of agreement shown by individuals to the statement 'It is now easier for people like me to get on and improve things for themselves than it was for my parents'. This question was asked to young people during wave 5 of the study and is perhaps a useful proxy to individual perception on current levels of social mobility within the country and whether individuals think they have the opportunity to progress towards their ideal careers and lifestyle. Whilst the majority of individuals in all ethnic groups believe that it easier for them to improve their circumstances when compared to their parents, 23% of disadvantaged White pupils disagreed or strongly disagreed with this statement, which was the highest figure across all the ethnic groups. It therefore seems that disadvantaged White individuals feel more resigned to their situation than individuals from other ethnic groups. Furthermore, the proportion was greater amongst disadvantaged White boys (27%), as opposed to disadvantaged White girls (18%)

Table 12: The level of agreement with the statement 'It is now easier for people like me to get on and improve things for themselves than it was for my parents' amongst disadvantaged young people by ethnic group

Ethnicity	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)	Total
White	15	62	18	5	1, 477
Indian	29	64	6	1	81
Pakistani	34	56	8	2	123
Bangladeshi	43	48	8	1	76
Black Caribbean	39	47	14	0	23
Black African	39	54	6	0	46

#### 3.3.4 The activities of young people at age 16-17

During wave 4, young people are asked to note what their main activity is. Just 50% of disadvantaged White pupils were still in school or college, whereas a large majority of pupils from other ethnic backgrounds had remained in full-time education after Year 11. A very low proportion of disadvantaged White individuals reported that they had successfully secured a trade or apprenticeship role, with over a quarter stating that they were doing something else.

Table 13: The main activity of disadvantaged young people by ethnic group at wave 4

	Going to a school or college full-time (%)	In full-time paid work (%)	Spending part of week at college and part of it with an employer (%)	On a training course or apprenticeship (%)	Something else (%)	Total
White	50	13	2	9	26	1, 840
Indian	90	1	0	3	5	86
Pakistani	77	3	1	7	13	137
Bangladeshi	85	3	1	6	6	82
Black Caribbean	75	2	3	2	18	30
Black African	93	0	0	2	5	61

Given the earlier findings on the aspirations of disadvantaged white pupils during wave 1 to start working full-time or learning a trade, we decided to see the proportion of individuals from this ethnic group that had achieved their earlier aspirations and we provide the results in Table 14. Only a minority of pupils appear to be achieving their aspirations from a younger age, with the majority being classified as doing something else. Further investigation found that pupils whose main activity was 'something else' were generally unemployed. Indeed, 58% of disadvantaged white pupils who stated that they were doing something else were actually unemployed.

Analysis does not show how this compares with other ethnic groups due to a lack of sufficient sample size. This is because the majority of young people from other ethnic groups were in full-time education.

Table 14: The main activity of disadvantaged White young people at wave 4 by their aspiration at wave 1 if they indicated they want to leave full-time education

	Going to a school or college full-time (%)	In full-time paid work (%)	Spending part of week at college and part of it with an employer (%)	On a training course or apprenticeship (%)	Something else (%)	Total
To start working full- time	30	22	3	8	37	130
Start learning a trade/Start work based training	25	22	2	10	41	121
Something else	30	7	4	24	35	22

### 3.3.5 Aspirations and attitudes of disadvantaged White young people who applied to university

When we analysed the small proportion of disadvantaged White young people who did apply to university at wave 5, we found these individuals possessed far more positive attitudes towards education and schooling. For instance, the lowest mean school attitudes score for this group of young people during the first three waves was 34.9, which far exceeds the mean value found overall for disadvantaged White pupils in any of the first three waves (table 12). In wave 1 of the survey, 83% of disadvantaged White pupils who did go on to apply to university at wave 5 stated that they were fairly likely or very likely to apply to university, with this group almost unanimously aspiring to continue in education after Year 11. Only 7% within this group agreed or strongly agreed that university wasn't for people like them, whilst 70% did agree or strongly agree that the best jobs went to those who had been through higher education.

#### 3.3.6 The attitude and aspirations of parents

Within wave 1 of the study, parents were asked about the career aspirations they hold for their child, as well as their views on education. Focusing our attention on disadvantaged pupils, we find there to be a clear distinction in the aspirations of parents of disadvantaged White individuals and parents of children from other ethnic groups, which we highlight in Table 15. Over 30% of parents of disadvantaged White individuals want their child to leave

education after Year 11, whereas the vast majority of parents from all other ethnic groups are aiming for their child to continue with their education after their GCSEs. There was a large difference in the aspirations of parents of disadvantaged White boys, compared to girls. More than one-third (35%) of parents of disadvantaged White boys wanted their child to start an apprenticeship or trade after Year 11, compared to a corresponding figure of 16% for girls.

Table 15: The aspirations for the child held by parents of disadvantaged young people at wave 1 by ethnic group

Ethnicity	Continue in full-time education (%)	Start a trade, apprenticeship or training course (%)	time naid	Something else (%)	Total
White	67	26	5	1	2, 715
Indian	97	3	1	0	123
Pakistani	96	3	1	1	190
Bangladeshi	97	2	1	0	107
Black Caribbean	90	6	3	0	43
Black African	98	2	1	0	81

Furthermore, Table 16 reveals that parents of disadvantaged White pupils are also far less likely to believe that leaving school at 16 can limit career opportunities. We therefore see from these tables that the parents of disadvantaged White pupils appear to place less value on further and higher education than parents from other ethnic groups.

Table 16: The level of agreement with the statement 'Leaving school at 16 limits young people's career opportunities' amongst parents of disadvantaged young people at wave 1 by ethnic group

Ethnicity	Strongly agree (%)	Agree (%)	Disagree (%)	Strongly disagree (%)	Total
White	46	27	20	8	2, 681
Indian	70	20	7	3	122
Pakistani	70	19	8	3	184
Bangladeshi	61	27	8	5	103
Black Caribbean	58	23	9	10	44
Black African	72	20	6	2	77

#### 3.4 Econometric analysis

The summary statistics we have supplied here seem to suggest that attitudes and aspirations may well impact on higher education decisions. To understand the role of attitudes and aspirations more fully, econometric analysis of the Longitudinal Study of Young People in England dataset was conducted. Descriptive statistics offer a useful guide and insight into what factors may influence an individual's decision to apply for higher education. However, in order to reach more nuanced conclusions, we must account for the determinants of applying to university jointly, which requires the use of regression analysis.

Often, the dependent variable of interest in a regression model is a continuous variable. In this instance, the dependent variable is discrete: university applications can only take one of two values, one if the young person did apply to university and zero otherwise. We

therefore decided to generate probit models<sup>49</sup>, which were preferred in this instance to linear probability models.<sup>50</sup> The final model we estimate is as follows;

Pr(Applying to university) =  $\alpha + \beta Xi + \delta Si + \gamma Ai + \varsigma Pi + \epsilon i$ 

'X' is a vector of demographic and family characteristics. In this research, we are interested in the interactions between gender, ethnicity and disadvantage and it therefore makes sense to include all pair wise and triple interaction terms for these variables within our model. 'S' represents a vector of school characteristics that we have included in the model. This includes factors such as school admissions policy, type of school, prior exam results and the proportion of pupils eligible for free school meals. 'A' represents a vector of the aspirations and attitudes of young people and their parents towards education, academic work and their careers, whilst 'P' is a vector of prior attainment results. Models are estimated sequentially, with our first model consisting of only demographic characteristics.

The results from our analysis can be found in appendix five, where we have only reported the partial effects of the independent variables rather than the results generated from the probit model itself. This is because the coefficients of the probit model have no meaningful interpretation and so it is more useful to report marginal effects, which highlight how a change in the independent variable impacts on the probability of the individual applying to university. Please note that we have reported marginal effects at means, thus interpretation of the model refers to an average individual with mean values for all independent variables.

Prior to explaining the results of our model, it is worth briefly discussing the sampling methods utilised in forming the Longitudinal Study of Young People in England and why this must be taken into account when carrying out econometric analysis, as well as the sample size across waves. The technique used to generate the sample was the probability proportional to size method, with schools being the primary sampling unit. The sampling design means there could be correlation between the observations of individuals within the same school, which must be adjusted for when creating regression models, as standard errors calculated will otherwise be too small. Whilst wave 1 covered 15,770 households, this reduces to 10,430 households by the time we reach wave 5. Additionally, around 6 to 9% of individuals do not provide a valid response to each of the relevant attitudinal and aspiration questions asked between waves 1 and 5, with these being the key reasons why our models are based on a smaller sample size than may be anticipated.

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<sup>&</sup>lt;sup>49</sup> Probit models are an example of a non-linear regression model and the size of the marginal effect of a variable will depend on the values of the other independent variables that one chooses.

Whilst one could utilise ordinary least squares estimation and create linear probability models to analyse the determinants of university participation, this type of regression model does have its drawbacks. In linear probability models, the dependent variable indicates the probability of a person applying to university and thus one would expect the probability values to lie between zero and one. However, in this type of model, it is possible to get values below zero or above one. Furthermore, it is highly unlikely that a linear relationship will exist between the probability of an event occurring and the different potential values of the independent variable(s).

#### 3.4.1 Model One: Demographic and Family Characteristics Only

The first model we created contained only demographic and family characteristics. For ease of interpretation, we decided to simplify the ethnicity variable into two categories – White and Black and Minority Ethnic, which seemed appropriate given White individuals displayed the lowest application levels to university across the various ethnic groups. In this model, we find that ethnicity, disadvantage and gender all significantly impact on the decision to apply to university and that the probability of an (advantaged) White individual applying to university is approximately 24 percentage points lower than that for an (advantaged) Black and Minority Ethnic Individual. We also find that the probability of a disadvantaged individual applying to university is 21 percentage points lower than for an advantaged individual. The interaction term *white\*disad* is also significant and indicates that the ethnic difference in the probability of applying to university is almost 10 percentage points larger for individuals from disadvantaged backgrounds, when compared to their advantaged peers.

Hence, a wider gap in application levels exists between White and Black and Minority Ethnic individuals amongst the disadvantaged group. No other interaction terms between gender, socioeconomic status and ethnicity are significant, but we do find that region, family type and number of siblings have a significant influence over higher education applications.

#### 3.4.2 Model 2: The Introduction of Schools Characteristics

Within our second model, we include school characteristics. Whilst nearly all variables relating to school are significant within this model, we can see that there is little impact on the significance of the demographic variables. The difference in the probability of applying to university between White and Black and Minority Ethnic groups widens further following the addition of these variables, but the magnitude of the gap in application levels by disadvantage falls by around 6 percentage points.

#### 3.4.3 Model 3: The Introduction of Attitude and Aspiration Variables

In model three, we introduce the key variables regarding the attitudes and aspirations of children and their parents, which we have discussed earlier in this paper. We can see that almost all these variables are highly significant. It appears that, in general: the aspirations and attitudes of the child towards education and school have a larger impact on the probability of applying to university than those of the parent. In particular, individual beliefs on whether the best jobs go to those who have been to university, whether university is for people like them and their aspirations for higher education in Year 9 seem to be especially influential.

What is particularly important to note here is the influence adding these variables has on the magnitudes of the coefficients on the key demographic characteristics. The probability of an (advantaged) White individual applying to university is still significantly less than for a (advantaged) Black and Minority Ethnic individual<sup>51</sup>, but the gap has fallen from around 29

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<sup>&</sup>lt;sup>51</sup> The *white\*disad* interaction is added to show whether the gaps in application rates by ethnicity differ by whether an individual is from an advantaged or disadvantaged background. When this is significant, the *white* variable (with no interaction term) refers to advantaged individuals, whilst *white\*disad* refers to disadvantaged individuals.

percentage points to approximately 14 percentage points. In the second model, after adding school characteristics, we find that amongst the disadvantaged group, the probability of a White individual applying to university is 41 percentage points lower when compared to a black and minority ethnic individual; however after including variables relating to attitudes and aspirations, this figure falls to 23 percentage points. Meanwhile, the gender and socioeconomic status gaps in the probability of applying for higher education fall by 3 to 4 percentage points.

Hence, whilst these variables do not explain away all the differences in higher education applications by specific demographic characteristics, they certainly do form part of the explanation as to why we see gaps in application levels by factors such as ethnicity, gender and socioeconomic background.

### 3.4.4 Model 4: The Introduction of Key Stage 2 and Key Stage 4 Attainment

In the final model, we include Key Stage 2 and Key Stage 4 attainment. Following inclusion of these variables, we no longer see any significant differences by socioeconomic status or gender, which confirms earlier work highlighting prior attainment as a major determinant of higher education choices. Despite accounting for prior attainment, we find that gaps remain in higher education applications by ethnicity. The probability of a White individual applying to university is 23 percentage points lower than for a Black and Minority ethnic individual.

The above discussion and modelling however does not enable us to determine the causal effect of particular variables on the probability of applying to university. There may well be unobserved characteristics (e.g. innate ability) that are correlated with specific independent variables (e.g. attainment at Key Stage 4) and applying to university, meaning our coefficient estimates for such independent variables could be biased. However, by including a wide range of control variables within the model, we have attempted to increase our chances of finding the causal impact.

#### 3.5 Summary

Towards the beginning of this chapter, we highlighted the low rate of applications to university by those from disadvantaged White backgrounds and subsequently aimed to investigate the reasons as to why this may be. Our initial cross tabulations indicated that disadvantaged White individuals and their parents had very different future aspirations and attitudes towards education, when compared to disadvantaged individuals from Black and Minority Ethnic backgrounds.

Through econometric analysis, where we were able to jointly control for a full range of factors that can impact on the decision to apply for higher education, we found that:

- The aspirations and attitudes of children and their parents do play a part in explaining the gaps in application rates.
- Young people's views on whether the best jobs go to those who have been through higher education and if university is for people like them appear to be particularly important, alongside their intentions regarding higher education at Key Stage 3.

• Parental aspirations and attitudes have a lower influence on application decisions than the aforementioned variables relating to young people.

However, even after taking into the account aspirations and attitudes of parents and children, as well as prior attainment, there are still significant gaps in the application rates between White and Black and Minority ethnic individuals. The extent of the gap however does not vary by whether an individual is advantaged or disadvantaged. As part of our qualitative fieldwork, we looked to explore what other potential factors that are not being captured through quantitative data may be determining application decisions.

# 4 Avon Longitudinal Study of Parents and Children

The Avon Longitudinal Study of Parents and Children was utilised to recruit and undertake depth interviews with young people and parents as part of our exploration into the factors determining an individual's decision to apply for a place at university. This study however, has collected a wide range of quantitative data at different timeframes relevant to this research, such as the attitudes of young people and their parents towards education, as well as their future career aspirations. We therefore provide an insight into how aspirations and attitudes towards education vary by gender and socioeconomic status in the Avon area, prior to discussing the qualitative findings. This chapter begins with a brief introduction to the study, followed by a discussion of the measure of disadvantage. Quantitative results are then provided.

#### 4.1 Background to the study

The Avon Longitudinal Study of Parents and Children, known to its participants as 'Children of the 90s', is a multi-generational birth cohort study, based at the University of Bristol. The families of all women who were pregnant, while resident in and around the city of Bristol, and due to deliver between 1st April 1991 and 31st December 1992 were considered eligible to take part in the study. Information has been gathered since pregnancy, with the data collection process still ongoing. Individuals provide self-reported information through completing postal questionnaires, with the full cohort or particular subsamples also invited to attend clinical assessment visits, enabling some of the data to be collected directly. Attrition within the sample has been caused by the death of participants, withdrawal from the study or loss of contact with the participant, with this having become more pronounced over the course of the study. 52 Attrition rates are differentiated by sociodemographic characteristics and recent responders (defined as having responded to an Avon Longitudinal Study of Parents and Children data collection assessment between the ages of 16 and 18) are more likely to be female. White, originate from higher income households and possess better attainment levels at Key Stage 4. All young people who were alive at age one were considered to be eligible for inclusion in the secondary data analysis, unless they had withdrawn from the study and requested that the data they had previously provided was not to be used in future investigations (n=17) or, if their personal circumstances meant that there was an unacceptably high chance that their identities could be disclosed (n=13). This gave a final overall sample of 14,687.

Looking more closely at the relevance of the dataset in this project, questionnaires sent to mothers regularly include sections regarding the child's education and enjoyment of school. Mothers are also requested to report the aspirations they hold for their child's education and future career path, as well as their own views on whether an academic or vocational route offers more opportunities to young people later on in their lives. Children are provided with similar questions on education, thus allowing us to explore the attitudes

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Boyd, A, et al. (2012) Cohort profile: the 'Children of the 90s'—the index offspring of the Avon Longitudinal Study of Parents and Children. *International journal of epidemiology*: dys064.

and aspirations of young people and their parents. The study also contains an array of potential indicators of socioeconomic status, as well as other key demographic characteristics, including gender, enabling examination of any differences that may exist in aspirations and attitudes by these variables. Whilst ethnicity is available in the dataset, approximately 95% of the sample is White; meaning variations by ethnicity could not be explored through analysis of the data, due to lack of sample size amongst other ethnic groups.

Additionally, where the Avon Longitudinal Study of Parents and Children had the required permissions to do so, they have established record linkages to participants corresponding National Pupil Database and Higher Education Statistics Agency records. National Pupil Database records provide an individual's attainment between Key Stage 2 and 4, whilst Higher Education Statistics Agency records supply information on whether an individual has entered higher education.

#### 4.2 Measure of Disadvantage

Our strategy for the qualitative aspect of this research involved only interviewing those from a disadvantaged background. For ethical reasons and to preserve the anonymity of participants, we were unable to utilise parental education and occupation to select the sample of young people to be interviewed. Instead, Index of Multiple Deprivation was relied upon to identify disadvantaged individuals who were eligible to participate in the qualitative fieldwork. Hence, our qualitative work in this project used an area based measure of disadvantage, as opposed to a measure at the individual level. As such, we have utilised this measure within the quantitative analysis presented here when comparing the aspirations of advantaged and disadvantaged individuals in the study. Those individuals living in households within the third most deprived English neighbourhoods were classified as being disadvantaged. Just over one-fifth (21%) of the sample was classified as being disadvantaged. We also ran a further check to see whether the results were any different if we utilised maternal education and occupation data provided within the dataset. Young people were deemed to be disadvantaged if their mother did not possess a degree and worked in an occupation that placed her in social class categories III (manual), IV or V<sup>53</sup>. This led to approximately 19% of young people being classified as disadvantaged. Even when using this as a measure of disadvantage, the conclusions reached were the same as when utilising Index of Multiple Deprivation.

#### 4.3 Descriptive Statistics

As mentioned above, the distribution of the sample by ethnicity means that we are only able to focus on young White individuals. However, amongst this group, we look for variations in attitudes and aspirations by both socioeconomic status and gender.

It is useful to begin by looking at higher education participation within the region. Amongst the Avon Longitudinal Study of Young People in England sample, 34% of White individuals were identified as having entered higher education, as indicated by the presence of a

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Those in social class III (manual) are in skilled manual occupations, IV refers to partly-skilled occupations, whilst V relates to unskilled occupations.

Higher Education Statistics Agency record. Yet, this disguises variations that exist by socioeconomic status, with only 17% of disadvantaged White individuals having gone to university, compared to 39% of those from advantaged backgrounds. There were also differences by gender amongst the disadvantaged White group, with 19% of females known to have participated in higher education, compared to 14% of males.

Similar to the picture found amongst the Longitudinal Study of Young People in England cohort, prior attainment, a key determinant of participation in higher education, varies by socioeconomic status within this sample. Advantaged White young people attained an average total capped GCSE score of 333, whilst the average amongst disadvantaged individuals was just 277. In addition, girls outperformed boys within the disadvantaged group by some distance, with girls achieving an average total capped points score of 294, compared to 260 for boys. Aside from attainment however, our analysis of the Longitudinal Study of Young People in England demonstrates that aspirations and attitudes also have a role to play in higher education decisions, hence we see whether aspirations and attitudes towards education in Avon appear to mirror those found in the Longitudinal Study of Young People in England.

#### 4.3.1 The aspirations and attitudes of young people in Avon

The first set of variables we analysed were related to the attitudes of young people towards their school. In particular, we concentrated on school attitudes at the ages of 11 and 14 to identify changes over time between advantaged and disadvantaged individuals with regards to their views on school. This period was carefully chosen, as it marks the transition from primary to secondary level education, which is a phase in which child motivation has been known to dip. Indeed, a general pattern that we do observe in the table below is that attitudes towards school appear to become less positive over time within both the advantaged and disadvantaged groups. However, there is little distinction to be drawn between the attitudes of advantaged and disadvantaged White young people towards school in the Avon region, irrespective of whether we consider opinions at Key Stage 2 or Key Stage 3. Indeed, there was also generally little variation between disadvantaged boys and girls at both 11 and 14 years of age.

Table 17: The proportion who agree or mostly/strongly agree with the above statements amongst White young people at various ages by socioeconomic status (base = variable)

	_		Disadvantaged boys (%)	Disadvantaged girls (%)
School a place where they really like to go each day (at 11 years)	82	85	80	88
School a place where they enjoy what they do in class (at 11 years)	88	89	87	91
School a place where they really like to go each day (at 14 years)	65	62	61	63
School a place where they enjoy what they do in class (at 14 years)	77	74	74	74

At the ages of 13 and 16, young people are asked about their intentions after year 11. In this instance, we do see some disparity in the aspirations of advantaged and disadvantaged young people, with those from disadvantaged backgrounds less likely to state that they are looking to remain in education, although the gap does narrow slightly over time. Where there is a particular difference however, is in the aspirations of disadvantaged White boys and girls. Disadvantaged girls show a much greater preference for remaining in education than boys, with the difference widening between the ages of 13 and 16. We also investigated the types of qualifications those who were aiming to remain in education were looking to study.

Table 18: The proportion of White young people looking to remain in full-time education after age 16 by socio-economic status and gender (base=variable)

	Advantaged (%)		Disadvantaged boys (%)	Disadvantaged girls (%)
Carry on in full-time education (at 13 years)	89	78	72	82
Carry on in full-time education (at 16 years)	94	89	79	94

Table 19 highlights that those from disadvantaged backgrounds were more likely to state that they would enrol in vocational qualifications, as opposed to A levels. This is potentially another reason for the differences in university participation by socioeconomic status, as A-levels have historically been seen as the qualifications individuals require to be accepted into a higher education institution.

Table 18: The proportion of White young people looking to study a particular time of qualification if they are planning to stay in full-time education

	Advantaged (%)	Disadvantaged overall (%)		Disadvantaged girls (%)
A levels/AS qualifications	88	74	71	75
AVCE's/GCE's in applied subjects	2	5	5	5
Other vocational qualifications	10	22	24	20
Total	3, 608	356	107	249

#### 4.3.2 The aspirations and attitudes of parents of young people in Avon

When the child is in Year 11, mothers are asked about the pathway that they believe leads to more opportunities and choice in life in the long run. Here, there is a clear discrepancy between mothers of children from advantaged and disadvantaged backgrounds. Whilst mothers of disadvantaged young people are more likely to believe that having strong practical skills and training will open up more career routes for the child, those from advantaged backgrounds state that good academic results will provide a young person with a greater variety of pathways. There was no difference however, in the views of mothers of disadvantaged White boys and girls.

Table 19: The variation in the attitudes of parents of White young people towards the importance of good academic results for future career opportunities by socioeconomic status

	Advantaged (%)	Disadvantaged (%)
Having good practical skills and training	38	56
Having good academic results	62	44
Total	4,312	497

When their child was 16 years of age, mothers were also asked to indicate the path they wanted the child to take at the end of year 11, with variations by socioeconomic status and gender highlighted in Table 21. Mothers of children from advantaged backgrounds showed a higher level of aspiration for their child to continue into further and higher education, whilst those from disadvantaged backgrounds illustrated a larger tendency for wanting their child to either find a job at the age of 18 or begin an apprenticeship/other form of vocational training. In addition, we observe quite a big difference in maternal aspirations amongst boys and girls within the disadvantaged group.

Mothers of disadvantaged White girls displayed a greater desire for their child to go to university or to stay in school until 18 and then find a job. Meanwhile, amongst disadvantaged White boys, we find that the most popular pathway among mothers was to see their child find an apprenticeship or other type of vocational work. When we analysed the type of job mothers hoped their child would obtain in the future, as indicated by the National Statistics Socioeconomic Classification, 38% of those from advantaged backgrounds wished for their child to find a higher professional occupation, compared to only 24% of mothers of children from disadvantaged backgrounds. Mothers of disadvantaged boys demonstrated a greater desire for their child to become a skilled manual worker, whilst amongst girls, a large proportion (47%) aimed for their daughter to enter a lower professional occupation.

Table 20: The pathway parents of young White people wanted their child to take after Year 11 by socioeconomic status and gender

	Advantaged (%)		Disadvantaged boys (%)	Disadvantaged girls (%)
Leave school at 16 and get a job	1	2	2	1
Stay in school until 18 and then get a job	18	27	22	31
Stay in school/college until 18, then go to university	73	54	47	60
Do an apprenticeship/other vocational training	9	17	29	8
Leave school and look after family/home	0	0	0	0
Total	4,497	521	231	290

Table 21: Maternal aspirations for future job of White young people by socioeconomic status and gender

	Advantaged (%)	Disadvantaged overall (%)		Disadvantaged girls (%)
Higher professional occupation	38	24	26	22
Lower professional occupation	36	35	21	47
Intermediate/Technical	9	11	13	9
Skilled manual workers	11	19	31	9
Small business employers/self-employed	4	6	5	7
Lower supervisory	2	3	1	4
Routine manual and non- manual	1	2	4	2
Total	4,096	447	200	247

#### 4.4 Summary

Although not reported in chapter 3, we did investigate the variations in attitudes and aspirations that existed between advantaged and disadvantaged White individuals in our analysis of the Longitudinal Study of Young People in England. We found that disadvantaged White individuals were more likely than their advantaged counterparts to state they were aiming to leave full-time education at the end of Year 11. Furthermore, parents of disadvantaged White pupils showed a greater preference for their child to leave education at the end of their GCSEs to begin a trade, apprenticeship or a full-time job. The only area where findings from the Longitudinal Study of Young People in England seem to differ from the Avon Longitudinal Study of Parents and Children is on school attitudes. In the Avon region there appears to be little disparity in the attitudes of advantaged and disadvantaged White individuals towards school, whereas we did find variations in school attitudes between the groups in the Longitudinal Study of Young People in England. However, the variations in aspirations and attitudes towards education of disadvantaged White boys compared to girls in the Avon region does generally mirror the results from the Longitudinal Study of Young People in England, with school attitudes again being the notable exception.

Although the sample for the Avon Longitudinal Study of Parents and Children is drawn from a specific geographical area and is not, therefore, representative of the population as a whole, the similarity in the results of our analysis suggests that the panel members are not atypical and that the findings from the quantitative and qualitative research based on this sample are likely to have wider relevance. Whilst we have evidenced the differing attitudes of parents and children from disadvantaged backgrounds, as well as by gender and ethnicity in these two chapters, we go on to explore in more detail factors that determine the aspirations and attitudes of young people that they believe are crucial to their higher education choices through our discussion of the findings from the qualitative fieldwork.

# 5 Primary research findings: The decision making process

The report now turns to findings specifically generated from the qualitative fieldwork undertaken as part of this study. This chapter and chapter 6 summarise the main findings from the 43 interviews with young people and 3 focus groups with parents drawn from the Avon Longitudinal Study of Parents and Children. The findings are presented in the context of relevant existing literature.

The interviews with young people lasted approximately 45 minutes. A timeline was used to frame the discussion. This acted as an *aide-memoire* for participants to consider the key stages in their journey from school into higher education or alternative pathways to work as well as a practical tool to help the interviewer understand the narrative surrounding participant decision-making, and attitudes and motivations toward higher education participation. It is important to note that each participant took part in one interview during the autumn/winter of 2014 and they were asked to consider their expectations and experiences retrospectively. The interviews aimed to:

- Identify key points of reference (current age, age on exiting formal education)
- Establish what the young person is currently doing and how they got to that point.
- Identify when they made the decision to take this path.
- Establish why they chose this path (*internal motivations*).
- Establish the influences on their decisions and this journey (external influences).
- Consider alternative pathways, and how opportunities change.

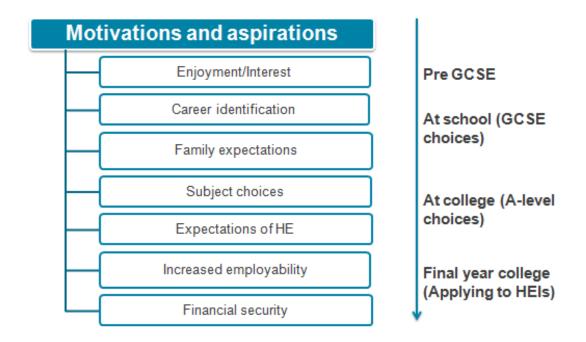
This opening qualitative chapter now seeks to understand the key points in a young person's life when decisions are made about higher education focussing on the cognitive/performative aspects of choice and in particular on young people's motivations and aspirations at given moments in the student lifecycle.

#### 5.1 When decision making takes place

Analysis of qualitative data gathered through this research suggests that different aspects of cognitive and performative markers of higher education participation have the potential to be more influential at different points in time during that individual's early life, and through formal schooling. The interviews conducted broadly followed the trend shown in Figure 6. This visualises participants' movements from a pre-GCSE period where motivations and aspirations focus more often on the interest an individual has in a particular subject, concept or topic, through to the final year of college, where decisions come into sharp focus and factors such as employability and financial security begin to become influential. While Figure 6 identifies a broad timeline with associated motivations and aspirations categorised against specific timings, in reality, these categories are more

fluid and the interplay between them more pronounced. Similarly, the interplay between background and personal characteristics is also more pronounced. Ethnicity, gender and social class, while influential, do not solely account for the decisions that individuals make regarding whether to progress into higher education. Rather it is the intersectionality of these characteristics, the subtle interplay of a variety of personal, social, cultural and economic factors that may mean a young person decides to attend university, or not.

Figure 6 Key motivations and aspirations of young people at specific times



#### 5.2 Pre-GCSE

Our analysis of the Longitudinal Study of Young People in England suggests that even by Year 9, pupils were already well on their way to deciding their career paths in that it is at this early stage when aspirations and hopes for the future are being formed. The findings from the qualitative research confirm that the pre-GCSE timeframe is a key point in establishing a young person's educational and career aspirations. At this point, the participants stated that their motivations and aspirations associated with education and careers were not specifically manifest concretely, but rather took the form of expressing enjoyment or an aspiration to explore an area of particular interest in more detail.

#### 5.2.1 Enjoyment

From the interviews conducted, young people were not attributing this interest to participation in higher education, long-term career goals or employment in general. Rather, they were exploring subjects they had an ability in or an affinity towards. This was about articulating a variety of experiences, and understanding what kind of person that individual was like, and what this meant for their own enjoyment or interest. This was an internal, intrinsic and personal process.

I just felt like it was just in me [performing]. It felt like that is what I was supposed to do. I am always chatting, I am always singing and I have a big personality. I love dancing and I joined an amateur group when I was nine so [...] it just stemmed from there really.

Non-Higher Education, White, Female

The motivation to explore these specific interests further was critical in moving the individual from a simple appreciation of an activity, to thinking more reflexively, about whether their enjoyment in this area could be translated into identifiable educational or career possibilities. Motivation, in this regard, was an important part of understanding embryonic connections between childhood activities and future career aspirations but it is a difficult subject of study to pin down.

There is a lack of clear understanding in the literature about how interest-based motivations are shaped and function as a contributing factor to progression, and there is a lack of evidence about the efficacy of interventions based on increasing motivations amongst prospective students. Early experiences would seem to be critical in establishing long-term interests in activities, but for young people, translating these experiences into opportunities for HE participation does not happen for a number of years.

#### 5.3 At school (GCSE choices)

The young people who participated in this study exhibited views that suggest developing an interest in a particular activity was often followed by a series of additional processes. The first of these was to link that activity to a particular career or goal. At this point, family expectations associated with potential career opportunities, and how these relate to the individual, began to develop, this was common across all participants who took part in the research. These developments often began around the time that young people started their GCSEs. Fundamentally, respondents started to move from concepts of interest and enjoyment into potential concrete educational and career opportunities, while asking questions such as who might I want to be, and what might I want to do. This was also where choosing whether to progress into further education came into play.

#### **5.3.1** Identifying careers and personal goals

As discussed above, it was at this stage – the point at which respondents started their GSCEs – where they reported beginning to consider a link between the enjoyment and general interest in activities they had been exposed to at a younger age and what this might have meant in terms of personal career goals. Importantly, respondents were keen to state that although career identification emerged at this point, this was not an important consideration in relation to their GCSE subject choices. Respondents often stated that they were given little choice or flexibility regarding their GCSE subjects and in general they undertook a range of subjects because that was expected of them.

Having an idea of what you want to do or what you want to be is a big question for young people [...] Most young people don't know what they want to do, [when choosing GCSEs] but they are all told you have got to narrow the subjects down, and they narrow them down again and narrow them down again. But what if they like a mix of different subjects, like music and science, can they do them both?

Parent Focus Group

Perspectives on careers did start to emerge during this stage, however. The progression from enjoyment and interest, through to career identification and subsequent decisions about whether to progress to higher education were still embryonic, and were dependent on a number of other factors for these links to be made concrete. These factors included the individual's self-motivation, the strength of the aspiration an individual had and how their personal experiences impacted upon how realistic they viewed these aspirations.

Because of the fact that I'm a girl, people assume girls can't do science. That was a big motivator for me because I was good at science and I wanted to break the stereotype.

Higher Education, Black or Minority Ethnic, Female

I suppose I have always felt a bit more pressure to take the lead in things, to be a woman who is not white, it is frustrating when you see all of these white men making the decisions. I think I have always kind of felt like well I want someone who isn't a white man to make those decisions. If there is not anyone else in that kind of role, maybe I do it myself.

Higher Education, Black or Minority Ethnic, Female

I had my head hooked on being a forensic scientist ... I chose those subjects in Year 9 so I could get the grades and go onto college. I did the first year at college but dropped out. My dad used to work nights and I have younger sisters ... going through that whole teenager thing, "I can do what I want" kind of stage. I also had a part-time job at the time and it all got a bit too much ... My work wasn't as good as it needed to be. I was given a place on the second year if I felt like I was comfortable to come back, but by the time I got round to it, I still wasn't.

Non-Higher Education, White, Female

In many instances, those motivated to link their enjoyment of an activity or subject to a future career made *active* decisions to attend university, or to go into employment or follow a vocational pathway early on. These individuals tended to identify a pathway into employment, whether that was through higher education or not. Those individuals who lacked self-motivation and had weaker aspirations, tended to fall out of education post-GCSE. This does not necessarily mean these individuals were dissatisfied with their experiences (although in some cases they were), just that they were more interested in gaining employment than more qualifications. However, as the following quote suggests, these decisions were sometimes more *passive* and the result of a lack of clarity about the opportunities available and the possible benefits of higher education.

I was a little bit unsure of what I wanted to do and didn't see the point of going to University unless I knew what I wanted to do. Really, I just wanted experience, I needed to start working and get on with it, not to stay in education and waste time.

Non-Higher Education, White, Male

#### 5.3.2 The influence of Family at this time

It was, in general, at this point when the influence of parents and other family members started to play a more significant role in the choices available to the respondents with whom we spoke. The influence of parents and family members is discussed in more detail in chapter 6, focusing on the key influences of decision-making, alongside peers and

teachers. However, in the context of the timeframe within which decisions were made, this was often the time where support networks played an important role in the expectations young people have. Respondents reflected that family expectations could manifest themselves as:

- A general and pervasive expectation that the respondent will go into higher education or not;
- A general understanding that the respondent should have a plan, and this plan should be linked to a career aspiration, but the respondent is free to choose how to achieve this aspiration;
- encouragement on the basis that respondents should have the opportunity to experience higher education because their own family members didn't, or that they should go because their parents went and it was valuable to them.
- A 'hands-off' approach, guided by the premise that as long as the young person is happy, they should have the freedom to choose their own path in life.

Gorard, See and Davies (2012) in their meta-analysis of existing interventions aimed at raising aspirations, suggest that interventions aimed at increasing parental involvement do help to improve attitudes to learning, increase motivation and enhance self-efficacy amongst young people. It is not difficult to see why this might be so; raising aspirations (hopes) of participating are of little use unless there has been a concomitant investment in education by young people, and this investment could be strengthened by greater parental involvement.<sup>54</sup>

They also examine the effect of *parental* attitudes and behaviour on progression to higher education. The clearest evidence for an effect on participation comes from parental involvement in their children's education. Parental involvement can lead to changes in the attitudes and behaviour of their children, <sup>55</sup> which have a positive impact on their chances of progressing to higher education. Parents can also have the effect of making children aware of career and educational options that they might not have otherwise considered and parental support has been identified as especially influential among ethnic minorities. This suggests that programmes designed to increase parental involvement may help to raise the aspirations of their children. However, this should not be at the expense of programmes to support young people to aspire to higher education. Evidence, including our analysis of the Longitudinal Study of Young People in England, indicates that the views of the young people themselves are more influential than the views of their parents.

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Gorard, S., See, B.H. & Davies, P. (2012). The impact of attitudes and aspirations on educational attainment and participation. York: Joseph Rowntree Foundation. <a href="http://www.jrf.org.uk/sites/files/jrf/education-young-people-parents-full.pdf">http://www.jrf.org.uk/sites/files/jrf/education-young-people-parents-full.pdf</a>

Kniveton, B. H. (2004). The Influences and Motivations on Which Students Base Their Choice of Career. *Research in Education* 72, no 1: 45-59.

Brooks, R. (2003). Young People's Higher Education Choices: The Role of Family and Friends, British Journal of Sociology of Education 24, no. 3: 283–97.

Shah, B., Dwyer, C., & Modood, T. (2010). Explaining Educational Achievement and Career Aspirations among Young British Pakistanis: Mobilizing "Ethnic Capital"? *Sociology* 44, no. 6: 1109–27.

# 5.4 At college or 6<sup>th</sup> form (when making A-level choices/college choices)

At this stage, the majority of respondents participating in the fieldwork had formulated general views about plans when they leave formal education. This did not necessarily mean that an individual would absolutely follow this pathway, but it is the point where decisions about whether to participate in higher education or not came into sharp focus. Not all respondents we spoke to attended college and for these, leaving formal education at 16 was borne out of uncertainty about what they wanted to do, or a strong belief that they wanted to earn a wage and be as financially independent as possible. Those who did go to college (the majority of respondents) had more deeply engaged with longer-term career planning, whether that ultimately meant going to university or not. A number of factors played a specific role at this stage in the timeline; making decisions about what subjects to study (in general at A-levels, but also B-Tech and Apprenticeships); how these might link to a potential career; and formulating more concrete views regarding their expectations of what higher education means to them. Again, it should be noted that support networks (discussed in more detail in the next chapter) played an important role in informing some of these decisions, along with personal views.

#### 5.4.1 Subject choices

Respondents stated that the subjects they chose to study at college played an important role in the subsequent decision whether to attend higher education. Subjects were chosen in the main based on the following considerations:

- Subjects that specifically relate to a chosen career path (for example studying for three science-based A-levels in order to study medicine at university);
- Subjects that provide a mixture of enjoyment or interest with ones which are considered more associated with a particular career pathway (for example; photography or English and law or economics);
- A specific vocational qualification for employment within a trade (for example Apprenticeships in mechanics or hospitality, or more arts oriented vocational qualifications).

In many instances, support networks played a more significant role in influencing the balance of subjects chosen, rather than dictating whether an individual should study one specific qualification over another.

#### 5.4.2 Expectations of higher education

As the participants progressed through college and moved into their final year, their expectations of higher education started to feature more prevalently in decision-making. While the majority of respondents knew what educational pathways they would take at this point, there was still an element of uncertainty regarding what university might be like and what they wanted to achieve. Respondents' expectations of higher education were, at this stage, borne out of the following key aspects (in order of most commonly stated):

#### Perceptions that career opportunities are increased

Many of the young people suggested that, at this stage, participating in higher education provided them with many more career opportunities, and opened many more employment doors over a longer period than would be the case if they did not go to university. This was the case even when the decision to go to university was borne out of a desire to experience university life, as opposed to studying toward a particular career.

Non-higher education participants also suggested this *may* be the case, but were more persuaded that gaining employment experience at an early age would be more beneficial for them moving forward, particularly with regards to financial and personal independence from broader family structures.

### A general view on the value of higher education in the accumulation of useful, employable skills

In particular, respondents who did not attend higher education expected vocational pathways, or employment experience, to provide them with more valuable skills for employment. Those attending higher education more generally viewed it as providing them with a long-term career prospect, but that going to university was more than just learning about a specific career.

Going to university is not just about gaining an education. You join societies, you meet all these new people, you experience different cultures, which you would never otherwise experience [...], When you're assessed at university [...] you're assessed in depth [...] and your skills should become broadened but also more specialised.

Higher Education, White, Female

#### The importance of experiencing different lifestyles/social experiences

Many of the respondents stated that a fundamental reason for participating in higher education was to experience a different social context, meet new people and to learn more about themselves outside of a family, peer or existing institutional situation. Their expectation was that this opportunity is possible by attending university.

It's invaluable isn't it really [...], the life experience you get regardless of what degree you do or where you go. Going and living on your own, going and making new friends and then having to actually study on your own, you're not stuck in a formal school environment. The expectations of you when you get there should be high, you know they expect you to manage yourself, they're not there to babysit you..

Higher Education, Black or Minority Ethnic, Male

#### HE is expected of me

Fewer respondents stated that they felt participation in higher education a fundamental expectation of them, and they in general felt as though the choice of whether to attend was ultimately theirs to make. However, it was often the case that those young people in our study who did go to university, also had supportive family and peer networks where there was experience of participation in higher education. Often these respondents also attended schools where, through careers education and information, advice and guidance, there was a general sense that (while not expected of them), university was the default post-formal education option for students.

#### 5.5 Final year of college or 6<sup>th</sup> form (applying to HEIs)

As discussed, the majority of respondents who attended college usually had a good idea as to whether they would attend higher education or not. Their final year provided them with a last point of reflection, a chance to directly consider information in prospectuses and other commonly consulted sources of information on university choice, <sup>58</sup> and an opportunity to articulate the benefits of higher education participation or non participation in longer-term financial and employability contexts.

#### 5.5.1 Increased employability and financial security

These two concepts often came into sharp focus toward the critical end of higher education decision-making, when a final choice needed to be made. At this point, those respondents who might have been considered more risk averse, or who did not have a specific career plan and were still weighing up higher education as an option were most likely to move into direct employment opportunities (these factors are discussed further in Chapter 6). It is important to note however, that active decision-making regarding both participation and non-participation in higher education took place at this point. For example, individuals perceived increased employability or financial security as better achieved through participation, and vice-versa through non-participation.

A survey by Callender and Jackson (2008) indicates that students from lower socio-economic groups are more likely than their wealthier peers to perceive the costs of higher education as a debt rather than an investment, and so place greater weight on immediate financial security. This can influence not only the choice of whether or not to participate in higher education, but also decisions about applying to a university with low living costs and good term-time employment opportunities, for example.<sup>59</sup> Expectations about financial security has also been shown to differ along gender and ethnic lines with male students and white students expecting to incur more debt by the end of their undergraduate studies than female and non-white students.<sup>60</sup>

#### 5.6 Summary

The report provides an analysis of the key points in time in which career and education decision-making comes into and out of focus for disadvantaged young people. The report highlights that from a very young age individuals begin to explore their interests and motivations about a wide range of activities, and that these have the potential to develop into career and education aspirations over time in complex, situated ways.

The table below outlines the key points at which young people make decisions about higher education participation.

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On information consulted by prospective students see for example: Oakleigh Consulting and Staffordshire University (2010). *Understanding the Information Needs of Users of Public Information about Higher Education*. HEFCE.

Callender, C., & Jackson, J. (2008). Does the Fear of Debt Constrain Choice of University and Subject of Study? Studies in Higher Education 33, no. 4: 405–29.

<sup>&</sup>lt;sup>60</sup> Bachan, R. (2013). Students' Expectations of Debt in UK Higher Education. Studies in Higher Education, 16.

Table 22: Timeline of decision-making

Timeframe	Decision making process
Pre-GCSE	Secondary data analysis suggests that even by Year 9, young people were already engaging with ideas about their chosen career path. At this point, participants in our research suggested that motivations and aspirations associated with education and careers took the form of expressing enjoyment or an aspiration to explore an area of particular interest in more detail.
	At school, and when making choices about their GCSE's, participants started to move from concepts of interest and enjoyment into potential concrete educational and career opportunities.
At School (GCSE choices)	Findings from our research suggested that those individuals with strong aspirations and self-motivation tended to progress into higher education, and those without fell out of education post GCSEs. This did not necessarily mean these individuals who chose to leave formal education were dissatisfied with their experiences just that they were more interested in gaining employment than more qualifications. These decisions were, however, sometimes more <i>passive</i> and the result of a lack of clarity about the opportunities available and the possible benefits of higher education.
College or 6 <sup>th</sup> form	At this stage, participants suggested that they had formulated general views about plans when they left formal education. This does not necessarily mean that an individual followed this pathway, but it is the point where decisions about whether to participate in higher education or not came into sharp focus. Those who did go to college or 6 <sup>th</sup> form had more deeply engaged with longer-term career planning and viewed participation in higher education as providing: increased career opportunities, the acquisition of useful, employable skills and valuable life experiences.
Final year of college	Increased employability and financial security often came into sharp focus toward the critical end of higher education decision-making, when a final choice needed to be made. Those participants who might be considered more risk averse or who do not have a specific career plan were most likely to move into direct employment opportunities, or leave education at this point.

# 6 Primary research findings: Key influences on decision-making

This chapter outlines the influences that impact upon choices that young people make when considering higher education. While the previous chapter builds a timeline around key points in the decision-making process, here more emphasis is placed on the structures that can enable and constrain choices.

#### 6.1 Introduction

In this context, sociological theory is useful for understanding the mechanisms by which an individual's class, gender and ethnicity can influence behaviour and relate to choices about higher education. In one of the most comprehensive works in this area Reay, David and Ball<sup>61</sup> set out a theoretical framework for examining higher education choice. They argue that decision-making is often not a rational process but involves assessing and incorporating a wide range of disparate information:

Decision-making is often a messy process in which intuition, affective response and serendipity can play a greater role than rational calculation and systematic evaluation of the evidence available (Reay, et al.; 2005, p. xi)

In their study of prospective students from a variety of socioeconomic and ethnic backgrounds, Reay *et al.* (2005) point to the importance of both '*hard*' constraints (such as economic resources or access to information), as well as '*soft*' constraints, (the "*subtle modalities of culture and language*" (Bourdieu, 1977, p. 82)). <sup>62</sup> These 'constraints' have potential to open up or close off *certain choices* for *certain people* at *certain times*. This may create tensions between their current situation or background and their future aspirations. <sup>63</sup> From our qualitative findings, it is possible to provide a broad analysis of the differing influences that inform choices such young people make about higher education participation. Figure 7 shows how the young people in our study reflected on higher education decisions through the relationship between such *soft* and *hard constraints*. Moving from top to bottom, the figure highlights whether a particular influence (for example the impact of finance or debt, or teachers, peers and family) is more associated with *hard constraints* or *soft constraints*.

Figure 7 provides a conceptual view and in practice the relationship between these factors is more fluid. Furthermore, although termed hard and soft 'constraints' these factors have the potential to both *open up* and *close off* opportunities for young people as choices come into and out of focus.

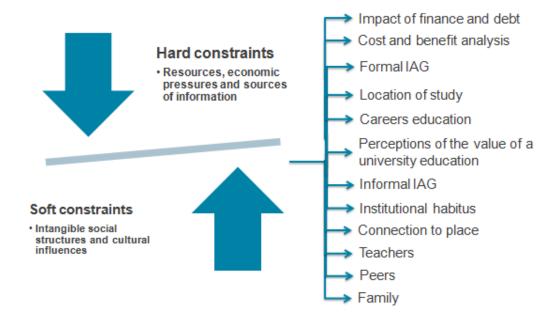
70

Reay, D., David, M.E. & Ball, S. (2005). Degrees of Choice: social class, race and gender in higher education. London: Institute of Education Press.

Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge: Cambridge University Press

Diamond, A., Roberts, J., Vorley, T., Birkin, G., Evans, J., Sheen, J. & Nathwani, T. (2014). *UK review of the provision of information about higher education: Advisory study and literature review.* HEFCE.

Figure 7 Relationship between soft and hard sociological and institutional influences



## 6.2 Support networks and the role of parents, peers and education professionals

Respondents consistently spoke about the influence of *support networks* in making active decisions about higher education participation. Support networks were among the most influential factors in establishing specific choices the young people we interviewed made. These support networks consisted of individuals who played a key role in a young person's life and included family networks (and in particular the influence of parents), peer networks (and particularly close peer groups at school/pre-college), and education professionals (specifically teachers). Studies by Grubb (2006),<sup>64</sup> Menon *et al.* (2007),<sup>65</sup> and Mangan *et al.* (2010),<sup>66</sup> all suggest that when prospective students make complex, high-stake decisions with long-term implications they struggle to determine which factors are most important and to gather relevant information. As such, the choices that young people make are regularly influenced by groups such as peers, teachers and parents.<sup>67</sup>

#### 6.2.1 Family support networks

The influence of support networks can be subtle and borne out of the often-intangible social structures and cultural influences that form *soft constraints*. These personal

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<sup>&</sup>lt;sup>64</sup> Grubb, W.N. (2006). 'Like, What Do I Do Now?' the Dilemmas of Guidance Counseling. In: *Defending the Community College Equity Agenda*, edited by T. Bailey and V. Smith Morest, 195–222. Baltimore, MD: Johns Hopkins University Press.

Menon M., Saiti, A. & Socratous, M. (2007). Rationality, information search and choice in higher education: Evidence from Greece. *Higher Education*, 54 (5): 705–721.

Mangan, J., Hughes, A., Davies, P. & Slack, K. (2010). Fair access, achievement and geography: explaining the association between social class and students' choice of university. *Studies in Higher Education*, 35(3): 335–350.

Similar findings are outlined by further research (Oliver & Kettley, 2010; Bogdan et al., 2012, for example) all of which outline the influence on students' decisions to apply (or not) to HE of specific groups (whether they be peers, teachers, parents or careers guidance officers).

connections are likely to shape potential students' *preferences* rather than directly influencing their specific choices. Parental involvement, in particular, can lead to changes in the attitudes and behaviour of their children, which can have a positive (and negative) impact on their chances of participating in higher education. The young people we interviewed highlighted that, irrespective of background and demographic characteristics, that their parents provided a "happy and supportive" environment within which to generate the confidence to make *active* and *positive* decisions. However, it was common amongst the young people interviewed who had progressed to higher education to report that:

- one or more parent was in an occupation where a university education was the norm (even if this particular occupation did not historically require a degree);
- one or more parent had higher education experience and felt it was valuable for their children to study at this level; or
- although neither parent had higher education experience they strongly encouraged their children to take up the opportunity they never had.

In contrast, it was common for the parents, or wider family networks, of the young people who did not go to university to have little or no higher education experience. Although these young people still had the support of their families (and parents in particular), they were more often encouraged to make decisions based on what they felt they wanted to do, rather than being encouraged down a particular path.

Kettley & Whitehead<sup>70</sup> suggest that while working-class parents are supportive of their children's aspirations to go to university, they often lack the knowledge and experience, or the cultural capital, necessary to guide their children through the practical process. The young people we interviewed who did not go into higher education often stated that, while they recognised that university was an option for them, they needed to be convinced of the benefits of going. This 'convincing argument' was linked to employment and career prospects, rather than the wider social or experiential benefits, which are often recognised by those who do go.

As highlighted in Chapter 6, Gorard et al (2012) suggest that interventions that increase parental involvement are often more fruitful than initiatives aimed at raising the aspirations of young people, with interventions aimed at increasing parental involvement having a positive effect.

Diamond, A., Roberts, J., Vorley, T., Birkin, G., Evans, J., Sheen, J. & Nathwani, T. (2014). *UK review of the provision of information about higher education: Advisory study and literature review*, HEFCE.

Kettley, N.C. & Whitehead, J.M. (2011). Remapping the "landscape of choice": patterns of social class convergence in the psycho-social factors shaping the higher education choice process. *Educational Review*, 64(4), pp. 493–510.

Existing literature has also shown that parental influence is much more significant among ethnic minority students, especially South Asian and African students. Authors such as Shah *et al.* (2010) and Modood (2004) propose that enforcement of familial norms encourages higher aspirations among ethnic minorities. Parents, other significant relatives and community members, they suggest, share some general but durable ambitions to achieve upward mobility for themselves and their children and believe that higher education is important in achieving those ambitions. Parents are successfully able to convey this view to their children who to a large degree internalise it and, even where they may not fully share it, develop ambitions and priorities that are consistent with those of their parents. This set of shared dispositions constitutes, on this view, a distinctive form of 'ethnic cultural capital'. This links strongly with our analysis of the Longitudinal Survey of Young People in England, which showed that the vast majority of parents from disadvantaged ethnic groups were aiming for their child to continue with their education after their GCSEs (compared to only 30% of disadvantaged White parents).

An interesting finding is the difference in perspectives between mothers and fathers regarding university and participation in higher education. Brooks (2004) observed that, since the 1980s, research into higher education choice has regarded fathers as less likely to play a vocal or overtly participatory role. These studies suggest that mothers are far more directly involved in this process as 'the labourers of school choice'. Unuqualitative findings, much like Brooks' own study, revealed a more subtle dynamic. Young people we spoke to, particularly those who went to university (and particularly female participants) suggested that both parents (where present) played a role. Mothers were perceived to be more 'socially supportive' and encouraged them to make education decisions that would ensure they were happy and gained experience of the world. While this does not necessarily manifest as a pro-higher education perspective, most young people perceived there to be at least some bias towards participation. Fathers in contrast were more 'planoriented' and encouraged young people to consider the outcomes and long-term returns of the different options available, including higher education.

I think mum was very much of the ethos that I had to do what would make me happy. It was never a 'you must do this' or 'you must do that'. My dad is slightly different. My dad is very much a 'you should better yourself in any way that you can' type of person [...] When I said I wasn't liking sixth form my dad was very much 'if you're not happy, leave, but you really need to think about what you're going to do'.

Higher Education, White, Female

For example: Connor, H., Tyers, C., Modood, T., & Hillage, J. (2004), *Why the Difference? A Closer Look at Higher Education Minority Ethnic Students and Graduates*; Ivy, J. (2010). 'Choosing Futures: Influence of Ethnic Origin in University Choice', *International Journal of Educational Management* 24, no. 5: 391–403;

See for example: Shah, B., Dwyer, C., & Modood, T. (2010). Explaining Educational Achievement and Career Aspirations among Young British Pakistanis: Mobilizing "Ethnic Capital"? *Sociology* 44, no. 6: 1109–27; Modood, T. (2004). Capitals, Ethnic Identity and Educational Qualifications. *Cultural Trends* 13, no. 2: 87–105.

Brooks, R. (2004). My Mum Would Be as Pleased as Punch If I Actually Went, but My Dad Seems a Bit More Particular about It: Paternal Involvement in Young People's Higher Education Choices. *British Educational Research Journal* 30, no. 4: 495–514.

Reay, D., & Ball, S. J. (1998). Making Their Minds Up: Family Dynamics of School Choice. *British Educational Research Journal* 24, no. 4: 443.

Siblings and extended family members were also influential in informing the decision-making of the young people we spoke to. Siblings often provided tangible examples of what 'life is like' at university and this often played a more critical role in deciding educational choices than many formal sources of information, advice and guidance. Similarly, if there was an extended family member who had been to university (or for example, set up a business or completed an Apprenticeship) these individuals were perceived to offer trustworthy *and* objective assessments of value and experience.

### **6.2.2 Peer support networks**

Brooks' (2003: 2004: 2007) highlights that parents often play a role in providing their children with a sense of a 'higher education hierarchy', whereas peer groups tended to rank themselves relative to their friends.<sup>75</sup> Brooks' research highlights the influence of the competitive nature of peer friendship in schools:

played an important role in constructing an individual's sense of 'ability' and position relative to peers. Although these influences were invariably exerted subtly and were rarely recognised by the young people themselves, they had a considerable impact on decisions made about higher education. (p. 293).<sup>76</sup>

Other evidence<sup>77</sup> suggests that prospective students from working class backgrounds are heavily influenced in their decisions to attend university through the peer networks they are linked to. Young people in our study regularly cited their peers as influencing decision-making, particularly earlier in their formal education. Respondents suggested that peers were particularly influential in the choice of subjects they did during their GCSEs and at college, and even with the decision to attend college.

Some [of my friends] tried to get in employment; they'd had enough of education. They were always the kids who were getting in trouble, falling out with the teachers and just generally not getting on [...] A lot of them you wouldn't imagine going to class let alone University. They only went to school because they had to. I kind of fell into this myself.

Non-Higher Education, White, Male

The majority of respondents who went into higher education did in general have a close peer network who also attended, but in some instances young people offered a counterpoint – making a decision to be deliberately different, to be the outlier. Although less common, this still implies that the influence of peers is strong, but also suggests that individuals making such *counterpoint decisions* may be more single-minded in their attitude to decision-making. Those not attending higher education had more of a mix of peers in terms of education choices.

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Brooks R. (2007). 'Friends, peers and higher education'. British Journal of Sociology of Education, 28 (6), pp. 693-707

<sup>&</sup>lt;sup>76</sup> Brooks, R. (2003). Young People's Higher Education Choices: The Role of Family and Friends, *British Journal of Sociology of Education* 24, no. 3: 283–97.

See for example: Archer, L., Hollingworth, S. & Halsall, A. (2007) 'University's not for Me — I'm a Nike Person': Urban, Working-Class Young People's Negotiations of 'Style', Identity and Educational Engagement. *Sociology*, 41(2): 219–237. Harrison, N. & Hatt, S. (2011). Expensive and failing? The role of student bursaries in widening participation and fair access in England. *Studies in Higher Education*, 37(6): 695–712.

### 6.2.3 Education professional support networks

Education professionals (teachers in particular) play a significant role in a young person's decision whether to attend higher education. Byrom (2009) for example, uses the concept of habitus as a tool for explaining changes in behaviour and attitudes; she argues that school-based institutional habitus and directed intervention programmes can be critical in guiding student choice relating to participation in higher education. Byrom highlights the high level of influence teachers can have on the aspiration of a student, concluding that school is a clear determining component in the students choices and strategies. For the young people taking part in our study, teachers were often instrumental in sparking an interest in a particular subject of study, or helping them to realise their potential, whether that be through higher education or not. In these instances, teachers may be described as enablers as they tap into an existing aspiration or motivation and can influence progression into higher education:

In my final year, we actually got a new teacher who I got on really well with and she was a pattern cutter. I got really close to her. There was only a couple of people in the year who had the potential to do pattern cutting because it's quite a specialist skill, and she kind of just pushed me in the right direction. She was encouraging me: 'Do it, you'd be really good at it. I think you'd be good.'

Higher Education, White, Female

Equally, however, teachers also have the potential to *inhibit* such aspiration. A few young people stated that they moved away from a subject they had initially shown interest in, or enjoyed hugely because they disliked a particular teacher.

There are numerous factors that influence an individual's 'landscape of choice' when considering education choices and our study shows that support networks appear to play a role in making prospective students conscious of particular options available to them, or closed off from them.

<sup>79</sup> Ibid, p220

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Byrom, T. (2009). 'I don't want to go to a crummy little university': social class, higher education choice and the paradox of widening participation. *Improving Schools*, 12(3): 209–224.

### 6.3 Institutional Habitus

Habitus (which describes the complex psychological disposition of a social group which reflects the context in which it has been developed) can help to explain the formation of aspirations and the shaping of opportunities that tend to be shared by groups of people who attend the same (or similar types of) institution. Habitus has been a highly contested concept but Bourdieu's social theory (1967; 1984; 1986) uses it as a conceptual tool to link individual agency to social structure.<sup>80</sup>

The relationship between agency and structure is dynamic, resulting from the backgrounds people come from (for example, their families), the environments they experience (for example, their schools) and the choices they make that determine their futures (for example, whether or not to go into higher education; if so which type of institution; which subject to choose). Sociologists working in the area of education argue that educational institutions have identifiable *habituses* that influence the decision-making and attainment of young people. McDonough (1997)<sup>81</sup> and Reay (1998)<sup>82</sup> have developed the idea of *'institutional* habitus', which may be described as

...a complex amalgam of agency and structure, and could be understood as the impact of a cultural group or social class on an individual's behaviour as it is mediated through an organisation (Reay, Crozier & Clayton, 2009, p. 109)<sup>83</sup>

Thus, *institutional habitus* shapes an institution's sense of who and what its students are expected to be. Institutional habitus has the potential to influence who participates in higher education. This idea is valuable because it contributes to our understanding of student choice by explaining the way in which decision-making behaviour is affected by the perceptions, aspirations and opportunities of different groups of young people, within an institution's sphere of influence.

Dunne, King & Ahrens (2013) provide an example of this by illustrating the contrasts between state and independent schools to highlight ways that school practices and processes influence the transition to higher education. Social practices in independent schools concentrate on the development and accumulation of a range of social and cultural capitals to support the "symbolic and academic capital of high examination passes" (p. 16). They argue that, in contrast to state schools, independent schools assume a higher education career for their students, and "invest more resources, start the process earlier, are more proactive in increasing their students' capital and aspire to get their students into higher-status universities and courses" (p. 17). Across state schools higher

Bourdieu, P. (1967). Systems of education and systems of thought. International Social Science Journal, XIX(3)14: 338–358; Bourdieu, P. (1984). Distinction: A Social Critique of the Judgement of Taste. Cambridge, MA: Harvard UP; Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.) Handbook of Theory and Research for the Sociology of Education (New York, Greenwood), 241-258

McDonough, P. (1997). Choosing Colleges: how social class and schools structure opportunity. New York: State University of New York Press.

Reay, D. (1998). 'Always knowing' and 'never being sure': familial and institutional habituses and higher education choice. *Journal of Education Policy*, 13(4): 519–529.

Reay. D., Crozier, G. & Clayton, J. (2009). 'Fitting in' or 'standing out': working-class students in UK higher education. British Educational Research Journal, 36(1): 107–124.

Dunne, M., King, R. & Ahrens, J. (2013). Applying to higher education: comparisons of independent and state schools. Studies in Higher Education.

education applications appear to be less ambitious even for the high achieving students. In this regard, teachers' practices and the careers advice they give (whether conscious or not) work to legitimise the cultural capital that structures relations within and between the educational and social hierarchies. The influence of institutional habitus was strongly apparent across the young people in our study with the expectations placed on students stronger in a school context than when attending at college. Respondents primarily outlined three ways in which institutional habitus occurred.

Firstly, that schools (and to a lesser extent colleges) viewed university attendance as an expectation among students, particularly among those who had the academic potential to succeed. Respondents suggested that schools had a broad (although not completely pervasive) view that educational success broadly related to higher education participation. This view was driven primarily through the perceived influence on respondents from their teachers (as we have seen above), and through the provision of formal information, advice and guidance which concentrated heavily on process and procedures directed at higher education related careers, applications and university visits or talks.

Secondly, and related, schools offered an unbalanced view of the potential alternative pathways for career development and employment (and in particular by providing a lack of formal information about vocational education and training). Finally, in a few instances, schools exhibited little in the way of expectations of education and career progression. Across these examples, the majority of respondent suggested that the schools did not offer them a realistic appraisal of what opportunities were open to them (and they therefore were required to engage in significant independent study in order to identify potential relevant educational choices open to them).

Nearly all of the respondents in our study attended state funded, local schools. What came through quite strongly through the interviews was that, for those students who attended schools with a stronger expectation of participating in higher education, the majority went onto study at university. Equally, for those who explored a more vocationally driven course, the careers education at the school was broader in scope. The young people we spoke to who left school without entering further education, however, did not necessarily view schools as having any particular expectation of them, and they didn't necessarily view this as a positive or negative attribute.

One further critical aspect of respondents' views on the educational expectations of the institutions they attended was that, for many, This could be because respondents did not attribute the information they were provided with as *formal careers education* or that, in the end, what information that was provided to them was not used. Many of the respondents stated that they undertook detailed independent research to identify information that they found useful and influential in their education choices. The ways in which young people source and use information is discussed in more detail in the next chapter (*Progression to Success*).

### 6.4 Economic and financial influences and the role of risk

The decision whether to enter higher education is increasingly couched in terms of economic and financial investment and reward. With the current fee cap of £9000 introduced at the start of the 2012/13 academic year, universities suggest that this makes students address key questions regarding participation: Is it worth me going? Why am I

going? What am I hoping to get out of it?<sup>85</sup> The participants in our study were no different, even though these young people were the last cohort before the most recent rise in tuition fees.

Overall, the young people stated that while economic and financial factors were one of a range of factors that were influential in informing their decisions regarding participation in higher education, they were not always critical or defining factors. For those who went into higher education paying tuition fees and any additional associated costs (living costs for example) were actually seen as less important than whether university was seen as value for money in and of itself. In this regard, the financial cost of attending university was offset by the perceived quality of the teaching, staff contact time, expectations of a vibrant social scene and the relevance of the course to their long-term career goals. For some, increases in tuition fees would have made them consider the cost and benefits further, but many said they would still have decided to go.

Many respondents also stated that they felt quite disassociated from the reality of paying the tuition fees. This was primarily because they understood that the loan for their fees was deferred, repayment was conditional on a achieving a minimum earning threshold, and that repayments were made over a significant number of years. The evidence suggests that the loan system, rather than inhibiting participation amongst less affluent students, actually facilitates it. Even those that did not have much knowledge on how the system worked or the support available prior to progressing to higher education knew it was not like a typical loan and as such the fees need not necessarily be a barrier. The biggest impact of the changes in tuition fees were not necessarily whether an individual would attend, but rather the timing of such decisions as a number of respondents were at the time of making a decision about higher education, interested in taking a gap year, but were put off the idea due to the imminent increase they would have had to have paid. So, for those who did attend, debt and financial factors, while playing a role, seemed less important that the value of a university education brought them.

Interestingly, respondents who attended university most commonly stated that when making decisions about whether to attend they viewed *gaining a qualification* and *the social experience* as the two most beneficial aspects of participation. Gaining a qualification itself implied that these respondents placed a significant cultural value (or in this instance what might be described as institutionalised cultural capital)<sup>86</sup> on a university degree perhaps over and above other types of qualifications or education/career experience. The interplay of support networks and institutional habitus plays a key role here.

In addition to the social outcomes associated with going to university (that is, life experience, friendship, social status and a familiarity with different cultures), there were

<sup>85</sup> Diamond, A., Vorley, T., Roberts, J., and Jones, S. (2012). *Behavioural Approaches to Understanding Student Choice*. HEA/NUS.

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In Bourdieu's theory, cultural capital comes in three forms: The embodied form of cultural capital is the consciously learned and subconsciously acquired personal properties (e.g. a learned language, including the acquired characteristics of local dialect). Objectified cultural capital refers to the physical objects owned (e.g. a collection of music or paintings), which are closely linked to economic capital. Finally, institutionalised cultural capital includes the social recognition conferred by institutions in the form of qualifications, for example, which also has a close relationship with the economic potential of the individual.

potential social risks associated with choosing a university. Many of the respondents who entered higher education felt it important to stay close to where they grew up, whether this be attending university in the Bristol area or moving further afield but still within a short distance (more broadly within the South West, south Wales, the south coast or Birmingham). Respondents stated that attachment to their local area was based on a number of key factors. These included the value they placed on family life, part-time work and employment connections in the area; the quality of higher education offer in the South West (and in Bristol in particular); and most significantly the importance of Bristol and the South West in building their cultural identity. Literature suggests that students from lowincome backgrounds tend to prioritise living close to home for reasons of cost. 87 Similarly, students from Black and Minority Ethnic backgrounds (and especially from South Asian families)<sup>88</sup> also prioritise living at their parental home while studying.<sup>89</sup>

Choosing a local university was rarely, solely a financial decision, but consisted of a complex interplay between such a variety of factors. Diamond et al (2012) suggest "breaking these social ties and commitments is often perceived as a risk, and as a result the default position reverts to non-participation or looking at only local universities". 90 Staying locally provide young people, particularly from more deprived backgrounds with an important safety net, as the quote below suggests. 91

I wanted to be far away enough from home that I wouldn't be seeing my parents every weekend, but I wanted to know that if there was an emergency I could come home easily.

Higher education, Black or Minority Ethnic, Female

Parents were also very aware of the potential importance of balancing university experience with location

I think it does focus on the convenience factor if you like. I think that is important because they are not quite ready to break all ties with the family home. I think expense is important and I think they do take that in to account, because they are going to be the ones with the debt at the end of it, so although you get more money, you are still in more debt in the end. The distance of travel too, travel is not cheap, so that is also a factor.

### Parent Focus Group

Importantly, however, participants in our study described the decision to stay locally in very positive terms, and for those few that did move significant distances, this was primarily focused on a specific course that linked to that individual's broader career goals.

Gibbons, S., & Vignoles, A., (2012). Geography, Choice and Participation in Higher Education in England. Regional Science and Urban Economics 42, no. 1-2: 98-113,

Davies, P., Mangan, J., & Hughes, A. (2009). Participation, Financial Support and the Marginal Student', Higher Education 58, no. 2: 193-204

This can be observed among South Asian students from all income groups, suggesting that this reflects a different attitude towards the role of social networks that can support students in higher education

Diamond, A., Vorley, T., Roberts, J., and Jones, S. (2012). *Behavioural Approaches to Understanding Student* Choice, HEA/NUS,

Davies, P., Mangan, J., & Hughes, A. (2009). Participation, Financial Support and the Marginal Student', Higher Education 58, no. 2: 193-204 - This research has shown that there could be an ethnic dimension to location. South Asian students, in particular, are much more likely to remain living at home whilst studying at university, regardless of their family income.

In contrast, the majority of respondents who did not enter higher education suggested that the financial impact of participation was 'not worth the risk' if there was not a job guaranteed at the end, or (more frequently) if they weren't exactly sure of what they wanted to study or achieve through university. In this regard, having a clear plan was critical. These young people might be considered to be more risk averse than those who attended higher education, particularly those for whom the social experience was an imperative (as often they chose subjects and universities that were more "interest" based than specifically outcome based).

[University] was an option, but I started thinking: I go and do three years, and how many thousands of pounds of year would that be? I started balancing the options [...] as I didn't know what I would do at university, spending many thousands on a university course that I didn't know what it would lead to, is that going to serve me better than earning for those three years?

Non-Higher education, White, Male

All respondents, whether they entered higher education or not or not, were asked what the value of alternative routes into employment might be (for example, more vocationally driven options). The most commonly stated were associated with experience of employment, more career options and financial independence. For those who did not enter higher education, these factors were often described as sensible and beneficial in both the short and long term.

### 6.5 Making decisions about higher education participation: Does it *feel right?*

Within higher education decision-making, prospective students, whatever their background, deal with varying degrees of uncertainty as neither the costs nor the benefits of various options can be entirely known, and depend on many factors outside the individual's control. Often, satisfying one requirement (studying at a particular university because of its reputation, or geographic location for example) can bring other issues into focus (such as the expense of moving away from home or the debts incurred). <sup>92</sup> In this process of balancing different requirements, factors such as socioeconomic status and cultural background can be influential.

As well as the uncertainty associated with higher education participation, research also highlights that prospective students often either do not have access to, or are not aware of to information about higher education. Furthermore they often do not use the information that is available to best effect. <sup>93</sup> The young people in our study, for example, often undertook minimal searches regarding educational options, and often resorted to trial and

<sup>92</sup> Case, D. O. (Ed.) (2012). Looking for Information: A Survey of Research on Information Seeking, Needs, and Behaviour. 3rd edition. Bingley: Emerald.

80

See also: Christie, H. & Munro, M. (2003). The Logic of Loans: students' perceptions of the costs and benefits of the student loan. *British Journal of Sociology of Education*, 24(5), http://www.tandfonline.com/loi/cbse20?open=24 - vol\_24; Grubb, W.N. (2006). Like, What Do I Do Now? The Dilemmas of Guidance Counseling. In Bailey, T., & Smith, V. M. (eds.) *Defending the Community College Equity Agenda*. 195–222. Baltimore, MD: Johns Hopkins University Press; Greenbank, P. (2009). Foundation degree students and their educational decision-making. *Education* + *Training*. 51 (4): 259-271.

error. This was particularly the case when the careers education or information, advice and guidance available from their school or college were limited.

Regardless of the significant information processing and cognitive stages of decision-making, a final decision about whether, or where, to participate in HE often comes down to whether or not it *feels right* for that individual, and this reasoning is very significant depending on the complex interplay of socio-cultural, economic and personal motivational and aspirational influences. Exposure to a wider variety of information sources, both formal (careers education) and informal (from close support networks, or university visits), and both intentional (web-searches about courses in a specific area) and unintentional (the visual experience of visiting a university campus, or workplace), allows prospective students to begin this process of assessment more authoritatively.

An example of this in our study is the use of university visits. Such visits are considered extremely significant in making final choices about where to study (although often, the decision to attend university had already been made). This is consistent with a wide range of studies of information use in higher education decision-making, which has indicated that physically visiting a university, college or place of work allows those considering their options to 'see themselves' as a member of an institution.<sup>95</sup>

I generally go with the flow; I look at the course, look at the websites. But I need [university] to feel like it is somewhere I can be. I had like a place at [specific university], which some would say is better that the one I went to, but at the open day I hated being there [...] I didn't like the campus, it was ugly and dull I[...] At [the university I attended], the staff were welcoming and friendly, I got to meet people and felt comfortable.

Higher education, white, female

Feelings of 'fitting in' and 'standing out' in higher education are heavily influenced by the fit between the cultures of home, school and university, where class in particular plays an important role:

The small numbers of working-class students attaining places at elite universities face not only academic challenge, but also considerable identity work, and the discomforts generated when habitus confronts a starkly unfamiliar field.<sup>97</sup>

This point is not only relevant to students from low-income groups, but can also help to account for the under-representation of ethnic minorities in high tariff institutions. Many of the participants in a qualitative study of ethnic minority young people suggested that

Allen, D. & Wilson, T.D. (2003). Information overload: Context and Causes. The New Review of Information Behaviour Research: Studies of Information Seeking in Context (Proceedings of ISIC 2002), 4, 31–44.

Diamond, A., et al., Behavioural Approaches to Understanding Student Choice (York: HEA, 2012), www.heacademy.ac.uk/news/detail/2012/student\_choice; Oakleigh Consulting and Staffordshire University, Understanding the Information Needs of Users of Public Information about Higher Education; Briggs and Wilson, 'Which University?'.

Reay, D., Crozier, G. & Clayton, J. (2010). 'Fitting in' or 'standing out': working-class students in UK higher education. British Educational Research Journal, 36(1): 107–124.

See also Reay, D., Crozier, G., & Clayton, J. (2009). "Strangers in Paradise"? Working-Class Students in Elite Universities', Sociology 43, no. 6: 1103–21; Smyth, E. & Banks, J. (2012). "There Was Never Really Any Question of Anything Else": Young People's Agency, Institutional Habitus and the Transition to Higher Education', British Journal of Sociology of Education 33, no. 2: 263–81,.

'traditional' universities were not for 'people like them', <sup>98</sup> while research conducted by Ivy (2010) identified a particularly strong 'risk aversion' among Afro-Caribbean sixth form students. <sup>99</sup> Fundamentally, as Ball *et al.* (2002) highlight, choices about higher education are "embedded in different kinds of biographies and institutional habituses, and different 'opportunity structures". <sup>100</sup>

The salience of accessible information will also vary between prospective students: What is most salient to a prospective student whose primary interest is in improving their employability might not be as pertinent to another student motivated by learning itself or by exploring different social and cultural experiences through higher education (Diamond *et al.* 2012, p.49). Evidence suggests that sources of information, advice and guidance perceived as unfamiliar are often disregarded in the decision-making processes of potential higher education students. For example, in Briggs & Wilson's (2007) study, the sources of information considered least useful were newspaper features, careers conventions, careers teachers and careers services. <sup>101</sup> Similarly, longitudinal qualitative research by Greenbank (2011)<sup>102</sup> quotes one of his participants as saying "I know that a careers adviser has a lot more knowledge, but a careers adviser does not know *me*". His research suggests that the view taken by students when considering higher education and wider career options is: 'I'd rather talk to someone *I know* than somebody *who knows*'.

Overall, the importance of *familiarity* is also shown to be significant amongst participants in our study, and specifically important across personal support networks. The young people we spoke to were often more likely to view information provided by their parents, wider family, siblings and peers or their own information searches more authoritatively than what might be considered more formal sources. Where personal support networks do not possess the cultural capital to inform these young people, then often higher education decisions can be made based on misinformation, or a lack of understanding about what studying higher education means.

As a parent, I didn't know what existed [in terms of information about higher education]. I felt really, really strongly about supporting my children in any careers guidance. I went to the school and I listened to them, but they knew nothing either, it was very narrow advice. I didn't know where to begin to support them, if I am honest, and I felt horrible.

### Parent focus group

Therefore, there is a need to help prospective higher education students work through the complex and challenging array of information available and how this information can be used and interpreted for specific purposes. Helping young people and their support

82

Smith, H. (2007) Playing a different game: the contextualised decision-making processes of minority ethnic students in choosing a higher education institution. *Race, Ethnicity and Education*, 10 (4). pp. 415-437.

<sup>&</sup>lt;sup>99</sup> Ivy, J., (2010) "Choosing futures: influence of ethnic origin in university choice", *International Journal of Educational Management*, Vol. 24 Iss: 5, pp.391 - 403

S Ball, S. J., Davies, J., David, M., & Reay, D., (2002) 'Classification' and 'Judgment': Social class and the 'cognitive structures' of choice of Higher Education. British Journal of Sociology of Education. Vol. 23, Iss. 1

Briggs, S., and Wilson, A. (2007). Which University? A study of the influence of cost and information factors on Scottish undergraduate choice. *Journal of Higher Education Policy and Management*, 29 (1). pp. 57-72

Greenbank, P. (2011). 'I'd Rather Talk to Someone "I Know" than Somebody "Who Knows" - the Role of Networks in Undergraduate Career Decision-Making', Research in Post-Compulsory Education 16, no. 1: 31–45.

networks to understand what is needed in order to make an informed decision about whether to participate in higher education would seem to be a critical issue.

For the young people who took part in our study, the decision whether to enter higher education was often considered in terms of whether it was right for them. In all instances, participants did not necessarily ascribe success, in and of itself, with higher education participation but rather in terms of the outcomes. For those who did not attend university, gaining employment experience, or studying for an Apprenticeship or other educational pathway were also considered a success depending on what each individual wanted when they left formal education. Table 24 outlines the five most commonly stated outcomes of successful educational choices amongst participants at the point of making decisions about participation in higher education.

Table 23 Top five responses to the question *what defined success for you* across interview types

Order	Parent	Young person	Male	Female	White	ВМЕ	HE	Non-HE
1	The right job/career	Financial security	Financial security	The right job/career	The right job/career	Financial security	The right job/career	The right job/career
2	My child is happy in their choices	The right job/career	The right job/career	Financial security	Financial security	The right job/career	Financial security	Financial security
3	Having acknowledgement of educational achievement	Being happy in my choices	Educational Success	Being happy in my choices	Being happy in my choices	Being happy in my choices	Being happy in my choices	Being happy in my choices
4	Having freedom of opportunities	Having close friends and family	Having acknowledgment of educational achievement	Having close friends and family	Having close friends and family	Having close friends and family	Having close friends and family	Having close friends and family
5	Financial security	Having freedom of opportunities	Having freedom of opportunities	Achieving a specific goal	Having freedom of opportunities	Achieving a specific goal	Achieving a specific goal	Achieving a specific goal

What the table shows is a consensus across young people that *financial security* and *gaining a job or career that is right for me* are the two primary measures of success, irrespective of how that is achieved. The young people's perspective does, however, differ from their parents' perspectives. Parents, for example, consider the *happiness of their child in the choices they have made* and *having acknowledgement of educational achievements* as measures of success. Young people, therefore, seem to be more concerned with outcomes, while parents more concerned with the educational experience. This is important because we can start to see how the different factors that people consider as important outputs influence decisions as to whether to participate in higher education. It is important to note here, that often the outputs (the measures of success) can be the same (financial security, for example), but the decisions can be very different.

For example, the top five measures of success for those young people who entered higher education were identical to those who chose not to attend. 103

### 6.6 Summary

The social norms, cultural capital and the relationship between information about educational choice, and decisions about whether to attend higher education can have a significant impact on the young person, depending on their circumstances. This chapter has highlighted the key influencing factors that impact upon these decisions. These are:

**Support networks: Family, friends, education professionals** - Respondents consistently spoke about the influence of *support networks* in making active decisions about higher education participation. Support networks were among the most influential factors in establishing specific choices the young people we interviewed make.

**Institutional Habitus**: The concept of institutional habits, or the ways in which an institution (in this instance schools and colleges) exhibit expectations of who and what its students are expected to be, is also important in higher education decision making. For the majority of participants in the research, the school or college they attended gave them a sense of what might be expected of them.

**Economic and financial influences:** While economic and financial factors were one of a range of factors that were influential in informing their decisions regarding participation in higher education, they were not always critical or defining factors. For those who went into higher education paying tuition fees, and any additional associated costs (living costs for example) were actually seen as less important than whether university was seen as value for money in and of itself. For the majority of respondents who did not enter higher education it was suggested that the financial impact of participation was 'not worth the risk' if there was not a job guaranteed at the end of it, or (more frequently) if they weren't exactly sure of what they wanted to study or achieve by entering higher education.

**Making decisions about higher education: Does it** *feel right*? - Within higher education decision-making, prospective students, whatever their background, deal with varying degrees of uncertainty as neither the costs nor the benefits of various options can be known with certainty, and depend on many factors outside the individual's control. Participants in our research often stated that a final decision about whether, or where, to participate in higher education came down to whether or not it *felt right* for them at that time.

Decision making is, therefore, heavily influenced depending on the complex interplay of socio-cultural, economic and personal motivational and aspirational influences. This interplay can impact from a young age, influencing aspirations and motivations towards learning and work and shaping perceptions about the opportunities available, including the

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It is important to note that: whether a young person felt they made the right decision was often based on their perception of what success looks like, and was only realistic through post-hoc analysis of those decisions from their current points of reference. Participants were only able to understand whether going to university was the right choice for them after they had made their decision. Often this was only even possible some time after they had completed their course of study, or had some employment experience.

extent to which there is a choice to be made.<sup>104</sup> Finally, this often leads to the perception among some groups (particularly those from more deprived backgrounds) that university is not for 'people like us'.<sup>105</sup> This can be a pervasive attitude, and can stem from schooling and family. The final chapter of this report presents recommendations for policymakers when considering how young people, particularly from more disadvantaged backgrounds, can be helped to make decisions about higher education participation a positive and active decision.

See for example: Briggs, S. (2006). An Exploratory Study of the Factors Influencing Undergraduate Student Choice: The Case of Higher Education in Scotland. *Studies in Higher Education* 31, no. 6: 705–22; Briggs, S. & Wilson, A. (2007). Which University? A Study of the Influence of Cost and Information Factors on Scottish Undergraduate Choice. *Journal of Higher Education Policy and Management* 29, no. 1: 57–72; Callender, C. & Jackson, J. (2008). Does the Fear of Debt Constrain Choice of University and Subject of Study? *Studies in Higher Education* 33, no. 4: 405–29; Grodsky, E., & Jones, M. T. (2007). Real and Imagined Barriers to College Entry: Perceptions of Cost', *Social Science Research* 36, no. 2: 745–66; Connor, H., Burton, R., & Pollard, E. (1999). *Making the Right Choice: How Students Choose Universities and Colleges*. Brighton: Institute for Employment Studies; Johnston, T. C. (2010). Who and What Influences Choice of University? Student and University Perceptions, *American Journal of Business Education* 3, no. 10. 15–24; Moogan, Y. J. & Baron, S. (2003). An Analysis of Student Characteristics within the Student Decision Making Process. *Journal of Further and Higher Education* 27, no. 3: 271–87.

Student Decision Making Process. *Journal of Further and Higher Education* 27, no. 3: 271–87.

Archer, L., Hollingworth, S. & Halsall, A. (2007). 'University's not for Me — I'm a Nike Person': Urban, Working-Class Young People's Negotiations of 'Style', Identity and Educational Engagement. Sociology, 41(2): 219–237.; N. & Hatt, S. (2011) Expensive and failing? The role of student bursaries in widening participation and fair access in England. Studies in Higher Education, 37(6): 695–712

### 7 Conclusion

It is well established that prior attainment plays a significant role in determining participation in higher education. However, when this is taken into account, a range of other personal and situational factors intersect to influence the decisions young people make and the likelihood they will choose to follow a higher education pathway.

There is an extensive literature examining the factors that influence progression to higher education. However, research to examine the way in which these factors interact and the relative influence they have on different groups is more limited. Our research adds considerably to the existing literature by exploring the interplay between gender, ethnicity and socioeconomic status and wider social, cultural, personal and economic factors and the intersectionality of influences. It does this by outlining that

- there are differences in parental aspirations for girls compared to boys. In particular that through our quantitative analysis parents of disadvantaged groups are more likely to aspire to the girls doing professional jobs/staying in education compared with boys. Although our statistical model shows that children's attitudes were more important in factors influencing participation that parent's attitudes, it is fair to say that the two are linked. In a few examples from our qualitative research some fathers were also more career focused for female students than mothers.
- even when accounting for prior attainment, we find that gaps remain in higher education applications by ethnicity particularly amongst disadvantaged groups. The probability of a White individual applying to university is 23 percentage points lower than for a Black and Minority ethnic individual.
- the difference in ethnic participation could be due to a number of factors, although it should be stressed that more research would be needed to explore this in more detail: ethnic minority groups may not be as influenced by working class habitus as White British groups; they may have a more positive attitude toward higher education as a means of gaining wider cultural capital and moving into higher socioeconomic groups; White British students, in particular, may be more nervous about higher education being a economically sound investment in terms of employability and see it more of a risk.
- however, because of the complex way factors interrelate with each other, they do not necessarily exist in isolation;
- these factors can also have different effects on different people at different stages of their lives.
- our qualitative research suggests that many experiences exhibited across the range of participants who took part in our study are shared; individual participation factors are not necessarily unique to any specific group in particular.

Research into the barriers that young people entering higher education face is a well-defined area of research. In contrast, less is known about the success factors that can

help young people realise their preferred educational choices. Our research highlights that despite the apparent barriers experienced by disadvantaged groups, many do progress to higher education. The findings suggest that the key drivers of this success are:

- Strong support networks;
- Positive attitudes towards education;
- Clear aspirations and goals and motivations to achieve these goals;
- Relevant and timely information, advice and guidance which focusses on the variety
  of options available to young people, but which gives them the freedom to explore
  their own choices; and,
- An appreciation of the costs and benefits of a chosen pathway.

Clearly, these factors alone will not result in progression to higher education; an individual must also achieve the required educational standard to secure a place. However, these drivers provide the conditions necessary for an individual to attain and achieve as well as to progress and are in many ways of equal importance. It is very challenging to isolate one specific driver as more important that another as these factors are all influential at certain points in time.

Finally, our research provides an analysis of the key points in time in which career and education decision-making comes into and out of focus for disadvantaged young people. The report highlights that:

- From a very young age individuals begin to explore their interests and motivations;
- These have the potential to develop into career and education aspirations; and,
- The points at which a young person moves into secondary and further education also create shifts in attitudes, expectations, experiences and aspirations, which are again influenced in complex, situated ways.

### 7.1 Challenges for policymakers

The findings from this research offer some challenges for policymakers seeking to identify possible interventions to help support young people to progress in their chosen pathways. The *intersectionality of factors* - that is the way dominant identifiers of individual personal or cultural characteristics interact and influence each other – means that it is impossible to determine the extent and relative influence of the range of factors impacting on a young person at a given point in time. Furthermore, as it is unlikely that lack of progression can be attributed to a single barrier (beyond lack of attainment) it is not possible to develop a corresponding intervention to address it. As such, evidence from the research suggests potential interventions, which look to widen access to higher education, are likely to be

most effective if developed within a coherent framework or programme. <sup>106</sup> Such a programme would look to incorporate interventions that have both 'push and pull' features, addressing barriers while simultaneously promoting the benefits for different groups of individuals. Analysis of the findings within this research suggests that successful programmes should look to:

- 1. Understand that different young people will have different requirements at different times in their lives and that support should be tailored accordingly.
- 2. Raise awareness of the financial and non-financial benefits of higher education and the opportunities available to people with higher level qualifications amongst young people and their support networks particularly during the transition from Key Stage 3 to Key Stage 4.
- 3. Support young people to access and make effective use of information, advice and guidance in order for them and their families to build a relevant *choice architecture* for their career and education preferences<sup>107</sup>
- Empower young people and equip them with the skills to make their own decisions, acknowledging that participation in higher education may not be the right pathway for everyone.
- 5. Recognise that interventions will be required across the entire student lifecycle, from an early age right through to the point at which decisions about higher education participation are. Strategies will necessarily cross government departmental boundaries, with higher education institutions playing a vital role

This report offers a valuable starting point in understanding differential participation in higher education, and considering what effective interventions might look like. A raft of interventions are currently delivered by higher education institutions ranging from talks in schools, through institutional visits and taster programmes to mentoring, master classes and summer schools. However, extensive previous 108 and current research undertaken by CFE Research on behalf of the Higher Education Funding Council for England and the Office for Fair Access suggests that there is a paucity of evaluative evidence to demonstrate the impact and effectiveness of these approaches. CFE is currently working with Higher Education Funding Council for England to develop an evaluation framework and associated tools designed to capture more consistent and robust information on widening participation activities and expenditure and to make recommendations on how gaps in the evidence base could be addressed in the future.

While further research is needed to evaluate specific approaches for widening participation, the report shows when the conditions are right there is a greater chance of that an individual will enter higher education irrespective of their gender, socioeconomic status or ethnicity. However, it is important to recognise that the leap a disadvantaged young person has to take in order to participate in higher education and to reap the

<sup>&</sup>lt;sup>106</sup> See for example: Gale, T. and Parker, S. (2013) *Widening Participation in Australian Higher Education*. Bristol, UK: HEFCE and OFFA. Available at: http://www.ncsehe.edu.au/wp-

content/uploads/2013/10/2013\_WPeffectivenessAus.pdf

Thaler, R. H., Sustein, C. R., & Balz, J. P. (2010). Choice Architecture. Working Paper. Available at SSRN: http://ssrn.com/abstract=1583509

See for example: Bowes, L., Moreton, R., and Thomas, L. et al (2013) The uses and impacts of HEFCE Funding for Widening Participation. Bristol: HEFCE; Bowes, L., Moreton, R., and Thomas, L. et al (2013) The uses and impacts of access agreements and associated spend. Bristol: OFFA

benefits can be quite profound, and as such the following potential interventions should be considered. 109

### 7.1.1 Age and stage appropriate interventions

Our research highlights that young people's interests, attitudes, motivations and aspirations start to form at a relatively young age and these along with the views of their parents have an impact on whether or not an individual eventually applies to university. Whilst disadvantaged White individuals do not have the lowest attainment levels at Key Stage 2, by Year 9, they are far more likely than any other ethnic group to be aspiring towards leaving full-time education and finding an apprenticeship or full-time job. These aspirations are reinforced by their parents who appear to display very similar attitudes and aspirations for their children at this stage. By Key Stage 5, most young people have made, or are close to making a final decision about higher education and those who are intending to apply are more focused on where and what to study, rather than whether to study at all. Indeed, interventions by higher education institutions at this point are also more geared toward recruitment rather than widening participation in higher education per se. Interventions which engage young people, and particularly White disadvantaged boys, during these at early stages in their lives could help to break down the negative norms associated with higher education and has the potential to normalise participation, making it one choice among many, which is possible for them to follow.

### 7.1.2 Outreach by higher education institutions at all school ages

Early engagement with young people in the widest sense is vital in order to influence their preferences before they become limited by the soft and hard constraints described in Chapter 6. There is evidence that some higher education institutions conduct outreach activities in primary schools. There may be a case to extend this work ensuring that higher education institutions play a stronger role earlier in the decision making process and establish a pervasive and positive presence in local communities particularly in areas of disadvantage. For those young people and their parents who have had very limited or no contact with higher education, the impact of these activities has the potential to be transformative and challenge entrenched family views and perceptions that higher education is not for 'people like them'. Interventions at this stage should focus on promoting young people's curiosity, and interest in subjects and activities, which can begin to help them reflect on their hopes and ambitions.

### 7.1.3 Changing the status quo

In addition to social norms, the more habitual a behavioural pattern is, the less likely a young person is to weigh up the costs and benefits of alternatives in a rational way. This *status quo bias* is useful for understanding non-participation in higher education, as it is an often-unconscious preference to remain in the 'default' option, even when choosing another option will increase a person's long-term utility. <sup>110</sup> For potential higher education students from non-traditional backgrounds, non-participation is potentially more likely to be taken as the default position. Many of the young people in our study who did not attend

<sup>109</sup> See also: Evans, S. and Whitehead, R. (2011) *London's Calling: Young Londoners, Social Mobility and Access to Higher Education.* London: Centre for London.

Kahneman, D., Knetsch, J. and Thaler, R. (1991) Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. *The Journal of Economic Perspectives*. 5, no. 1,193–206.

higher education describe their educational choices as *going with the flow*. This perspective can be a strategy for responding to more complex decision-making, including higher education participation (and particularly if a young person has had limited exposure to university, for example).

Many young people describe their decision not to attend university in terms of being unsure about what they want to do and the longer term benefits of a higher education. Because their 'commitment' was not consistent, their preferred educational 'choice' was potentially defaulted to non-participation (even if non-participation was seen positively). Those participants who attended higher education often made positive long-term commitments with reference to aspirations and motivations. The participants in our study show that making a commitment to a long-term goal or activity can therefore be powerful in helping young people from non-traditional backgrounds plan and come to terms with career and educational choices that may differ from their immediate support networks or personal experiences. Research suggests that *commitment devices*, even simple processes such as writing down long-term goals, have the potential to help young people achieving their preferred educational pathways (whether or not this links to participation in higher education). This is where effective information, advice and guidance can be critical.

### 7.1.4 Framing participation in higher education

The way in which outcomes are presented, or framed, can have a significant effect upon the choices that people make. 112 As our research shows, the decision to enter higher education is influenced through the intersectionality of social, cultural, economic and personal factors and young people with similar experiences will not necessarily choose the same educational pathway. The ways in which higher education is presented to young people has the potential to affect the extent to which they view higher education as a choice for them. This "framing effect" is an example of a *cognitive bias* where the way in which an issue is presented leads to differences in observed behaviour, primarily with people behaving differently depending on whether an issue is presented in terms of *gains or losses*. For example, participants in our study who went into higher education often framed it as an opportunity to achieve a qualification, experience a rich cultural scene or become more employable (*gains*). Alternatively, those who did not viewed it as a financial risk where significant debt would be accrued (*losses*).

Previous research suggests that those from more disadvantaged backgrounds are more likely to view participation in higher education as a *loss* rather than a *gain*. This has also come through strongly in our research; the young people who did not attend university

See for example: Kahneman, D., Knetsch, J., & Thaler, R. (1991). Anomolies: The Endowment Effect, Loss Aversion and the Status Quo Bias. *The Journal of Economic Perspectives*. 5, No. 1. 193-206; Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performances: Self control by precommitment. Psychol Sci. 13(3): 219-24; Dolan, P., Hallsworth, M., Halpern, D., King, D. & Vlaev, I. (2010). *MINDSPACE: Influencing behaviour through public policy*. London: Cabinet Office; Institute for Government; Dolan, P., Hallsworth, M., Halpern, D., King, D., Metcalfe, R. & Vlaev, I. (2012). Influencing Behaviour: The Mindspace Way. *Journal of Economic Psychology*, 33(1): 264–77.

Kahneman, D. and Tversky, A. (1984) Choices, Values, and Frames. American Psychologist. 39, no. 4, 341–350.
 See for example Page, L., Garboua, L. L. and Montmarquette, C. (2007) Aspiration Levels and Educational Choices: An Experimental Study. Economics of Education Review. 26, no. 6, 747–757: Vossensteyn, J. J. (2005) Perceptions of Student Price-responsiveness: A Behavioural Economics Exploration of the Relationships Between Socioeconomic Status, Perceptions of Financial Incentives and Student Choice. Universiteit Twente.

were much more concerned with the cost of higher education, in terms of fees, and the opportunity cost in terms of lost earnings, than those who did attend. Equally, employability was an important factor linked to the risk of participation in higher education. Many interview participants who did not attend higher education made the choice to go into employment relatively quickly - in this regard higher education was seen to delay this opportunity. For those who did participate in higher education, as well as the opportunity to gain a broader experience of life was an interest in gaining a specific career or improving their prospects in the long term. Employability, for those from more disadvantaged backgrounds would seem to be an important factor. The longitudinal evaluation of the National Scholarship Programme provides further evidence that those with the potential to attend higher education but who do not progress are increasing concerned about the cost and accrued debt but that these factors are not sufficient to deter potential students from disadvantaged groups if they positively aspire to progress. 114 The removal of barriers such as cost through interventions such as the National Scholarship Programmes only. therefore, offers a partial solution. Interventions framing the short and long-term benefits of higher education are required to encourage those with the ability to progress to move from a position of loss aversion and view the investment in higher education in terms of a potential gain.

### 7.2 Ensuring the right choices for the right people

Higher education is not necessarily right for everyone, and many of the young people we spoke to who did not follow a higher education pathway were satisfied with their decisions. Others, who explored vocational pathways, had the opportunity to experience employment first-hand whilst gaining qualifications associated with their chosen career. However, whilst higher education may not be the ideal path for every person, our research suggests that a lack of awareness of the nature of the jobs that are available in today's labour market and the qualifications needed to obtain such jobs could be inhibiting progression to higher education for some, particularly amongst young people from more disadvantaged backgrounds.

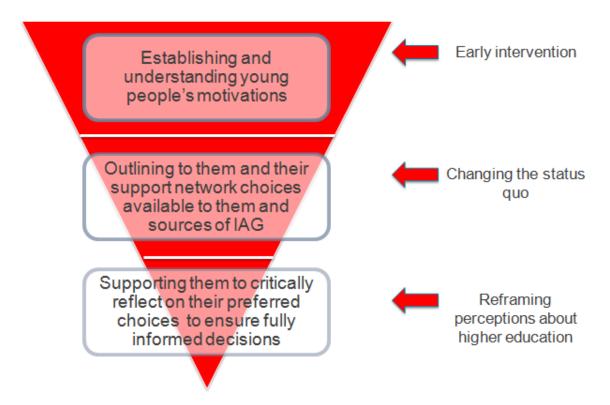
As such, it is imperative that these young people are made aware from an early age of the various career pathways one can take, as well as the opportunities in the local and national labour market. This will help to ensure that their aspirations and attitudes towards education are raised, which is likely to increase applications to higher education. It is equally important to inform parents of the pathways and opportunities open to young people when their child enters secondary education, as our analysis indicates that their views can also influence higher education applications. In order to do this the policy interventions described above (and visualised in Figure 8) may help. In essence, Figure 8 describes that successful progression into higher education for all young people means:

 Giving young them the tools through which they are able to reflect authoritatively on their own motivations, from a young age and with support from educational institutions.

Bowes, L. Moreton, R. Thomas, L. Porter, A. Sheen, J. and Birkin, G. (2014) Evaluation of the National Scholarship Programme – Year 3 Bristol: HEFCE

- 2. Supporting influencing networks through accessible, relevant and formal information advice and guidance, and working within local communities to change the status quo.
- 3. Helping young people identify what they need to do to achieve their goals, identify who can help them achieve them and reframe their views on higher education in general.
- 4. Understanding that choices about education mean different things to different people.

Figure 8 Model of successful progression into higher education



### **Appendix 1: Literature Search Terms**

The following table lists the set of terms that were used as the basis for the literature search.

Primary Search Terms	Key words and associated terms		
Progression/participation in	Gender		
University and Higher Education Participation	Ethnicity (White British, Afro-Caribbean, Indian, Pakistani, Bangladeshi, Chinese)		
	Socio-economic status (class, POLAR, IMD, postcode, NS-SEC, benefits/free school meals, first generation entrant/first in family, parent's education, family income, non-traditional students), LSYPE, ALSPAC, econometric analysis/modelling, probit/logic modelling, fixed effect approaches, linear probability modelling, logistic regression		
	Higher Education Initial Participation Rate/HEIPR, Widening participation, Widening access, routes into HE (academic/vocational), fair access, subject specific participation, types of institution (HE in FE attendance, traditional HE, academic reputation), social exclusion, social mobility, social justice, drop-out rates, retention rates		
0	Age (18–24)		
Secondary search terms Formal advice	Cara ara aduantian		
Formal advice	Careers education Information, advice and guidance/IAG		
	Key Information Sets (KIS)		
	Higher education provider/university/college information		
	UCAS		
	Outreach		
Decision-making	Rationality; (systematic errors, norms and non-participation)		
	Cognitive influences		
	Adaptive bias		
	Attribution biases (for example: projection bias; system justification; trait ascription bias)		
	Decision-making biases (for example: Anchoring; confirmation bias; distinction bias)		
	Habitus, cultural capital, social capital, socialisation.		
Influences	Loss/risk/debt aversion, investment/return on investment/graduate premium; cognitive influences; bounded rationality; rules of thumb; Heuristics, preexisting frames / norms		

Academic reputation; access, location distance from home, course/programme of study/subject, bias (conscious/unconscious), admissions process, tariff, mode of study (full time / part time), selective institutions Funding; cost, fees, financial aid, non-financial support, grants, bursaries, scholarships, fee-changes

**Table 24 Key search terms** 

## Appendix 2: Additional literature regarding gender and higher education participation

### The Gender Gap in Participation

Despite a 6 percentage point drop in 2012/13, there has been a general upward trend in higher education participation since the early 1970s. This is reflected in the participation rates of men and women. The proportion of men and women progressing into higher education began to rise steadily from the late 1980s. Up until 1992, male participation exceeded female participation. Since then, the proportion of women progressing into higher education has steadily increased. 115

### **Gender and Subject of Study**

Subject choice is guided by prior educational choice, first at Key Stage (KS) 4 and then, perhaps more obviously, at KS 5, when GCSEs and equivalents are taken. There is a great deal of variation in gender balance by subject of study in higher education, as Figure 9 illustrates, with some subjects dominated by men and others by women. It has become traditional to find a greater proportion of men in STEM subjects, although there are some notable exceptions including in the physical and biological sciences. Conversely, women tend to dominate subjects within the arts, humanities and the social sciences, and those that lead to caring professions such as teaching and nursing.

<sup>&</sup>lt;sup>115</sup> Broecke, S. & Hamed, J. (2008). Gender gaps in Higher Education Participation: An Analysis of the Relationship between Prior Attainment and Young Participation by Gender, Socio-Economic Class and Ethnicity. London: DIUS.

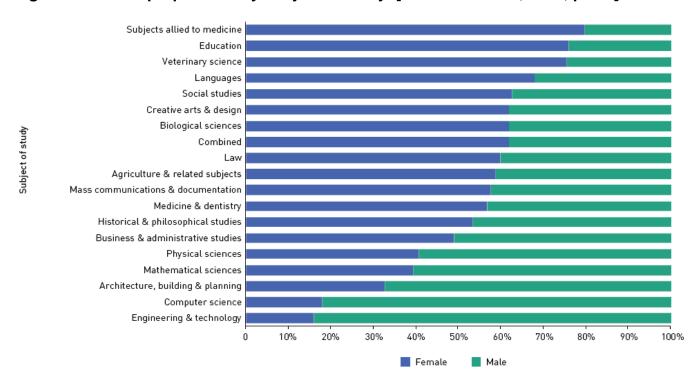


Figure 9: Gender proportions by subject of study. [Universities UK, 2013, p. 13.]

Gender imbalance by subject of study is not unique to England. Amongst OECD countries, women predominate in tertiary education and they account for 75% of degrees in the fields of health and welfare. However, the proportion of women who graduated from STEM subjects grew more slowly between 2000 and 2011 (from 40% to 41%) than the proportion of women in all fields (from 54% to 58%). The European Commission is committed to getting more women into science and technology and the European Union set a target to reduce the gender imbalance in engineering and manufacturing subjects. However, progress in the EU as a whole, as in England, has been slow.

### **Explaining the Gender Gaps in HE Participation**

The gender gap can be primarily explained through prior attainment. However, it may not necessarily be the sole cause of the choices young people make regarding higher education participation. There are also likely to be other attributable factors such as personality or situational influences. The following text explores some of these other potential influences in more depth. It is recognised that further research, using more sophisticated methods of analysis, is still required to establish whether the gender

<sup>&</sup>lt;sup>116</sup> OECD (2013). Education at a Glance 2013: OECD Indicators.

European Commission (2012). Structural change in research institutions: Enhancing excellence, gender equality and efficiency in research and innovation. Luxembourg: Publications Office of the European Union

<sup>118</sup> It is, however, important to be mindful of the subject dimensions to this issue, because the difference in HE attainment is partly explained by subject choice. For example, more men do Chemistry and more women do English, and Chemistry has a higher proportion of firsts than English (See Mellanby, J. & Zimdars, A. (2010). Trait anxiety and final degree performance at the University of Oxford. *Higher Education*, 61: 357–370).

participation gap is *caused* by the gap in prior attainment as well as to establish how these other factors interact with prior attainment to potentially mitigate its effect.

### **Motivations and Aspirations**

Motivation is an important part of understanding higher education participation but it is challenging to identify. As we outline in the main report there is a lack of clear understanding about how it functions as a contributing factor to participation and there is a lack of evidence about the efficacy of interventions based on increasing motivations amongst prospective students. Less still is known about how motivations differ between the genders and there is little evidence on which to base any firm conclusions about how gendered differences in motivations contribute to participation.

Rampino & Taylor (2013) find that different levels of educational aspirations and attitudes are reported by 11–15-year-old boys and girls. "Girls tend to view their schoolwork, the importance of GCSEs, participating in post-compulsory schooling and attending university more positively than boys." (p. 34). Furthermore, girls recognise the importance of GCSEs at an earlier stage than boys, who tend to realise their importance too late (p. 29). These attitudes and aspirations have also been found to differ according to age, parental education and parents' attitudes to education.

There is, however, little firm evidence to suggest that aspiration-raising initiatives actually have a significant impact on participation for any socio-economic group. Furthermore, evidence to suggest that aspirations differ significantly enough between the genders to explain the gap in participation is equally hard to come by. Evidence, such as that by Rampino & Taylor, suggests that a more effective approach may be to address parental attitudes and aspirations as well as to promote boy's appreciation of education. In summary, the influence of both the motivations and aspirations of men and women in participating in higher education are identified as having potential for further research.

### **Perceptions and Expectations of HE**

Perceptions of the value of higher education and expectations of the potential benefits are likely to influence participation, with those expecting to receive value for money and achieve a good qualification and a positive job outcome more likely to progress. Research on the social and demographic trends in the US finds that women are more likely to see the value and benefits of attending HE than men and this could help to explain the higher participation rates amongst women overall. Wang & Parker also shows that women began to overtake men in higher education participation in 1992, which appears to correspond with the pattern observed in the UK.

121 Ibid

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<sup>&</sup>lt;sup>119</sup> Rampino, T. & Taylor, M. (2013). *Gender differences in educational aspirations and attitudes*. Institute for Economic and Social Research.

Wang, W. & Parker, K. (2013). Women See Value and Benefits of College; Men Lag on Both Fronts, Survey Finds. *Pew Social and Demographic Trends*, 17 August. Pew Research Center.

### Wider Social Trends, Gender and Subject of Study

The results of the PISA 2012 study (OECD, 2013b) provide an international comparison of gender differences in educational participation and attainment demonstrating that gender disparity in participation in higher education is not unique to the UK. Internationally, as well as in the UK, there has been a switch in participation from more men to more women (OECD, 2013a). Barone's (2011) study of gender divisions in higher education across eight countries highlights that international patterns of gender imbalance in higher education are broadly comparable between different countries: gender imbalance has declined surprisingly little in recent decades and displays a largely similar level and qualitative pattern across several countries. This similarity is surprising given that the countries in the study differ widely in terms of their welfare systems, labour markets and educational institutions.

Research analysing historical data in Germany<sup>122</sup> suggests that, the raising rates of women's enrolment in higher education could be partly explained by women's increased labour market opportunities. In this research, Becker argues that increased female participation in higher education may, therefore, have been stimulated by the expansion of public employment, the growing demand for highly qualified female workers in welfare and service areas, the increasing returns of women's increased education and training, and the improved opportunities for combining family and work outside the home over the last thirty years.

The implication of such findings lends support to cultural explanations of gender differences in higher education participation or wider social trends, that have enabled women to engage more in the labour market. Barone's study highlights that *some* of the courses taken by women in higher education are functionally or symbolically similar to women's traditional domestic roles or subsequent careers, however. "The overrepresentation of female graduates in care-oriented fields reflects both their intrinsic occupational preferences and the increasing job opportunities created in service economies." (p. 173). Even though traditional forms of socialisation are breaking down in post-industrial societies, "gender essentialist ideologies are highly resilient, not least because they are reinforced by the structural developments of service economies." (p. 173)

### **Habitus**

Pierre Bourdieu's concept of *habitus* is one the three pillars of his sociological theory alongside *field* and *cultural capital.*<sup>123</sup> Habitus describes the complex psychological disposition of a social group which reflects the context in which it has been developed. As such, habituses can be associated with socioeconomic status, and can help to explain the formation of aspirations and the shaping of opportunities that tend to be shared by groups

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Becker, R (2014). Reversal of Gender Differences in Educational Attainment: An Historical Analysis of the West German Case. *Education Research*, 56(2): 184–201.

<sup>&</sup>lt;sup>123</sup> See for example: Bourdieu, P. (1967). Systems of education and systems of thought. *International Social Science Journal*, XIX(3)14: 338–358; Bourdieu, P. (1984). *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, MA: Harvard UP; Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.) *Handbook of Theory and Research for the Sociology of Education* (New York, Greenwood), 241-258

of people who attend the same (or similar types of) institution. This concept is prevalent in sociological studies of higher education participation where it is used to explain observed gender patterns.

Dumais states that "Habitus, or one's view of the world and one's place in it, is an important consideration in trying to understand how students navigate their way through the educational system." (p. 45).<sup>124</sup> Dumais argues that it is necessary to consider how students perceive and use both resources (capital) and their orientation to using those resources (habitus), especially when studying gender differences. Her study suggests that habitus has a strong effect on attainment for both male and female students, with some significant differences between genders. For example, the habitus of male students can be very different to that of females, as they downplay their cultural capital to avoid being regarded as "sissies". Dumais concludes that, while inherent ability is the dominant factor in influencing a student's grades, habitus and socioeconomic background are also important (p. 59).

### **Ethnicity**

Hussain and Bagguley looked at the decision-making process of a specific ethnic group, South Asian women, when deciding whether or not to study at HE, and which institutions to study at. 125 Their gendered and ethnic identities, and specifically their attitudes to marriage, relationships with their communities and experiences of racism, guided their decision-making process. However, this study does not look at the equivalent experience of men within this ethnic group, and so it is unable to shed much light on explanations for higher participation rates amongst women. The attitudes of the women in the study above differed substantially from those of White working-class males in Quinn et al.'s study. 126 Quinn et al. argued that popular culture depicts White males, specifically of the lower classes, as educational failures. This perspective was reflected in the viewpoints of White, working-class men, who were pushed by their families towards traditionally working-class, manual occupations and away from HE. As noted above, literature suggests boys typically hold less positive attitudes towards HE than girls overall. Archer, Pratt and Phillips in their study of working-class male attitudes towards participation in higher education explored this further by examining how gender, class and ethnicity intersect to impact on progression.<sup>127</sup> A main difference was that more Asian men argued that participation would enable them to achieve a middle class job and lifestyle, whereas the White men argued that participation would only be justified if it did not entail an identity shift away from their working-class roots. While it is plausible to suggest that male attitudes to higher education contribute to a negative view of participation, there is too little research to provide a causal explanation.

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Dumais, S.A. (2002). Cultural capital, Gender, and School Success: The Role of Habitus. *Sociology of Education*, 75(1): 44–68.

Hussain, Y and Bagguley, P. (2007). *Moving on up: South Asian Women and Higher Education*, Trentham Press.

Quinn, J., Thomas, L., Slack, K., Casey, L., Thexton, W. & Noble, J. (2006). Lifting the Hood: Lifelong Learning and Young, White, Provincial Working-Class Masculinities. *British Educational Research Journal*, 32(5): 735–750.

<sup>&</sup>lt;sup>127</sup> Archer, L., Pratt, S.D & Phillips, D. (2001). Working-class Men's Constructions of Masculinity and Negotiations of (Non)Participation Higher Education, Gender and Education, 13(4): 431–449.

In summary, there has been relatively little research on gender differences in participation that compares differences between ethnic groups. There is even less evidence that contributes to an explanation for the gender gaps in higher education participation in terms of ethnic and gendered differences. In addition, the fact that women tend to have higher participation across almost all ethnic groups suggests that the explanation is unlikely to be found in ethnic differences.

### **Economic and Financial Factors**

Economic and financial factors are increasingly important in the decisions whether to enter higher education. The central argument is that investing time and money in higher education pays off in terms of more rewarding and better paid careers, and that participation is able to contribute to social mobility. As competition between higher education institutions is increasing, the benefits are 'sold' in terms of the financial rewards attached to various subjects of study and career paths. The 'graduate premium' is the Net Present Value (NPV) of benefits associated with an undergraduate degree relative to an individual with 2 or more A-levels. <sup>128</sup>

A gender gap in earnings exists across all levels of education but the largest gap is found amongst workers with a tertiary education. In most OECD countries, including the UK, the earnings of tertiary-educated women is less than 75% of that of tertiary-educated men. <sup>129</sup> It could, therefore, be expected that tertiary education would be a less appealing option for women, yet despite the apparent lower returns relative to men, women have higher participation rates. As tertiary educated women earn more than women with a secondary education only, this suggests that women may be more concerned with their earnings relative to other women when it comes to decisions about progression into higher education. However, women can expect to receive a greater benefit from higher education in terms of the NPV of a degree: The NPV for men is £168,000 and for women is £252,000. <sup>130</sup> In other words, women can expect to receive a greater financial benefit than men over their lifetimes from doing a degree, even though they earn less overall. A degree makes a bigger difference for women largely because women without a degree earn so much less comparable than men.

### **Gender Identities**

Most of the literature concerning gender identities has specifically dealt with White, working-class masculinity, and specifically in this context, on how White, working-class masculinity influences higher education participation. The concept of masculinity can be used to help explain potential differences in participation between males and females. Masculinity ties in with socio-cultural and attitudinal factors, and also relates to socio-economic status. In Archer, Pratt and Phillips' qualitative study with working-class men,

After accounting for costs including tuition fees, foregone earnings during study, and higher tax contributions associated with higher earnings: BIS (2011). *The Returns to Higher Education Qualifications*. London: BIS.

<sup>&</sup>lt;sup>129</sup> OECD (2013). Education at a Glance 2013: OECD Indicators.

<sup>&</sup>lt;sup>130</sup> Walker, I. & Zhu, Y. (2013). The Impact of University Degrees on the Lifecycle of Earnings: Some Further Analysis. London: BIS.

participants reported a sense of 'classed masculinity' in regards to higher education. <sup>131</sup> The working-class male masculinity that they identified with and which shaped their behaviour was at odds with the perceived 'middle-class' masculinity within universities. Thompson & Bekhradnia <sup>132</sup> also outline how peer pressure on boys and masculine male culture within schools can lead some to make little academic effort and rebel against the perceived control of teachers.

Archer, L., Pratt, S.D & Phillips, D. (2001). Working-class Men's Constructions of Masculinity and Negotiations of (Non)Participation Higher Education, Gender and Education, 13(4): 431–449.
 Thompson, J. & Bekhradnia, B. (2009). *Male and female participation and progression in Higher Education*. HEPI.

## **Appendix 3: Avon Longitudinal Study of Parents and Children**

### Recruitment

The study families were recruited during the pregnancy of the index child in the early 1990s, meaning the children have now reached 22 to 23 years of age. The families of all women who were pregnant, while resident in and around the City of Bristol (South-West, UK), and due to deliver between 1<sup>st</sup> April 1991 and 31<sup>st</sup> December 1992 are considered eligible to take part in ALSPAC. By the time the index child reached 18 years of age the families of women with 15,247 pregnancies had enrolled into the study. These pregnancies resulted in 15,458 fetuses, of which 14,775 were live births and 14,701 were alive at 1 year of age.

### Standard assessments of educational attainment in the ALSPAC Cohort

The ALSPAC children, as a consequence of recruiting participants due to be born between 1<sup>st</sup> April 1991 and 31<sup>st</sup> December 1992, entered schooling across three academic year groups. The eldest cohort children would have started their compulsory education in the 1995/96 academic year, and the youngest children would have completed compulsory education in 2008/09. Approximately 25% of the cohort are in the eldest academic year, 58% in the middle academic year and 18% in the youngest academic year. Table 26 illustrates the timings of the standard educational attainment assessments of ALSPAC children who progress through compulsory education through to completing Higher Education. It conceptually illustrates how even the youngest cohort children may now have graduated from Higher Education if they progressed to the next assessment stage in consecutive years and completed a three year, full time, undergraduate degree. In practice however, the timelines of many students progression through education will be influenced by deferring entry to the next assessment stage, re-sitting assessments, changing their chosen course or interrupting their studies due to health or personal circumstances.



<sup>&</sup>lt;sup>a</sup> assuming Key Stage 1 assessment was completed in academic 'Year 2', <sup>b</sup> Key Stage 2 in 'Year 6', <sup>c</sup> Key Stage 3 in 'Year 9', <sup>d</sup> Key Stage 4 in 'Year 11' and <sup>e</sup> Key Stage 5 in 'Year 13' assuming a child graduated from a three year, full time, undergraduate degree course

Table 25 Standard attainment assessments of the ALSPAC cohort according to participant date of birth

### **Education Data Collection in the ALSPAC Cohort**

With the support of the Department for Education (DfE) and the Department for Business. Innovations and Skills (BIS), ALSPAC has collected and collated an extensive array of information on the child's education and aspirations, and from the parents/carers in relation to their child(ren). Measures include:

- Mothers self-reported information: Mothers qualifications held, qualifications held by their partner, adult learning, child's enjoyment of school and associated activities (e.g. reading) from ages 5 to 14, child and parental aspirations from ages 9 to 16, parent involvement in child's education
- Child self-reported information: Enjoyment of school, attitudes towards learning, education and occupational aspirations, key stage four choices, parental relationships (in relation to education), university aspirations, applications and reasons for leaving education, employment.
- Teacher and Head Teacher objective assessments: child's strengths and difficulties, parental involvement, conduct disorder and special needs (Years 4 and 6). Class based assessments measured childrens understanding of mathematics, science and spelling.
- Linked routine records: National Pupil Database (NPD) attainment, absence and exclusion and census data, Individual Learner Record further education data and Higher Education Statistics Agency (HESA) higher education data.

The wider ALSPAC databank supplements these data with information which can be used to assess confounding and representation (e.g. social and economic position (parental occupation, income, neighbourhood data), demographic profile (sex, ethnicity)) and potential mediators (e.g. risk taking behaviour, self-esteem and substance use). Further information about the data available in the databank can be found in the Study Data Dictionary. 133

### Using ALSPAC in this research

### **Ethical approval**

Ethical approval for the study was obtained from the Avon Longitudinal Study of Parents and Children Ethics and Law Committee and the National Health Service Local Research Ethics Committees. The design of this study was also discussed with the Avon Longitudinal Study of Parents and Children Original Cohort Advisory Panel. This panel made recommendations as to how the information associated with the research should be worded, and the panel contributed to the design of the data collection methodology. They

<sup>133</sup> http://www.bristol.ac.uk/alspac/researchers/resources-available/

have also reviewed this report to ensure it complies with their guidelines on nondisclosure.

### Depth interviews with young people

A total of 10,156 (69.1% of panel members) young people were eligible for the study. These cases were randomised into strata groups based on sex (male/female), ethnicity (white/non-white) and higher education experience (enrolled/not enrolled into higher education/unknown higher education status). In order to ensure individuals from each of these groups were interviewed, invitations were sent at random to members of each strata group. Invites were sent in three batches, with batch 1 (n=433) and batch 2 (n=1,453) including individuals from a full range of strata groups. Batch 3 (n=79), purposively sampled non-white young people, as this group was under-represented at that stage of recruitment. To ensure adequate numbers for Batch 3, the neighbourhood deprivation selection criterion was relaxed to include households from the most deprived two thirds of United Kingdom neighbourhoods.

# Appendix 4: Longitudinal Study of Young People in England and National Pupil Database data used in the analysis

### The measure of disadvantage used in this analysis

The measure of disadvantage we have constructed utilises data relating to parental education and occupation. Within wave 1 of the study, we are supplied with the National Statistics Socioeconomic Classification of the main parent <sup>134</sup>, with Table 27 highlighting the distribution of respondents across the various occupational categories within the Longitudinal Study of Young People in England. As we can see from the table, 38% of individuals classified as the main parent were working in routine/semi-routine occupations or had never worked/were long unemployed.

Table 26: Descriptive statistics on the main parent's occupation at wave 1

Main parent NS-SEC class	Percent
Higher managerial and professional occupations	6
Lower managerial and professional occupations	25
Intermediate occupations	14
Small employers and own account workers	8
Lower supervisory and technical occupations	8
Semi-routine occupations	20
Routine occupations	12
Never worked/long term unemployed	6

<sup>&</sup>lt;sup>134</sup> The parent most involved in the young person's education.

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### Total frequency 15,133

The first wave also provides information on the main parent's highest educational qualification, with the distribution of qualifications across the sample highlighted in the table below. The most common educational qualification held by the main parent was GCSE qualifications at A-C or equivalent, with one-fifth of individuals holding no qualifications at all.

Table 27: Descriptive statistics on the main parent's highest educational qualification at wave 1

Highest educational qualification of main parent	Percent
Degree or equivalent	12
Higher education below degree level	13
GCE A level or equivalent	14
GCSE grades A to C or equivalent	29
Qualifications at level 1 and below	9
Other qualifications	2
No qualifications	20
Total frequency	15,087

Having generated this variable, we found that 20% of young people in our sample were classified as disadvantaged. We sought to confirm the suitability of our measure by comparing the financial and economic circumstances of those from advantaged and disadvantaged backgrounds, as indicated by our definition. Table 29 illustrates the findings. The first measure within this table is from a question asked to the main parent in wave 1 regarding how well the household is managing on their current income. As we can see, there is a large difference in the level of financial difficulty by socioeconomic status. Just 31% of young people from disadvantaged backgrounds are in households where the family are managing quite well on their current income, compared to 57% of those from advantaged backgrounds, who demonstrate a greater ability to save or spend on leisure. The proportion of young people from advantaged backgrounds who live in households that

own their property is almost twice the proportion found amongst disadvantaged individuals. Whilst there is less variation by socioeconomic status in terms of computer ownership, those from disadvantaged backgrounds are far less likely to be able to access the internet from home. It appears therefore that our variable for disadvantage allows us to distinguish between those families with and without economic and financial stability.

Table 28: The proportion of households who have achieved the following measures of economic/financial capital by socioeconomic status (base = variable)

Measure of economic/financial capital	Advantaged (%)	Disadvantaged (%)
Managing quite well on household income, able to save or spend on leisure	57	31
Own their home <sup>135</sup>	79	43
Computer within household	93	72
Internet access at home	82	48

### Data used

### **Longitudinal Study of Young People in England**

**MP [Wave 1]:** Thinking of how your household is managing on your total household income at the moment, would you say it was...

- 1. Managing quite well, able to save or spend on leisure
- 2. Just getting by, unable to save if wanted to or
- 3. Getting into difficulties

**HH [Wave 1]:** Which of these best describes the accommodation you are living in at the moment?

- 1. Owned outright
- 2. Being bought on a mortgage/bank loan
- 3. Shared ownership (owns and rents property)
- 4. Rented from a Council or New Town
- 5. Rented from a Housing Association
- 6. Rented privately
- 7. Rent free

<sup>135</sup> Either owned outright or the property has been bought on a mortgage/bank loan

8. Some other arrangement

**MP [Wave 1]:** Does your household have a home computer (excluding games consoles) in your (part of the) accommodation?

- 1. Yes
- 2. No

**MP [Wave 1]:** Can you, or other members of your household, get access to the internet either just for email or to browse the web, from home?

- 1. Yes
- 2. No

**YP [Wave 5]:** Have you applied for a place on a university course which will start either this year that is in September/October 2008 or next year that is in September/October 2009?

- 1. Yes
- 2. No

**YP [Wave 1]:** How likely do you think it is that you will ever apply to go to university to do a degree? Would you say that it's...

- 1. Very likely
- 2. Fairly likely
- 3. Not very likely
- 4. Not at all likely

**YP [Wave 1]:** When you're 16 and have finished year 11 at school, what do you want to do next...

- 1. Stay on in full-time education, either at the school you are at now or somewhere else
- 2. Leave full-time education
- 3. Leave full-time education, but return later

**YP [Wave 1]:** What do you want to do when you're 16 rather than stay on in education? [Only asked to those who state they want to leave full-time education – option 2 in the question above]

- 1. To start working full-time
- 2. Start learning a trade / start work-based training
- 3. Be unemployed / sign on
- 4. Something else

**YP [Wave 1 to 3]:** The school attitudes variable is derived. Pupils are asked to supply answers to twelve statements about their feelings towards school and academic work. They can provide one of the following responses;

-1. Don't know

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

The answers to each question are then assigned a value between 0 and 4 (inclusive), with a higher value signalling more positive attitudes ('Don't know' responses are given a value of 2). The twelve values obtained for each individual are summed to give a continuous variable that ranges from 0 to 48. The questions used to generate this measure are as follows;

- 1. I am happy when I am at school
- 2. School is a waste of time for me
- 3. School work is worth doing
- 4. Most of the time I don't want to go to school
- 5. People think my school is a good school
- 6. On the whole I like being at school
- 7. I work as hard as I can in school
- 8. In a lesson, I often count the minutes till it ends
- 9. I am bored in lessons
- 10. The work I do in lessons is a waste of time
- 11. The work I do in lessons is interesting to me
- 12. I get good marks for my work

**YP** [wave 4]: Here are some things that young people have said about university and higher education. Please say how much you agree or disagree with each of these.

The best jobs go to people who have been to university

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

People like me don't go to university

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

**YP [wave 5]:** Next are a few questions about certain aspects of life in Britain today. Do you...?

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

It is easier now for people like me to get and improve things for themselves than it was for my parents.

**MP [wave 1]:** What would you yourself like your child to do when he/she reaches 16 and can leave school? 136

- 1. Continue in full-time education
- 2. Start learning a trade/Get a place on a training course
- 3. Start an apprenticeship
- 4. Get a full-time paid job (either as an employee or self-employed)
- 5. Something else

MP [wave 1]: And how much do you agree or disagree that...

Leaving school at 16 limits young people's career opportunities later in life?

- 1. Agree strongly
- 2. Agree a little
- 3. Disagree a little
- 4. Disagree strongly

**YP [wave 4]:** I'd like you to look at this card and tell me which of the answers on it best describes what you are doing now. If you are currently on holiday from a school or college which you will be returning to in September, please answer number 1.

- 1. Going to a school or college full-time [This includes being in between 1<sup>st</sup> and 2<sup>nd</sup> years of a course and currently working or on holiday]
- 2. In full-time paid work (30 or more hours per week)
- 3. Spending part of the week at a college, part of it with an employer
- 4. On a training course or apprenticeship
- 5. Something else

**YP [wave 4]:** And which of the answers on this card best describes what you are doing now? Again, if you are on holiday, or off sick at the moment, please tell me what you usually do. [Only asked to those who state their main activity is 'something else' in question above]

- 1. Unemployed/looking for work
- 2. Looking after home or family full-time
- 3. In a part-time job (less than 30 hours per week)
- 4. Something else

**HH [wave 2]:** Government office region is a categorical variable consisting of the following nine categories.

<sup>&</sup>lt;sup>136</sup> Please note that in order to form table 16, I have combined options 2 and 3 into one category. Within the econometric analysis, only the first three options were utilised in creating the dummy variables. Options 4 and 5 only account for approximately 3% of responses to the question.

- 1. North East
- 2. North West
- 3. Yorkshire and Humberside
- 4. East Midlands
- 5. West Midlands
- 6. East of England
- 7. London
- 8. South East
- 9. South West

**HH [wave 1]:** Family composition is a derived variable based on the parents of the young person. Individuals are placed into one of the following categories for this variable. <sup>137</sup>

- 1. Married couple
- 2. Cohabiting couple
- 3. Lone father
- 4. Lone mother
- 5. No parents in household

**HH [wave 1]:** Number of siblings is a derived variable identifying the total number of siblings of the young person currently living in the household. This is a continuous variable and is included directly in the probit models we create.

### **National Pupil Database**

**Type of institution at Key Stage 3:** We were provided with a variable indicating the type of school an individual attended. The following types of school were included

- 1. Academy
- 2. City Technology College
- 3. Community college
- 4. Community special
- 5. Foundation school
- 6. Foundation special school
- 7. Voluntary aided
- 8. Voluntary controlled

From this, we created a derived variable consisting of the following groups;

- 1. Community [3. Community College]
- 2. Foundation [5. Foundation school]
- 3. Voluntary [7. Voluntary aided and 8. Voluntary controlled]

The appropriate dummy <sup>138</sup> variables used in our econometric analysis were generated from this derived variable.

<sup>&</sup>lt;sup>137</sup> Please note that option 5 was not included when creating the dummy variables from this variable for econometric modelling. Option 5 only accounts for approximately 1% of responses.

**Admissions policy at Key Stage 3:** This variable highlighted the admissions policy of the school and consisted of the following categories;

- 1. Comprehensive
- 2. Modern
- 3. Not applicable
- 4. Selective

We excluded option 3 (not applicable) from the group and created the dummy variables utilised in the econometric analysis from the remaining three categories.

**KS4EM\_04:** This is a continuous variable included in the National Pupil Database that shows the percentage of 15 year-old pupils that achieved 5 or more A\* to C including English and Maths in 2004 GCSE examinations.

**ASC04fsm:** This is another continuous variable included in the Database and provides the proportion of pupils known to be eligible for free school meals in 2004.

**KS2\_attainment** – Average point score for an individual at Key Stage 2 across English, Maths and Science

**KS4\_attainment** – Total capped GCSE or equivalent point score for an individual.

<sup>&</sup>lt;sup>138</sup> A dummy variable takes the value of zero or one to indicate the absence or presence of a categorical effect. It enables qualitative data to be used in quantitative analysis.

### **Appendix 5: Marginal effects**

	Pr(Applying) <sup>139</sup>		Pr(Applying)		Pr(Applying)		Pr(Applying)	
white	-0.238	**	-0.292	**	-0.143	**	-0.226	*:
disad	-0.212	**	-0.154	**	-0.118	**	-0.0317	
male	-0.0746	**	-0.0873	**	-0.0521	**	-0.0141	
white*disad	-0.0989	**	-0.119	**	-0.0834	*	-0.0636	
white*male	0.0227		0.00359		0.0388		-0.000856	
disad*male	0.00886		0.0191		0.0224		0.00849	
white*disad*male	0.0970		0.0844		0.123		0.0642	
NE	-0.0875	*	-0.0213	*	-0.0200		0.0247	
NW	-0.0323	*	0.0257	*	0.0281		0.0315	
YH	-0.0753	*	-0.0209	*	-0.0113		-0.0113	
EM	-0.0644	*	-0.0300	*	0.00950		-0.0105	
WM	-0.0852	*	-0.0451	*	-0.0108		-0.00889	
EE	-0.0881	*	-0.0502	*	-0.0133		-0.0235	
SE	-0.0796	*	-0.0667	*	-0.0198		-0.0253	
SW	-0.128	*	-0.0991	*	-0.0879		-0.0884	
lone_parent	-0.179	**	-0.157	**	-0.109	**	-0.0492	,
siblings	-0.0397	**	-0.0303	**	-0.0177	*	-0.00375	
foundation			0.00668	*	0.00949		0.0105	
voluntary			0.0535	*	0.0438		0.0382	
modern			-0.0554	*	-0.0759	*	-0.0424	
selective			0.117	*	0.0559	*	0.0226	
KS4EM_04			0.00569	**	0.00379	**	0.000417	
%FSM_pupils			-0.00164		-0.00260	**	-0.00286	
school_att					0.0106	**	0.00374	
stay_fte					0.175	**	0.0648	
likely_apply					0.207	**	0.103	
bestjobs_a					0.241	**	0.148	
habitus_a					-0.233	**	-0.102	
not_progress					-0.0364		-0.0390	
trade_or_app					-0.181	**	-0.0797	
leave16					-0.0574	**	-0.0446	•
KS2_attainment							-0.00286	
KS4_attainment							0.00381	,
n	5524		5524		5524		5524	

<sup>&</sup>lt;sup>139</sup> The dependent variable is the probability of applying to university. \*\* denotes significant at 1% level and \* denotes significance at the 5% level.

## Appendix 6: Interpreting the variable coefficients in the final model which shows marginal effects

**white** – A dummy variable equal to one if the individual is white and zero otherwise. The probability of a white individual applying to university is 22.6 percentage points lower than for a BME individual.

**disad** – A dummy variable equal to one if the individual is classified as disadvantaged and zero otherwise. The probability of a disadvantaged individual applying to university is not significantly different to that of an advantaged individual.

**male** – A dummy variable equal to one if the individual is male and zero otherwise. The probability of a male applying to university is not significantly different to that of a female individual.

white\*disad – A two-fold interaction term between ethnicity and socioeconomic status. It shows that the variation by ethnicity in the probability of applying to university is not significantly different between the advantaged and disadvantaged group.

**white\*male** – A two-fold interaction term between ethnicity and gender. It shows that the variation by ethnicity in the probability of applying to university is not significantly different between male individuals and female individuals.

**disad\*male** – A two-fold interaction term between socioeconomic status and gender. It shows that the variation by socioeconomic status in the probability of applying to university is not significantly different between male individuals and female individuals.

white\*disad\*male — A three-fold interaction term between ethnicity, socioeconomic status and gender. The impact of disadvantage on the variation by ethnicity in the probability of applying to university does not significantly differ between male individuals and female individuals.

**NE** – A dummy variable equal to one if the individual is from the North East region and zero otherwise. The probability of an individual from the North East applying to university is not significantly different to that of an individual from London.

**NW** – A dummy variable equal to one if the individual is from the North West region and zero otherwise. The probability of an individual from the North West applying to university is not significantly different to that of an individual from London.

**YH** – A dummy variable equal to one if the individual is from the Yorkshire and Humberside region and zero otherwise. The probability of an individual from Yorkshire and

Humberside applying to university is not significantly different to that of an individual from London.

**EM** – A dummy variable equal to one if the individual is from the East Midlands region and zero otherwise. The probability of an individual from the East Midlands applying to university is not significantly different to that of an individual from London.

**WM** – A dummy variable equal to one if the individual is from the West Midlands region and zero otherwise. The probability of an individual from the West Midlands applying to university is not significantly different to that of an individual from London.

**EE** – A dummy variable equal to one if the individual is from the East of England region and zero otherwise. The probability of an individual from the East of England applying to university is not significantly different to that of an individual from London.

**SE** – A dummy variable equal to one if the individual is from the South East region and zero otherwise. The probability of an individual from the South East applying to university is not significantly different to that of an individual from London.

**SW** – A dummy variable equal to one if the individual is from the South West region and zero otherwise. The probability of an individual from the South West region applying to university is not significantly different to that of an individual from London.

**lone\_parent** – A dummy variable equal to one if the individual is in a lone parent family and zero otherwise. Being from a lone parent family reduces the probability of applying to university by 4.9 percentage points when compared to an individual from a family consisting of either a married or co-habiting couple.

**siblings** – A continuous variable highlighting the number of siblings the young person has. The number of siblings a young person has does not significantly impact on the probability of applying to university.

**foundation** – A dummy variable equal to one if the individual attended a foundation school at Key Stage 3 and zero otherwise. The probability of an individual who attended a foundation school applying to university is not significantly different to that of an individual who attended a community college.

**voluntary** – A dummy variable equal to one if the individual attended a voluntary aided or voluntary controlled school at Key Stage 3 and zero otherwise. The probability of an individual who attended a voluntary aided or voluntary controlled school applying to university is not significantly different to that of an individual who attended a community college.

**modern** – A dummy variable equal to one if the individual attended a secondary modern school at Key Stage 3 and zero otherwise. The probability of an individual who attended a secondary modern school applying to university is not significantly different to that of an individual who attended a secondary comprehensive school.

**selective** – A dummy variable equal to one if the individual attended a secondary selective school at Key Stage 3 and zero otherwise. The probability of an individual who attended a

secondary selective school applying to university is not significantly different to that of an individual who attended a secondary comprehensive school.

**KS4EM\_04** – A continuous variable highlights the proportion of 15 year-old pupils who achieved 5 A\*- C grades at GCSE including English and Maths in the academic year 2004. The probability of an individual applying to university is not significantly impacted upon by historical school attainment, as indicated by this variable.

**%FSM\_pupils** – A continuous variable that shows the proportion of pupils known to be eligible for free school meals in 2004. The probability of an individual applying to university is not significantly impacted upon by this variable.

**school\_att** – A continuous variable indicating an individual's attitude towards school. A one unit increase in this variable increases the probability of an individual applying to university by 0.37 percentage points.

**stay\_fte** – A dummy variable equal to one if the individual intends to stay in full-time education after Year 11 and zero otherwise, as reported in wave 1. Intending to stay in education after Year 11 increases the probability of applying to university by 6.5 percentage points.

**likely\_apply** – A dummy variable equal to one if the individual states that they are very or fairly likely to apply to university at wave 1 and zero otherwise. Being very or fairly likely to apply to university at wave 1 increases the probability of applying to university by 10.3 percentage points.

**bestjobs\_a** – A dummy variable equal to one if the individual agrees or strongly agrees that the best jobs go to those who have been to university and zero otherwise. Agreeing or strongly agreeing that the best jobs go to those who have been to university increases the probability of applying to university by 14.8 percentage points.

**habitus\_a** – A dummy variable equal to one if the individual agrees or strongly agrees that people like them don't go to university at wave 4 and zero otherwise. Agreeing or strongly agreeing that university isn't for them reduces the probability of applying to university by 10.2 percentage points.

**not\_progress** – A dummy variable equal to one if the individual disagrees or strongly disagrees that it is now easier for people like them to get on and improve things for themselves compared to their parents. Disagreeing or strongly disagreeing with this statement reduces the probability of applying to university by 3.9 percentage points.

**trade\_or\_app** – A dummy variable equal to one if the main parent of an individual would like their child to start a trade, apprenticeship or training course at the age of 16 and zero otherwise. Aspiring for the child to begin a trade, apprenticeship or training course at 16 reduces the probability of applying to university by 8 percentage points.

**leave16** – A dummy variable equal to one if the main parent of the individual disagrees a little or strongly disagrees that leaving school at 16 limits a young person's career opportunities later in life and zero otherwise. Disagreeing a little or disagreeing strongly

with this statement reduces the probability of applying to university by 4.5 percentage points.

**KS2\_attainment** – A continuous variable indicating an individual's average Key Stage 2 point score across English, Science and Maths. The probability of an individual applying to university is not significantly impacted upon by attainment at Key Stage 2.

**KS4\_attainment** – A continuous variable highlighting an individual's total capped GCSE or equivalent point score. A unit increase in a person's total capped GCSE point score increases the probability of applying to university by 0.38 percentage points.

### Appendix 7: Avon Longitudinal Study of Parents and Children data used in the analysis

### **Young People**

[School life and me – at age 134 months] – Last term, my school was a place where I really liked to go each day

- 1. Agree
- 2. Mostly agree
- 3. Mostly disagree
- 4. Disagree

[School life and me – at age 134 months] – Last term, my school was a place where I enjoyed what I did in class

- 1. Agree
- 2. Mostly agree
- 3. Mostly disagree
- 4. Disagree

[Life of a teenager – at age 169 months] – My school is a place where I really like to go each day

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

[Life of a teenager – at age 169 months] – My school is a place where I enjoy what I do in class

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree

[Travelling, leisure and school – at age 166 months] – When you are 16 and after you have finished Year 11 at school what would you like to do?

- 1. Stay on in full-time education
- 2. Leave full-time education

[Year 11 questionnaire for young people – during Year 11] – When you have finished Year 11, what will you do?

- 1. Carry on in full-time education, either at the school you are at now or somewhere else
- 2. Leave full-time education for training, work or something else

[Year 11 questionnaire for young people – during Year 11] – Which type of qualifications do you plan to study for next year? [Only asked to those who state they intend to remain in full-time education after Year 11, hence option 1 in the question above]

- 1. A levels/AS qualifications
- 2. AVCEs (vocational A levels)/GCEs in applied subjects
- 3. Other vocational qualifications

### Parent (child based)

[Year 11 questionnaire for parents and carers – during Year 11] – In the long-run, which do you think gives people more opportunities and choice in life?

- 1. Having good practical skills and training
- 2. Having good academic results

[Year 11 questionnaire for parents and carers – during Year 11] – What do you want your child to do after Year 11?

- 1. Leave school at 16 and get a job
- 2. Stay in school or college until 18, then get a job
- 3. Stay in school or college until, then go to university
- 4. Do an apprenticeship or other vocational training
- 5. Leave school and look after family/home

[Your daughter/son 16+ years on – at 198 months] – What are your aspirations for your child's future job. Please highlight which best describes the sort of work you would like to see him/her doing eventually.

- 1. Higher professional occupations
- 2. Lower professional occupations
- 3. Intermediate/Technical
- 4. Skilled manual workers
- 5. Small business employers/self-employed
- 6. Lower supervisory
- 7. Routine manual and non-manual

### Mother

[Your pregnancy and filling the gaps – at 32 weeks gestation] – Mother's highest educational qualification [derived variable]

- 1. Certificate of Secondary Education/None
- 2. Vocational
- 3. O level

- 4. A level
- 5. Degree

[Your pregnancy – at 32 weeks gestation] – Social class for mother [derived variable]

- 1. I
- 2. II
- 3. III (non-manual)
- 4. III (manual
- 5. IV
- 6. V

### Neighbourhood

Index of Multiple Deprivation decile at the point where the young person begins Year 9 [derived variable]

- 1. Least deprived
- 10. Most deprived

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