

# **Tracking student mothers' higher education participation and early career outcomes over time: initial choices and aspirations, HE experiences and career destinations**

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## EXECUTIVE SUMMARY

### Introduction

There has been an emphasis in recent years on widening participation in Higher Education (HE). Although there have been some positive changes overall, there is still a much higher proportion of students from higher than from lower social class backgrounds attending Higher Education Institutions (HEIs) and there are also vast differences by social class in the proportion of students attending the highest tariff HEIs and in the subjects studied. There are also large gender differences in the subjects chosen at HE, with important implications for the labour market outcomes of men and women later in life.

There have been relatively few studies of student mothers who may face particular challenges in achieving successful outcomes within and after HE. The following report describes research aiming to address this gap. Funded by the Nuffield Foundation, this research sets out to examine the experiences of a large and diverse group of student mothers aged over 21 during and after Higher Education (HE), to see whether or not inequalities break down as a result of HE and whether or not student mothers can achieve social mobility, in comparison with other students of similar ages without children. A mixed-methods approach is employed, including statistical analysis of Futuretrack, a national, longitudinal, online survey of all full-time 2005-6 UCAS applicants, as well as new semi-structured interviews with a selected sample of student mothers.

The research is particularly timely, given the recent increases in HE tuition fees, raising concerns about future HE participation among mature students. Already, the numbers of mature students and part-time students have decreased since the introduction of higher tuition fees (HESA data, 2014).

The study was broken down into three distinct pieces of work:

- A comprehensive literature review;
- Quantitative, longitudinal analysis of Futuretrack data;
- Follow-up qualitative interviews with a sample of student mothers.

### The literature review

The main findings from the literature review demonstrated that:

- The demands of juggling childcare and domestic work with studying, and in many cases with paid work, are particularly difficult for student mothers. The division of domestic work and childcare appears unchanged for women who continue to take on the majority of such responsibilities, even with the addition of a student role.
- Partners and other relatives vary in their responses to women taking on the student role, and support from significant others appears patchy, although important.
- Most student mothers are limited in their choice of HEI, choosing to study locally in order to manage childcare, children's education and partners' work.
- Universities vary in their response and level of support, with many students having to rely upon individual staff members, and others missing classes or turning up late, due

to child sickness or difficulties with course timetabling, which often change at short notice.

- Those universities with the greater resources appear to have better facilities and structural supports (e.g., on-site crèches) but student mothers are less likely to attend such HEIs.
- How HEIs respond to the needs of student mothers can have the (potentially adverse) effect of maintaining and highlighting the 'otherness' of students with childcare responsibilities. However, until student parents are recognised as having unique needs and requiring specific support, they may remain invisible and isolated, with a greater risk of dropping out.
- Single student mothers are most at risk of negative outcomes, both in terms of the level of demands placed upon them, but also in terms of financial hardship. Many rely heavily upon grandparents and friends for childcare support.
- Most student mothers study to improve their career prospects, but many increase their self-confidence and esteem as a consequence of HE. Many also report on the importance of acting as good role models for their children.
- The experiences of student mothers tend to vary by many different interlinking factors, including social class, ethnicity and marital status.

### **The quantitative and qualitative data findings**

The initial aims of the project were to examine 'whether or not inequalities break down as a result of HE and whether or not student mothers can achieve social mobility, in comparison with other students of similar ages without children'. Our findings suggest that inequalities do not appear to break down as a result of HE. Some student mothers can and do achieve social mobility, in that they progress into a better job than before. However, the restricted choices of HEIs and of courses specifically chosen by student mothers, the lack of information about the reality of such jobs upon graduation, the difficulties and barriers encountered on their HE journey, and the similarly restricted occupational choices made after HE, suggest that this group of students experience relatively poor social mobility, in comparison with other female students.

Younger female non-mothers are more likely than mature students (both mothers and non-mothers) to be in non-graduate jobs and earning lower salaries overall soon after qualifying from HE. It must be remembered, however, that younger students have a greater degree of flexibility in that they are more able to take some time out after studying to reflect on their options, go travelling, take on internships and other (unpaid) work, leading towards the job they eventually want. The additional follow-up interviews carried out for this project in 2014 (up to 8 years after their initial application to HE), showed that the majority of student mothers had not moved into the jobs they initially anticipated when applying to HE and were unlikely to do so. Many had dropped out of HE.

Our research further highlights the various differences between mothers and non-mothers from the point of applying to HE and eventually moving into the labour market. Specifically:

- Student mothers are very different from all other female students entering HE, even those of a similar age. Motherhood has a significant impact on women's choices and experiences before entering HE, during HE and afterwards. Similar-aged women

without children are also different from “traditional” students who enter HE at 18 or 19 but seem to occupy a middle ground between mothers and younger non-mothers.

- A higher proportion of student mothers are from lower socioeconomic backgrounds and are more likely to study locally than all other female students, primarily because of childcare arrangements, children’s schools and partners’ work. They are also more likely to choose lower tariff HEIs and to choose particular subjects, e.g., Social Studies, Subjects allied to Medicine and Education, and aspire to female-dominated jobs in the public sector: nursing, social work, teaching and midwifery, which would not have required a degree in the past. The reality of such jobs is often very different from what was initially expected.
- There appears to be a lack of early information for student mothers about what these, and other popular job choices, entail. Placements often represent a crunch point, either during the degree itself or during a post-graduate year (e.g., PGCE). Of those mothers who drop out of HE, many do so because of the various barriers and difficulties of managing childcare and studying (often combined with work). Most mothers do not visit the careers service or the student union during their time in HE (primarily due to a lack of time and a perceived lack of relevance).
- For many student mothers, Higher Education is an opportunity that was not available to them when they were younger, and many are very positive about the overall HE experience. For example, they are more likely than other female students to think that their course helped them in self-confidence and spoken communication.
- Family support and social networks are crucial during the HE experience. Partners often facilitate the inflexibility of HE timetabling by having greater flexibility in their work in order to provide support with childcare. Single mothers appear to be a particularly disadvantaged group, supporting previous research on student mothers in the UK and elsewhere.
- Many mothers compromise when entering the labour market by putting their careers on hold or going back to their old jobs (more mothers than other graduates were already working for their current employer). Many are exhausted from the overall HE experience and feel that they need to take some time out or devote some more time to their children and partners. A similar proportion of mothers and other mature student women are employed in non-graduate jobs, but mothers are more likely to choose a job because it is local and because it is compatible with a partner’s career. These limited choices mirror their initial decisions regarding HE and also represent a level of ‘pay-back’ for partners’ support during HE.
- On the other hand, when age, subject, class of degree and type of HEI were included in a regression analysis, the impact of motherhood on the likelihood of being in graduate employment became insignificant, whilst the impact of SES remained constant. Motherhood as such does not appear to have any immediate impact on the likelihood of graduate employment whilst age, subject group, class of degree and type of HEI does. Older women are more likely than younger women to enter graduate employment; those doing Subjects allied to Medicine and Education do better compared with those doing Physical Sciences; those attending the highest tariff HEIs do better than those attending lower tariff ones; and those getting a better class of degree are more successful in gaining graduate employment than those not doing so. It appears that those mothers surviving the HE experience do well in

gaining graduate employment, although the types of graduate jobs undertaken by female graduates do vary by motherhood status.

- Mothers are more likely than other female graduates to be working part-time, doing voluntary work or are not in employment (and not looking for work). Those working part-time tend to be in lower-level jobs than originally intended, e.g., support workers rather than social workers, or teaching assistants rather than teachers. These lower-level jobs could be done without a degree. Even if they go back to the job they had before, or are working in a lower-level support role, student mothers often have a greater appreciation of that job and, in many cases, aspirations for the future or for other things they might do.
- While some mothers had negative experiences of HE, many valued the whole experience and their success in having completed a degree, which goes beyond simple employment outcomes. Many talked about acting as good role models and being able to discuss HE with their children as they started to consider HE options. Other positive outcomes for mothers included self-fulfilment, greater self-confidence, gaining a broader outlook on the world, and a general appreciation of the skills they have gained.

### **Preliminary recommendations**

- HEIs should engage more with student mothers at the earliest opportunity during the application process to provide tailored advice about the courses available. Advice and support should be focused on widening participation in different degree courses, not focusing solely on very vocational courses at lower-ranked universities.
- HEIs should ask applicants specific questions upon registering for HE which would help to identify and target those most in need of help (student mothers are only one group among many which can gain from such support, but they are less likely to look for it than other groups of students).
- Careers advice needs to be more relevant to student mothers and could be offered in a different way than the offer for “traditional” students with more time available (e.g., greater online support).
- HEIs need to consider the impact of timetabling on student mothers. In courses where there are lots of similar-aged women it would make sense to timetable according to their needs. Timetables need to be rigorously maintained and adhered to, and if changes are made, student mothers should be given special consideration.
- Many student mothers are reluctant to ask for special consideration but then find it particularly difficult when emergencies occur. Lecturers and course directors should provide greater flexibility for student mothers and those in greater need of support.
- More courses need to be offered on a part-time basis, especially those which attract a high number of mothers. This more flexible provision will help to reduce the number of drop-outs from HE.
- Simple categorisations and measures of “success” from HE (i.e., a graduate job) need to be extended and re-evaluated as this could reduce HEIs’ willingness to accept students with more varied backgrounds. The ‘value added’ provided by an HE



is a better indicator of success, especially for non-traditional students who start from a particularly low base and struggle with additional responsibilities while studying.

## CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

There has been an emphasis in recent years on widening participation in Higher Education (HE), but while the sector as a whole has had some success, there is still a much higher proportion of students from higher than from lower social class backgrounds attending Higher Education Institutions (HEIs). There are also vast differences by social class in the proportion of students attending the highest tariff HEIs and in the subjects studied. Although widening participation in HE is undoubtedly important, questions still remain about whether or not HE remains an effective route to social mobility and integration, “a force for opportunity and social justice, not for the entrenchment of privilege” (DfES, 2003: 71, cited in Atfield and Behle, 2010). For example, there has been relatively little focus on how students from different backgrounds and with different circumstances experience HE and on their access to labour market opportunities (e.g., Elias and Purcell, 2004; Crozier, 2008; Greenbank and Hepworth, 2008). In addition to class differences, there are large gender differences in the subjects chosen at HE, which have the potential to lead to differential returns for men and women within the labour market, even though girls continue to out-perform boys at school and are more likely to stay on in full-time education after GCSEs.

There have been relatively few studies of student mothers who may face particular challenges in achieving successful outcomes within and after HE. Some researchers have focused on part-time students which often included limited information on mothers; others focused on mature students which again sometimes included data on mothers.

The following report is based on research funded by the Nuffield Foundation to examine the experiences of a large and diverse group of student mothers aged over 21 during and after Higher Education (HE), whether or not inequalities break down as a result of HE and whether or not student mothers can achieve social mobility, in comparison with other students of similar ages without children. A mixed-methods approach is employed, including statistical analysis of longitudinal, real-time data, as well as new semi-structured interviews with a selected sample of student mothers. The research is particularly timely, given the recent increases in HE tuition fees and the impending withdrawal of funding for Level 3 qualifications, raising concerns about future HE participation among mature students. Already, the numbers of mature students and part-time students have decreased since the introduction of higher tuition fees (HESA data, 2014).

This study was broken down into three distinct pieces of work which will be integrated here into a single report (for further details of the literature review, see Appendix 1):

- A comprehensive literature review;
- Quantitative, longitudinal analysis of Futuretrack data;
- Follow-up qualitative interviews with a sample of student mothers.

The following section includes a summary of the most recent literature on student mothers, followed by an overview of the methodology used in this study, the main results sections and the conclusions.

### 1.1 Issues of access and the decision to enter Higher Education

Several researchers have touched on issues relating to the decision to enter HE, although only a few have focused specifically on student mothers' decisions and issues relating to how they access HE.

Many researchers, both in the UK and elsewhere, have demonstrated that becoming a role model for children is an important factor in parents choosing to study (e.g., Haleman, 2004; Marandet and Wainwright, 2009, 2010; Reay et al., 2002; Reay, 2003; Wisley, 2013). Although comparisons between student mothers and fathers are rare, Marandet and Wainwright (2009, 2010) found that almost twice as many student mothers as student fathers report role modelling for children as an important factor in the decision-making process. Fathers, on the other hand, were almost twice as likely as mothers to cite specific course availability as an important factor, whereas both fathers *and* mothers reported that proximity to home was important in their choice of university. Gonzalez-Arnal and Kilkey (2009) and Reay (2002, 2003) also reported on the importance for mature students of the location of university and that, for many, the local university was the only choice possible, due to children's schools and the proximity of support networks for care.

The transition to HE appears to be especially difficult for working-class, lone mothers (Reay et al., 2002). Single mothers were those most at risk of difficulties in balancing children and study and tended to take longer to complete their access courses than other mature students. Osborne and colleagues (2004) also describe how for single parents, juggling work, home and family was a major barrier in their decision to become mature students, and this was the group with the largest number of barriers (major concerns were timetabling and the provision of childcare, with grandparents often called upon to help). Haleman (2004) similarly found that there were particular difficulties balancing parent, student and provider roles for US single mothers. Another US study, comparing younger and older student mothers, found that younger mothers were significantly more likely to emphasise HE as their ticket to a more independent lifestyle, allowing them to set up a household of their own (Wisley, 2013). Older mothers, on the other hand, were more likely to cite personal and academic goals in their decisions to study. The most commonly cited reason for entering HE for both groups was to improve their working situation (68 per cent of younger and 57 per cent of older mothers). Others wanted to provide a better life for their families. In the UK, Osborne and colleagues (2004) also found that almost all applicants to HE were motivated by the prospect of getting a better job, but the majority were ill-informed about the financial implications of entering HE. Many were also worried about their ability to learn.

Lister (2003) highlighted previous UK research identifying the particular needs of female carer students once they have enrolled, as well as in accessing HE (e.g., flexibility in learning programmes, childcare, better transport and finance). Learning flexibility includes IT, remote learning and shorter teaching days. However, Lister also cautioned that flexible study programmes are more likely to be taken up by women which may serve to perpetuate their carer roles. Nevertheless, women carers were attracted to a qualification in social work, and block modules which work alongside school terms were reported as the primary reason for applying.

## 1.2 University and government support for student mothers

Universities vary in the degree of support they offer to student mothers and much of the research focuses on the differences between older and post-92 universities. Archer, Hutchings and Ross (2003) have suggested that certain 'spaces' within the HE sector (part-time courses, post-92 universities) have sometimes been constructed as working class. Callender (2010) argues that, as part of the widening participation agenda, older HEIs need to attract more non-traditional students, especially those from poorer backgrounds. However, more traditional attitudes to student parents in older universities mean that greater university resources do not necessarily lead to a more supportive culture.

In a comparison of UK and Danish HEIs, Brooks (2012) found that UK student parents received low structural support (high tuition fees, little or no free childcare, no automatic right to parental leave and little flexibility in modes of study, such as taking time off for a sick child). Any support tended to be given to low-income parents and was often at the discretion of academic staff. In Denmark, support for student parents was generally set within legislation (e.g., e-learning packages to enable students who had children with long-term illnesses to study at home and thus complete their courses on time) and was supported by government. As universities receive payment for students who successfully complete their courses, there are considerable rewards for offering flexible modes of study. In Denmark, there were many affordable childcare facilities with available places close to the HEIs, whereas in the UK, there were large differences between the older and newer universities in overall levels of support and available resources.

Findings from another UK study involving ten case studies of English HEIs demonstrated that, on the whole, national and university policies do not address the needs of students with children (Moreau and Kerner, 2012). Universities vary enormously in their provision of support to student parents. There was again some indication that pre-92 and/or high-ranking universities are able to offer more to student parents, possibly due to their more secure financial position. On the other hand, students with lower levels of economic and cultural capitals are concentrated in the post-92 sector and tend to study 'newer' subjects; as such, they are less likely to receive such support. Indeed, support in many cases is left to the good-will of individual members of staff (i.e., informal practices), but often triggered by legislation, e.g., the Equality Act. Although there was a widespread view among student parents that universities offered them little support, it was recognised that this presented a problem: many preferred not to be recognisably "different" from more traditional students.

Although the recent government focus has been on widening access to HE, Marandet and Wainwright (2009, 2010) highlight that it has done little to support the retention and progress of non-traditional students and recent changes to HE have meant even greater difficulties for these students. Student parents are often abstracted from the context of their private lives and some students find themselves internalising their home situations to try and fit in at university. As with Moreau and Kerner's later (2012) study, a number of staff and students articulated the need for special treatment and flexibility for student parents as a matter of fairness. However, many students expressed a difficulty in sustaining this level of differential treatment. Indeed, many student mothers see failure to access HE or to progress within it as an individual failure, rather than a structural problem (reflecting the individualisation of HE).

Another recent study argues that if HE is to be anything other than "survival of the fittest," where only those with substantial support networks can cope with the demands of studying and motherhood, adequate support structures are vital at both government and institutional level (Hinton-Smith, 2012). Older universities are those which need to change the most if they are serious about supporting lone mothers and providing positive experiences. Similarly to studies outlined earlier, financial problems or concerns were particularly acute among lone mothers in Hinton-Smith's study, who expressed a need for clearer advice on student finance, and the provision of more information on childcare support in particular. More help was also required in easing the transition from FE to HE, e.g., by preparatory modules. Once within the system, there were many highlighted examples of ways in which lone student parents could be helped, e.g., making registration at the beginning of each year and each term quicker. The ability to secure low-cost (and family-friendly) campus accommodation was also highlighted as being of particular importance for lone student mothers. Other recommendations included the facilitation by HEIs of networks of student mothers, as well as greater provision of childcare facilities, seen to be one of the key reasons behind high rates of student drop-out among lone parents. Other key issues related to better timetabling of courses, flexibility and support and remote access to services. Attitudes towards non-

traditional students also need to be fully revised. Broadening the model from a 3-year full-time course to support the needs of the non-traditional student would also help in recruiting and retaining lone student parents.

### 1.3 Particular barriers and difficulties for student mothers

The majority of articles, by far, relate to the problems and particular difficulties faced by student mothers.

Childcare, perhaps not surprisingly, is crucial to student parents (e.g., Moreau and Kerner, 2012; Marandet and Wainwright, 2009, 2010; Shuetze and Slowey, 2002), with the high costs of childcare being a particular issue. Many researchers highlight the fact that financial difficulties are a main barrier to study, with 39 per cent of student parents finding it difficult to pay for childcare (Marandet and Wainwright, 2009, 2010). This, however, varied by partner status: a total of 53 per cent of lone student parents reported financial difficulties, compared with 29 per cent of partnered student parents (Marandet and Wainwright, 2010). When asked what would help them complete their degree, 'support with childcare costs' ranked highly and, when asked what would improve their experience the most, 70 per cent cited information targeted at students with children. Most student parents were studying full-time due to the financial penalties of studying on a part-time basis but were finding this difficult. Problems with childcare included issues of flexibility, affordability, availability and suitability, e.g., the childcare needs of student parents were often at odds with nurseries and childminders. A system of work placements also raised problems for parents. Alsop and colleagues (2008) reported that flexibility from the department and individual staff was crucial in relation to assignment deadlines and absences to look after sick children. The cost of transport and time taken to get to university was also an issue and many limited their trips to university as a result. Part-time students were more likely to feel isolated and unable to join in full university activities due to childcare and other responsibilities.

Gonzalez-Arnal and Kilkey (2009) similarly found that many mature students faced financial barriers: among those who considered dropping out, having money worries was the biggest reason cited. While in general mature students are less likely than their younger counterparts to perform paid work during term time, mature students with children are more likely to do so and also tend to have longer hours of paid work which negatively affects their academic outcomes. The authors also note the limited options available to them after graduation, arguing that "just as caring responsibilities render mature student carers geographically immobile when it comes to choosing where to study, it also restricts their future job-search area... Their future wage levels were also destined to be affected by the need to find jobs and patterns of employment that would enable them to reconcile paid work and caring responsibilities (2009: 99)".

The timing of lessons and short-notice changes to lessons were reported as being particularly problematic for student mothers (Alsop et al., 2008; Marandet and Wainwright, 2009, 2010; Moreau and Kerner, 2012; Shuetze and Slowey, 2002; Walkup, 2005). In addition, the isolation of student parents and the difficulties juggling varying responsibilities were of importance (Moreau and Kerner, 2012; Shuetze and Slowey, 2002). Many reported missing out on 'being a student' and 'not fitting in' which led to isolation, showing similar findings to Alsop and colleagues (2008). International student parents and single parents were seen as facing even greater difficulties. The health and emotional aspects of being a student parent were described, e.g., guilt, as well as mental and physical health issues, such as sleep deprivation and depression. The construction of care as a private issue meant that many students relied on informal support from individual staff members or family. However, many others had not sought out any support.

Shuetze and Slowey (2002) reported that a fifth of student parents cited a lack of confidence (often due to a lack of earlier educational experiences) and many felt they needed more tutoring support as a result. However, even though many student parents faced such problems, they were reluctant to talk to support staff. A lack of 'traditional' student skills often accentuated student parents' alienation (e.g., referencing, essay structure skills, computer literacy, etc.). Alsop and colleagues (2008) also found that lack of time and lack of money were the main obstacles that mature student carers had to overcome upon entering university, but other aspects of their caring responsibilities were also mentioned, e.g., the cost that their decision to become a student had on the emotional aspects of their caring role and the changes that being a student imposed on their identity as mothers. The authors conclude that, despite the greater presence in universities of students with caring responsibilities, and despite mature and part-time students remaining explicit targets within the widening participation strategy, their particular challenges tend to be ignored at university and at national policy level, echoing much of the research outlined in the previous section.

Brennan and Osborne (2008) also found that students who were typically local with domestic commitments, and had limited engagement with the HEI, differed from the others in a number of respects: they reported lower gains in self-confidence, were less likely to expect to retain university friendships after graduation, were more likely to feel that they 'never fitted in' and very much more likely to feel that the 'qualification was the main thing' and that life outside of university remained the most important aspect of their lives. "For this...group of students, the experience of university study was something which was lived in parallel with other lives, lives quite full of other responsibilities" (2008: 187).

Walkup (2005) found that peer support was very important to student mothers, in spite of some blanket regulations imposed by HEIs which made life more difficult (e.g., limited parking and incompatible lecture times). Similarly with some of the other literature outlined earlier, Walkup also refers to some of the negative experiences of being a student mother, most particularly the theme of feeling excluded by the rest of the group and the difficulties and frustrations of working with younger students.

A series of research studies have focused primarily on female doctoral students. For example, Brown and Watson (2010) conducted a study with eight doctoral student mothers at a post-1992 HEI in the UK; some had other caring responsibilities as well as being mothers. The authors found that being a mother had profound implications for doctoral-level study. The timing of study was dictated by domestic demands and balancing home and academic life was a source of great stress, with women being torn between their roles as wife/mother and student. Attendance at conferences was very problematic and, for many, impossible, resulting in a lower level of "embeddedness" within the university research culture. Previous research has also shown that student mothers start their doctoral studies later and take longer to complete them (Nerad and Cerny 1999). Lack of time is a major issue for female part-time research students (Leonard 2001). The negative impact of stress in terms of health and quality of life was often highlighted.

US studies have shown many parallels with the UK research reported above, with similar barriers and difficulties. Kuperberg (2009) argues that mothers' original "token" status within graduate school has changed somewhat, with more and more women seeing this as a time when studying can be combined more easily with childcare. As such, there should be greater scope for women to change the institutional culture which typically discourages women from having children while studying. Financial incentives for HEIs and reputational penalties for high numbers of drop-outs would seem to support the view that universities would be increasingly open to change, and more recent research from the US shows that there are a greater number of on-site crèches, collaborative writing groups to reduce isolation and a

higher availability of part-time work for graduate mothers (Kuperberg 2009: 478). The author hypothesises that this “institutional effect” should increase motherhood among more recent female graduate students, relative to earlier years. Findings showed that although there was an increase over time, women with graduate degrees demonstrated a later fertility pattern than women with lower education levels, and while at graduate school their motherhood rates were significantly lowered. Kuperberg argues that “maternity leave policies and childcare options available to graduate students may explain part of this puzzle” (2009: 496). Improving policies for graduate student mothers may prevent women from ‘leaking out’ early in the pipeline of their elite careers and thereby increase their opportunities later in life.

Sweet and Moen (2007) showed that women unanimously expressed a positive impact of studying on personal satisfaction but also expressed ambivalence, viewing it as an inevitable dilemma in balancing their various roles. Few changes were shown in the division of domestic labour or childcare, with women still doing more than men. In interviews, 62 per cent of women reported that their return to study had had a negative impact on their marriage (only two women reported positive outcomes on marriage quality). Much of this dissatisfaction with marriage quality emanates from failures to re-work the division of domestic labour and childcare to accommodate the wife’s return to HE, although the authors note that current job demands of wives and husbands also provided a barrier to a more equal sharing of domestic labour and childcare.

In another US qualitative study similarly focusing on doctoral student mothers, Lynch (2008) argues that the “cultural script” of intensive mothering in the US contributes to high attrition rates for these mothers (motherhood is defined as the route to personal fulfilment and an essential part of female identity). The author also examined external structural factors which may affect attrition (e.g., childcare and financial support), as well as socio-cultural identities. Respondents complained of little financial support, which slowed down their progress. Many switched to part-time status after the birth of a child but felt that this cost them in terms of career and future eligibility for funding. There was also a feeling that this led to negative perceptions about their commitment to studying. Many took out government loans which led to further worries and the majority fell back on family and husbands for financial support, with many experiencing a loss of independence as a result. All the women talked about finding affordable childcare, as the majority of on-site childcare facilities were too expensive and the operating hours too restrictive. Many of the women relied upon other family members or spouses for childcare as a result. Respondents devised certain strategies which included downplaying the maternal role in the academic realm (‘maternal invisibility’) as well as downplaying the student role outside of academia (‘academic invisibility’). Many reinforced the cultural expectation that only mothers’ care was good enough, with many excusing their male partners. “The combined effect of these practices is to publicly segment the women’s student and mother identities. Therefore, although respondents privately define themselves as ‘student mothers’, they rarely present their blended identities, either to the academe or to the culture at large. The stress of maintaining a dichotomous identity can result in motivational conflicts (Mills 1959) for student mothers, and can be a factor leading to increased attrition” (2008: 599).

Returning to issues of class and the importance of other family relationships highlighted above, Moss (2004) focused on 17 women in the UK (not necessarily mothers) who were interviewed after their finals, in order to explore their experiences and perceptions of HE. A third of the sample was made up of black women. Cuts in social security and the introduction of student loans had forced many women to work, with a major source of employment for the women students being care work, often fitting this in around studying, working at nights and weekends. Many faced scrutiny by other family members and often had to justify the time spent studying. Many also felt under more pressure to justify any absences at college. In spite of the push by the previous New Labour government to increase HE among under-

represented groups, the material conditions which would allow students to study effectively (greater time, space and money) were being reduced. For these women, 'space and time for studies had to be snatched from space and time for paid work, home, leisure and community' (290). As Heward (1996) argues, examining women's experience of HE in the context of a linear occupational career does not convey the reality of the process for many. 'Age, mother status, residence, dis/ability, colour, religion, geographical heritage, class and sexuality intersect differently with dominant normative expectations. Individual women's feelings and experiences arise in relation to their specific position and cannot readily be generalized to other women' (1996: 299).

In 2009, the NUS produced its important and influential report *Meet the parents*, focusing upon the experience of students with children in FE and HE. The research found that 92 per cent of respondents did not move to study, which inevitably affects their overall experience of HE. Many student parents were on vocational courses which involved placements, causing particular difficulties in terms of childcare and additional costs. Most of the barriers experienced by student parents involved the mis-match between childcare and timetabling, holidays, deadlines and placements, echoing previous research. Around 60 per cent of respondents had thought about dropping out (65 per cent of lone student parents). As outlined earlier, HEI staff were vital in student parents' experience, with individuals often at the mercy of 'beneficent tutors'. Having little money and time made it difficult for parents to get involved with student life and one in ten said they felt isolated. Many also faced financial pressures, especially lone parents. Seventy-six per cent received no childcare funding, even though they were entitled to benefits (the rules are often overly complicated and many have to change between benefits and support several times a year). Only 18 per cent felt they had received enough information about their financial entitlements to make an informed decision about becoming a student parent and only 14 per cent felt that they had received sufficient information about childcare. Accessing good childcare was a constant barrier and 79 per cent had regularly relied on friends and family while at university. Half of all students had missed or been late for a class due to child illness. The report makes several recommendations, including better data collection of student parents, financial support and help with childcare, changes to timetabling and help in training for those dealing with student parents, as well as greater engagement with other students, all issues which have been raised in earlier studies in both the UK and elsewhere.

A later report by the NUS and Million+ (2012) focused more specifically on mature students, who now make up around a third of all undergraduate students (10 per cent in 1980) and who come to HE with a variety of work and personal experiences, bringing different skills. Mature participation in HE helps to raise aspirations and skills, as well as social mobility. Mature students are a very diverse group, however. Compared with young students, they are more likely to study part-time at modern HEIs and FE colleges, undertake online and distance courses, are female and from lower SES groups and BME groups than younger students, as well as studying locally. The report highlights concerns that the new funding regime and changes to access may negatively affect mature students, with numbers already declining. Mature students are also more likely to drop out, even though the majority really value the opportunity to enter HE.

#### 1.4 Positive experiences and outcomes of HE

Moreau and Kerner (2012) found that, among a range of barriers and negative experiences, the positive aspects of being a student parent included being a positive 'role model' for one's children and finding yourself after being 'just a mum'. In spite of highlighting many difficulties, the NUS study on student parents (2009) similarly reported that 75 per cent of respondents said that being a student had been a positive experience, both for themselves and for their families.



Walkup (2005) discussed how student mothers changed over the three years of studying. Mothers commented upon becoming 'much more critical' and 'intrigued' about learning, as well as changing their reactions and increasing self-esteem. Other women reported greater determination and energy as a result of a successful engagement with HE. Whilst still seeing children as important, some were now putting themselves first and seeing their own lives as significant in their own right. Walkup reflects upon these various responses, saying that 'the discourse of motherhood reinforce[s] connections between the two processes of self-development and mothering. It also suggests that whilst this has been a sometimes difficult and painful experience, but also productive and creative one which is essentially personal and rewarding' (2005: 7).

In a US study, Wisley (2013) asked 95 mothers how enrolment had affected their children: a third of mothers said that their children had become more motivated and diligent at school as a result of their own HE studies. Thirty-three mothers also said that their own enrolment would spur their children on to apply for HE themselves. In another US study, Lynch (2008) found that there was no difference in support for student mothers from either male or female advisors/supervisors. "Mutual respect and praise, time spent together, acknowledgment of the student's private life, and networking on the student's behalf are factors commonly reported by respondents as both supportive and encouraging". Some women mentioned a student support group set up by the university which was very beneficial and included meetings, online chat groups and webpages containing tips and advice. Others reported a reliance on families and non-university friends for support.

O'Shea and Stone (2011) reported on an Australian study of female student parents, who started their courses as a means of improving their career options but later found that HE represented a means of personal achievement and also a means to restore identity. Many felt they had missed out on opportunities in the past. Others had re-negotiated their relationships with partners and traditional domestic roles, but implicit in the women's stories was a willingness by the women to accommodate their partners in order to avoid active resistance. There are strong similarities here to Smith's study (1996), which found that 'patriarchal values towards women's role in the family' (68) created a situation where women 'expected to receive little emotional support [and] had to judge their husbands/partners' moods before broaching the subject of returning to study' (70). All women showed increasing confidence and wellbeing over time, however. Many talked about a change in identity and being a good role model for their children, echoing UK research (e.g., Reay et al., 2002).

### 1.5 Key findings from the literature

- Student mothers face particular difficulties both in terms of accessing HE and, once within the HE system, in successfully completing their studies. There appears to be a lack of financial, educational and emotional support in the earliest stages of the HE journey, factors which could reduce HE participation among student parents and increase student drop-out once enrolled.
- The demands of juggling childcare and domestic work with studying, and in many cases, with paid work, appear to be particularly difficult for student mothers. The division of domestic work and childcare appears unchanged for women who continue to take on the majority of such responsibilities, even with the addition of a student role.

- Partners and other relatives vary in their responses to women taking on the student role, and support from significant others appears patchy, although of great importance.
- Most student mothers are limited in their choice of HEI, choosing to study locally in order to manage childcare, children's education and partners' work.
- Universities vary in their response and level of support, with many students having to rely upon individual staff members, and others miss classes or turn up late, due to child sickness or difficulties with course timetabling, which often changes at short notice.
- Older universities appear to have greater resources, better facilities and structural supports (e.g., on-site crèches) but student mothers are less likely to attend such HEIs. There also appears to be a more negative culture surrounding "non-traditional" students in such universities, perhaps as a result of their under-representation.
- How HEIs respond to the needs of student mothers can have the (potentially adverse) effect of maintaining and highlighting the 'otherness' of students with childcare responsibilities. However, until student parents are recognised as having unique needs and requiring specific support, they are more likely to remain invisible and isolated, with a greater risk of dropping out.
- Single student mothers are most at risk of negative outcomes, both in terms of the level of demands placed upon them, but also in terms of financial hardship. Many rely heavily upon grandparents and friends for childcare support.
- Most student mothers embark on HE to improve their career prospects, but many increase their self-confidence and esteem as a consequence of HE. Many also report on the importance of acting as good role models for their children, highlighting the potential for inter-generational effects.
- The experiences of student mothers tend to vary by many different interlinking factors, including social class, ethnicity and marital status.

## CHAPTER 2: METHODOLOGY

### 2.1 Introduction

The following sections describe the methodology used in both the quantitative data analysis and the semi-structured interviews conducted with student mothers in 2014, up to eight years after their initial application to HE.

### 2.2 The Futuretrack data set and the quantitative data analysis

Futuretrack is a national longitudinal online survey of all full-time 2005-6 UCAS applicants including EU and overseas applicants (this includes all those who applied for a course in 2005-6, even if they then decided not to go further with HE or if they were unsuccessful in their application)<sup>1</sup>. For the quantitative analysis described here, the four waves of the survey were used: the first wave was conducted during the application process (summer - early autumn 2006); the second wave after completion of the first year (summer - early autumn 2007); the third wave during respondents' last year in HE (spring 2009 for three-year courses and spring 2010 for four-year courses). A final wave took place either two or three years after graduation (depending on the length of course and the time of graduation) in winter 2012.

The data set can be used to analyse student mothers' pathways through HE and into the labour market / further study. However, the question of whether a respondent had children was not asked in Wave 1 of Futuretrack; as a result, those mothers who applied to HE but did not enter an undergraduate course in 2006 and did not respond to the next wave could not be identified. The data set does allow for the identification of mothers in the following waves, 2-4 (Table 1). Even though the total number of mothers in the sample decreases over time, the proportion of mothers remains around 8 or 9 per cent of all female students. The proportions of those with younger and older children vary over time but in all waves, the proportion of mothers with children older than 5 years was higher, compared to mothers with younger children.

Table 1: Mothers in the Futuretrack sample

	N	% of sample	% with children under 5 years old	% with children aged 5 - 12 years old	% with children aged older than 12
<b>Wave 2</b>	1948	9.2	2.6	5.9	3.6
<b>Wave 3</b>	1035	8.6	1.3	4.7	3.6
<b>Wave 4</b>	482	7.9	1.0	4.2	4.0

Source: Futuretrack data, weighted, n unweighted; W2 and W3 sample includes only those who started in HE as a full-time student; W4 includes only those who completed their undergraduate courses.

A small number of respondents became mothers during the course of their studies. Those remaining in the sample were included in further analysis (as they were mothers) but, due to small numbers, we did not do any further comparisons between those who became mothers and those who applied as mothers.

<sup>1</sup> More information about the Futuretrack project can be found on the project website: <http://www2.warwick.ac.uk/fac/soc/ier/futuretrack> and at Purcell et al. (2013).

It must also be noted that part-time students are not included in the analysis described here. It is anticipated that many student mothers will study on a part-time basis or would choose to move to part-time study if their caring responsibilities changed or proved particularly difficult. As a result, we are excluding a potentially large group of student mothers from our analysis. For more on part-time students in Futuretrack, see Callender's body of work (e.g., Callender and Wilkinson, 2012).

### 2.3 Finding a comparator group

In order to identify the specific impact of motherhood on students' HE experience, it was necessary to identify a suitable comparator group to contrast the findings for student mothers. Evaluating the effect of motherhood on HE students here presents the inherent problem that it is not possible to observe the 'true counterfactual' – i.e., what would have happened to student mothers if they had not had children. A common approach used in defining an appropriate comparison group in lieu of the true counterfactual group is to match 'treated' individuals (here, student mothers) with 'untreated' individuals (non-mothers) and comparing the outcomes for these two groups. This requires that the matched mothers and non-mothers be as similar as possible. Initially, a number of covariates were used in order to match mothers to non-mothers in the data set. These variables included: age, ethnicity, disability, parental background (i.e., whether or not parent has a degree) and region. Finally, the matching procedure included only age to match mothers to non-mothers. We chose age as the matching variable as this was the most significant differentiating variable between student mothers and other students and we wanted to examine other interesting differences between groups, such as socioeconomic status, university chosen and course studied. We also compared women only. On average, student mothers were 35.7 years old when they applied to HE, whilst the average age of non-mothers was 19.5 years<sup>2</sup>.

Coarsened Exact Matching (CEM) was used to carry out the matching in the data. This procedure is described in Lacus, King and Porro (2009) and was implemented in Stata using the programme CEM. The cutpoints for age which were used in CEM were determined automatically by the programme and this achieved the best balance of covariables compared to the unmatched data. Alternative matching methods were also considered, including propensity score matching with various sets of explanatory variables included for the matching equation and also using different matching algorithms. However, the results achieved with CEM were considered to provide the best balance between mothers and non-mothers in our sample.

The 'matched' group of non-mothers includes all non-mothers where a match was possible and the totals for this group of non-mothers incorporates the weights produced by the CEM matching process. The weights for each of the matched mothers is equal to one. For the non-mothers who are matched to the group of mothers, the weights vary so as to achieve a better balance between the non-mother and mother groups in terms of age (i.e. the variable on which the CEM process has been based in this instance). The weights on the individuals in the matched non-mother group range from 0 to 45. The sum of the weighted observations ends up being the same as the sum of unweighted observations - some of the actual individuals in the sample are weighted as 0 (or less than 1) whilst others are weighted by much greater factors. All non-mothers (except where the variable on age was missing) are included in the matched group of non-mothers but they are weighted differently, thus producing somewhat different group averages for other variables. In other words, the matched non-mother group is the same as the 'all other female' group (except where a match was not possible because of missing age information). The CEM matching process based on age resulted in 2,444 student mothers being matched to 28,508 non-mothers in

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<sup>2</sup> All figures refer to the Futuretrack data sample.

wave 2, 1,264 student mothers matched to 16,120 non-mothers in wave 3 and 575 mothers to 9,795 non-mothers in wave 4. The following tables will display findings for student mothers and similarly-aged matched non-mothers, together with findings for younger non-mothers.

All students were assessed for their socioeconomic status, using the National Statistics Socio-economic Classification (NS-SEC), an assessment of parental socioeconomic status (not ideal in the case of student mothers but this has commonly been used in other studies to assess socioeconomic status and was felt to be the best for comparisons with non-mothers and younger students). Categories were combined to form three main SES groups: managerial and professional; intermediate; and routine and manual occupations<sup>3</sup>. Student mothers were less likely to come from higher social classes than other students: only 36 per cent stated that, when they were fourteen years old, their parents had belonged to the managerial and professional occupations, compared with approximately 44 per cent of matched non-mothers and 54 per cent of younger non-mothers.

Type of university chosen was categorised by the tariff score required for entry, and has been used extensively in previous Futuretrack reports (e.g., Purcell et al., 2013; Behle, 2014)<sup>4</sup>. For more on this classification, see Purcell et al (2009)<sup>5</sup>; see also Appendix 2 for classifications of HEIs.

Table 2 clearly shows that student mothers were more likely than either matched non-mothers or all female non-mothers to be from lower SES backgrounds, less likely to apply to higher-status universities and more likely to attend lower-status universities (for more on these differences, see later sections).

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<sup>3</sup> More information about this classification can be found here <http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html>

<sup>4</sup> Kate Purcell, Peter Elias, Gaby Atfield, Heike Behle et al. (2013) 'Futuretrack Stage 4: transitions into employment, further study and other outcomes', [http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/stage\\_4\\_report\\_final\\_30\\_10\\_2013.pdf](http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/stage_4_report_final_30_10_2013.pdf)

Behle, H. (2014) 'European Mobility of UK educated graduates. Who stays, who goes?' *Higher Education Quarterly* 68 (3), 288 – 304.

<sup>5</sup> For more on this categorisation, see: Purcell, K., Elias, P. and Atfield, G.(2009) 'Analysing the relationship between higher education participation and educational and career development patterns and outcomes: a new classification of higher education institutions', [http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/findings/ft3.1\\_wp1\\_access\\_tariff\\_classification.pdf](http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/findings/ft3.1_wp1_access_tariff_classification.pdf)

Table 2: Differences between mothers, matched non-mothers and all female non-mothers after first year

		Student mothers	Non-mothers	All female non-mothers
<b>Socio-Economic Status</b>	Managerial and professional occupations	34%	42%	53%
	Intermediate occupations	24%	24%	21%
	Routine and manual occupations	42%	34%	26%
<b>Total (=100%)</b>		1823	21667	21667
<b>HEI chosen</b>	Highest tariff university	10%	16%	26%
	High tariff university	22%	20%	25%
	Medium tariff university	38%	33%	29%
	Lower tariff university	22%	19%	13%
	General HE college	6%	5%	2%
	Specialist HE college	2%	7%	4%
	<b>Total (=100%)</b>		1599	21225
<b>Age group (as at 30th Sept 2006)</b>	18 and under	0%	0%	50%
	19-20	0%	3%	30%
	21-25	11%	11%	13%
	26 and over	89%	86%	7%
<b>Total (=100%)</b>		1939	23173	23173

Source: Futuretrack data, Wave 2 (percentages of student mothers/matched non-mothers weighted by CEM weight; all female non-mothers weighted by Futuretrack weight).

\* Please note that due to the large numbers of participants involved in the analysis, most of the comparisons using chi-square tests will show significant differences. These significance tests should therefore be treated with caution.

## 2.4 Qualitative semi-structured interviews

Although the Futuretrack surveys include some open-ended questions for respondents to record more detailed answers and also include questions to gauge the attitudes and aspirations of respondents, all surveys are limited to pre-defined coding to allow for statistical analysis. By employing a mixed-methods approach to the study, however, we were also able to gather and qualitatively analyse more in-depth information from a targeted group of Futuretrack respondents.

Of the student mothers in the original Futuretrack survey, approximately 40 per cent indicated a willingness to be contacted for further research purposes and provided contact details. A target group of 30 student mothers was set for follow-up telephone interviews to gauge differences between women from different socioeconomic groups. It was hoped that the targeted sample would include 10 women from each of the three major socioeconomic groups who graduated in different subject areas from different HEIs.

Thirty potential respondents meeting the selection criteria were initially contacted by an email from the original Futuretrack research team members, in order to respect data confidentiality agreements. Respondents were informed of the purposes of the study and asked for their willingness to participate. None were coerced into taking part and respondents were assured that their data would be anonymised in any publications arising from the research. A series of three further email mail-outs was required to attract a sufficient number of women to take part.

## **2.5 The final interview sample**

After repeated mail-outs, a total of 24 student mothers were reached and interviewed (see Table 3). There were some difficulties in determining beforehand if mothers had dropped out of their studies (although some had completed the surveys for all 4 waves, others had only completed Wave 2 or Wave 3, and it was impossible to know if they had not completed later surveys after dropping out of HE or because of a lack of time to complete the survey). For this reason, the researchers had to employ a degree of flexibility in their approach and designed two interview topic guides (one for completers and one for non-completers).

All women who responded to the email were interviewed, irrespective of whether or not they had dropped out: due to the anticipated additional demands on student mothers, we were also interested in the reasons for dropping out of HE and this proved to be a useful approach to adopt in sampling our group of mothers. One student mother was unable to speak on the telephone when called and sent her responses via email, after receiving the (revised) topic guide from the researchers.

**Table 3: Final sample of interviewed student mothers and selected characteristics**

ID	HEI Tariff score	Subject	Completed degree	SES	Partner	Changed career plans after HE?	Current activity
1	Medium	Art and Design	Y	High	Y	Same	Self-employed; nursing PT
2	Lower	English	Y	High	Y	Changed	Working as before
3	Higher	Psychology	Y	Low	Y	Changed	Not working (new baby)
4	Medium	Physiotherapy	N	Mid	Y	Changed	Food retail assistant PT
5	Medium	English	Y	Mid	Y	Same	Assistant head of primary school
6	Medium	Psychology	Y	High	Y	Changed	Working as before> redundancy> now volunteering
7	Lower	Arch Design	N	Low	Y	On hold	Not working (4 children)
8	Higher	Law	Y	Low	Y	On hold	PA in law firm
9	Higher> Higher 2009	Dental Hygiene> Nursing	N>Y	Low	Y	Changed	Not working (childcare)
10	Higher	MSc Res Methods	Y	High	Y	Changed	Term-time PT teaching; unfinished PhD
11	Lower	Engl lang teaching	Y	Mid	Y	Same	PT teacher
12	Lower	Midwifery	N	High	Y	Changed	Working as before (teaching, but added child development)
13	Lower	Events Mgmt	N	High	N	Changed	Website project manager
14	Higher	Midwifery	N	Mid	N	Changed	Housing association
15	Lower	Midwifery	N (Dipl)	Low	Y	Same	Midwife, home births
16	Medium	Midwifery	Y	Mid	Y	Changed/better	Training to be health visitor
17	Medium	Sport and Exercise Sci	Y	High	Y	Changed	PT charity admin work
18	Higher	Film and TV	Y	High	N	Changed	Working as before in a bar and training to be a counsellor
19	Higher	Social Work	Y	Mid	N	On hold	Support worker
20	Higher	Primary Educ	N (B Ed)	High	Y	Changed	Not working, doing degree in Psychology
21	Higher	Speech Sciences	Y	High	Y	Same	Private speech therapist for special needs children
22	Higher	Primary Education	Y	Mid	Y	Same	Supply teacher in a primary school
23	Higher	Biomedical Sciences	Y	Low	Y	Changed/better	Genetic technologist, NHS
24	Lower	Social Work	Y	Low	Y	Same	Social worker (child disabilities)



Code:

HEI tariff score = the total number of points required to enter the university or college, which is used to gauge the status of the HEI in question;

SES = socioeconomic status;

Partner = married/cohabiting (Yes/No);

Changed plans = had respondent changed the career plans they originally had when entering HE (Yes/No);

## 2.6 Interview design and methodology

The interviews were designed to follow a semi-structured topic guide, and to last for around 45 minutes (it was expected that the interviews with non-completers would take less time but this was not always the case). Interviews were audiotaped and fully transcribed by a professional transcription service. Extensive interview notes were also taken at the time and written up afterwards.

Data was coded using Nvivo qualitative software and analysed thematically. Specific questions requiring further clarification, and not available via the survey, included:

- Whether or not the respondents now feel that HE has conferred any benefits upon them as individuals and also upon their children and other family members;
- Why they chose the subject they did, if they would choose to study the same subject again and in the same HEI, and if not, why;
- Perceptions of the costs and benefits of balancing parental responsibilities and full-time study, how their options and experiences were different from student mothers with older/younger children or different family circumstances;
- Clarity of career plans and if this changed on (re-)entering the labour market; quality and extent of careers advice provided during HE; how the job they are doing now is different from what they expected or different from what they were doing before;
- Aspirations concerning future careers, including whether or not to remain in their current job, to find work related to their degree subject or particular job attributes that are important to them and why; geographical locations where they sought employment and why;
- Perceptions of their skills and employment-readiness, the state of the labour market, and their optimism about achieving both their long- and short-term career plans.

If respondents had not completed their studies, we were keen to know the reasons for dropping out of HE, whether they planned to return to HE in the future and what they were now doing.

The interviews allowed us to gather new data clearly focused upon the perceptions and experiences of HE for student mothers of different ages and with different family circumstances and backgrounds. With the benefit of a longer-term perspective (up to 8 years after their initial application to HE), we were also able to gauge whether or not the impact of having children had changed (for example, many of the women who started HE in 2005/6 with young children may now be willing and able to (re-)enter full-time employment). This cohort of women entered HE before 2008/9 and are likely to have had expectations of career progression upon completion. On the other hand, the economic crisis has meant that even those with good qualifications are likely to be experiencing difficulties in finding work.

For more details of the interview topic guides, see Appendix 3.

## CHAPTER 3: APPLYING TO UNIVERSITY

### 3.1 Introduction

The following sections will demonstrate the journeys of mothers, similar non-mothers and all female non-mothers from 2006 and into the labour market. We begin with students' initial applications to HE study and their reasons for doing so, as well as the details of who applied, where they applied and why they chose the courses they did (Chapter 3). We continue with students' experiences of HE (Chapter 4) and end with the labour market outcomes of Futuretrack graduates (Chapter 5)<sup>6</sup>.

### 3.2 What happened after applying to university?

Participants responding to Wave 2 were asked what happened after their application to university the previous year. It should be noted that these figures are based on those students who responded to Wave 2 and that many of those who did not proceed into HE would not have responded further to the survey. However, there did not appear to be large differences between groups.

*Table 4: What happened after applying to HE?*

	Student mothers	Non-mothers	All female non-mothers
Completed a year in HE as FT student	77%	75%	78%
Started but did not complete the year as FT HE student	4%	4%	4%
Accepted a deferred place to start course in Autumn 2007	5%	4%	7%
Deferred entry to reapply to enter HE in Autumn 2007	7%	9%	7%
Did not enter HE and have no plans to do so	7%	9%	5%
<b>Total (=100%)</b>	<b>2402</b>	<b>28379</b>	<b>28379</b>

*Source:* Futuretrack data, Wave 2 (percentages of student mothers/matched non-mothers weighted by CEM weight; all female non-mothers weighted by Futuretrack weight). All differences significant ( $\alpha < 0.001$ ) (Chi-Square).

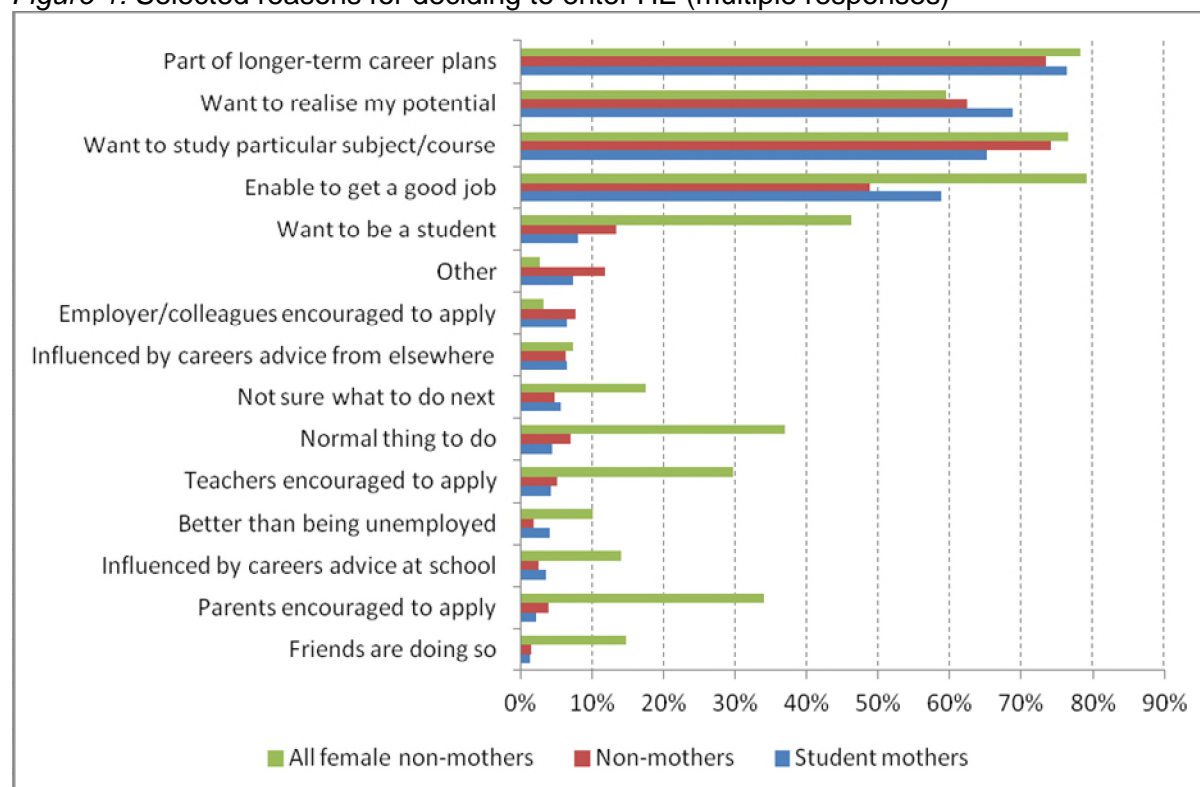
### 3.3 Reasons for choosing to go to university (survey data)

When choosing to apply to university, all potential students have to decide what kind of course to take and at which HEI to study. The following section deals with the factors that influenced student mothers in their choices, distinguishing their choices from those of other female applicants who were not mothers. The following analysis is based on those applicants who went on to study in HE<sup>7</sup>.

<sup>6</sup> To avoid ambiguity, we use the term "students" throughout, even after they have graduated and entered the labour market.

<sup>7</sup> Because there was no 'motherhood' question in the first wave of the survey it is only possible to report differences in the application process between mothers and those without children for those who went on to

Figure 1: Selected reasons for deciding to enter HE (multiple responses)



Source: Futuretrack Wave 1; student mothers = 1621; matched non-mothers = 20286; all female non-mothers = 20286. All female applicants who had entered HE in 2006 (CEM Matched); all female non-mothers weighted by Futuretrack weight.

All female students appeared to be very instrumental in their reasons for applying to HE (Figure 1): between 70 and 80 per cent of all groups stated that they applied because *HE was part of their longer-term career plans* (this was also the most important reason expressed). Over 60 per cent of all groups said it was because *they wanted to realise their potential*, although the student mothers were more likely to state this as a reason than the other two groups (69 per cent, compared with 62 per cent of matched non-mothers and 60 per cent of younger students). *'I want to study a particular subject/course'* was also a frequently stated response for all groups. Student mothers were more likely than matched non-mothers, but less likely than all female non-mothers, to respond that *'it will enable me to get a good job'*. Mothers were less likely to say that they *wanted to be a student*, however (8 per cent only). Younger students were more likely than both student mothers and matched non-mothers to say that they were encouraged to apply, their friends were doing so and that it was the normal thing to do.

Many student mother applicants also used the open answer option to add a specific comment to the pre-defined list. Mothers referred to the opportunity for HE to improve their careers and how important it is to act as a role model for their children. Some applicants, especially those who had worked in lower-skilled occupations within the education sector, stressed that they wanted to use HE to add further value to their existing work experience:

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study at HE and filled in the second wave of the questionnaire. A fifth of applicants with children (n = 456), however, did not enter HE immediately (in 2006) but filled in the consecutive questionnaires. They were excluded from the analysis of the application process and students' experiences.

*All my children are in full time education now and wanted to get my career going (Social Studies, General HEI)*

*I have five and a half years' experience working in a primary school, doing a variety of jobs and working with children of all abilities including special needs. I now feel ready to move on and further my career and hopefully become a teacher (Education, Lower Tariff HEI)*

*Becoming a single mum gave me the push I needed to educate myself and provide a better future for my son (Subjects allied to Medicine, Lower Tariff HEI)*

*Enabled me to put off going back to work after birth of son so can be with him in his early years but also further my career at the same time (Creative Arts & Design, Lower Tariff HEI).*

*To set a bench-mark for my children to aspire to (Social Studies, Highest Tariff HEI).*

### **3.4 Reasons for choosing to go to university (interview data)**

The semi-structured interviews, conducted in 2014, also highlighted some of the reasons for mothers' decisions to go to university, which fell into three main categories:

- To achieve ambitions / did not have opportunity when younger
- To change career: stuck in a rut, unhappy in current job
- To upgrade to a better job, needed qualification

Typical examples of mothers' responses during the interviews included:

*I was told when I was younger, you've got potential, but people like me, from where I was from, you didn't go to university then, in the seventies. People like me didn't, so it was a case of, you get out and you get a job. I always had that in the back of my head, could I have done that? Could I have gone away to university? Could I have achieved a better qualification? Because, I was always considered bright, as they called it then, so I think it was more about me proving to myself, well, yes, I could have done it, actually, and I've done it now (A6, Psychology, Lower Tariff HEI, completed degree).*

*I wanted to achieve something, it was something that I should've done when I was younger, probably, and you kind of never get around to doing it, or I didn't, really, life sent me a different path, if you like, or whatever, and I really felt like it was something that I could achieve but I hadn't and I wanted to (A9, Dental Hygiene, Higher Tariff HEI, did not complete degree; went on to complete Nursing degree in 2012).*

*I'd just had my daughter, and prior to becoming pregnant, I had always worked in admin, and I knew that I wouldn't be able to survive on admin wages, so I thought I'd give university a go (A19, Social Work, Higher Tariff HEI, completed degree).*

### **3.5 Socioeconomic status and choice of university**

Although there has been a push in recent years on widening participation in HE, a higher proportion of students from higher socioeconomic backgrounds still attend HE than those

from lower socioeconomic backgrounds, calling into question the success of initiatives which aim to increase participation among those from more disadvantaged backgrounds. There are also large differences by socioeconomic status (SES) in the type of HEIs attended and in the subjects studied. In order to explore the SES of students by type of university attended, we proceeded to compare student mothers with matched non-mothers and all female non-mothers.

*Table 5: Differences between mothers, matched non-mothers and all other students: choice of university and socioeconomic status*

	University tariff scores	Managerial and Professional (%)	Intermediate (%)	Routine and Manual (%)	Total (%)
<b>Student mothers</b>	Highest	12%	8%	10%	10%
	High	23%	20%	23%	22%
	Medium	37%	42%	37%	38%
	Lower	21%	20%	23%	22%
	Other	7%	10%	8%	8%
<b>Total (=100%)</b>		525	373	602	1500
<b>Matched non-Mothers</b>	Highest	20%	11%	13%	16%
	High	21%	19%	20%	20%
	Medium	31%	37%	34%	33%
	Lower	15%	22%	21%	19%
	Other	13%	11%	12%	12%
<b>Total (=100%)</b>		11009	4102	4749	19860
<b>All female non-mothers</b>	Highest	33%	23%	17%	27%
	High	26%	25%	24%	25%
	Medium	24%	32%	37%	29%
	Lower	10%	14%	16%	13%
	Other	7%	7%	7%	7%
<b>Total (=100%)</b>		11009	4102	4749	19860

*Source:* Futuretrack data, Wave 2 (percentages of student mothers/matched non-mothers weighted by CEM weight; all female non-mothers weighted by Futuretrack weight). All differences significant ( $\alpha < 0.05$ ) (Chi-Square)

Table 5 shows that there are still large differences by social class in the types of universities attended by younger students, with a third of students from professional and managerial backgrounds entering the highest tariff universities, compared with only 17 per cent of those students from routine and manual backgrounds. There is a correspondingly higher proportion of those students from routine and manual backgrounds attending lower tariff universities (16 per cent, compared with only 10 per cent of those from higher SES backgrounds).

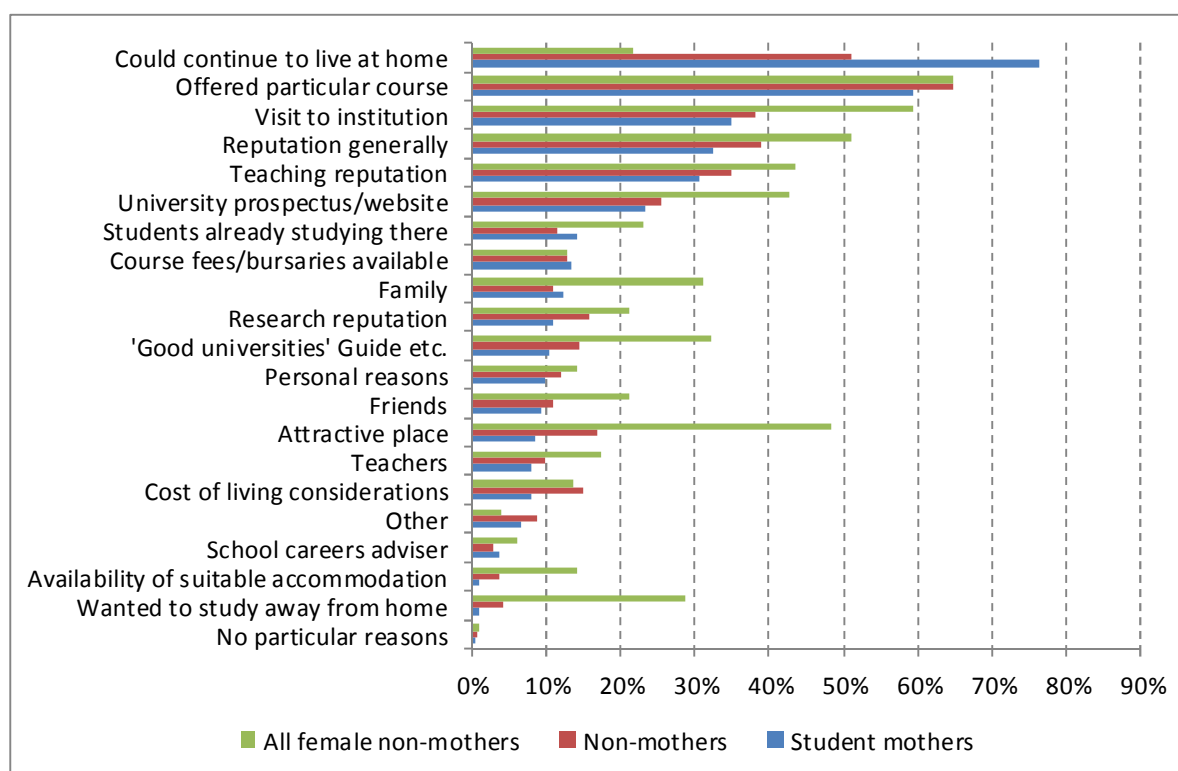
For the older non-mothers, there is a less pronounced association between socioeconomic status and choice of university. Nevertheless, the association does still exist, with more women from higher SES backgrounds attending the highest tariff HEIs (20 per cent, compared with 13 per cent of those from routine and manual backgrounds), and fewer from the higher SES group attending the lower tariff universities (15 per cent, compared with 21 per cent of routine and manual non-mothers).

On the other hand, these differences by socioeconomic background all but disappear for the student mothers, with only 12 per cent of those from higher SES backgrounds and 10 per cent of those from lower SES backgrounds attending the highest tariff universities. There is a much higher proportion of mothers than other students attending the medium tariff universities (38 per cent, compared with 33 per cent of matched non-mothers and 29 per cent of younger female students) and lower tariff universities (22 per cent compared with 19 per cent of matched non-mothers and 13 per cent of younger students). The following section details why these large discrepancies exist between mothers and other female students.

### 3.6 Reasons for choice of university

Respondents were asked why they had chosen a particular university or college and results showed large differences between mothers, matched non-mothers and all other female students (Figure 2).

Figure 2: Selected reasons for choosing HEI



Source: Futuretrack Wave 1: Student mothers = 1578; matched non-mothers = 19963; All female non-mothers = 19963; CEM Matched data, all female non-mothers weighted by Futuretrack weight.

Student mothers appeared to be more constrained in their decisions on where to study, as by far the most important reason for their choice was that they could continue to live at home (76 per cent of mothers, compared with 51 per cent of matched non-mothers and 22 per cent of younger students). The fact that the HEI offered a particular course was also important for student mothers, as well as other applicants. Other reasons relating to the attractiveness of the HEI were of less relevance to student mothers than the other two groups (9 per cent, compared with 17 per cent of matched non-mothers and 48 per cent of younger non-mothers), as was the general reputation of the HEI (33 per cent, compared with 39 per cent

of matched non-mothers and 51 per cent of younger non-mothers). Younger students appeared more likely to have investigated the chosen university via various websites and reports such as the Good Universities Guide (32 per cent), as well as by visiting the university (60 per cent). Matched non-mothers again occupied something of a middle ground between the other two groups.

In the open responses to this question, many student mothers took the opportunity to describe their limited choice of HEIs. Many referred to childcare or schools as important in their decision, stating the practicalities of knowing the various childcare options available in the local area and a desire to avoid disrupting their children's education. Many also stated that they owned a home locally and / or that it was close to their husband or partner's place of work.

In the interviews, it also emerged that by far the most important reason for choice of university was location: almost all the interviewed mothers said that they had chosen the university closest to them as that would allow them to combine study with childcare more easily (only two students chose a university which involved a long commute and this proved extremely difficult). The reputation of the university was generally not mentioned at all or only mentioned as a secondary reason by those who were lucky enough to have a high tariff university locally.

*It was more for the reason that it was the closest I could get to to get this degree done. If I had no issues with childcare, etc, no, probably wouldn't go to G. I would look for a lot... I'd rather look at a university that was higher in the league table, so...I didn't look at any of that. It was just purely I can get the degree done, and I can be local (A11, English language teaching, Lower Tariff HEI).*

*Because I live in N, I've got children, they go to school in N and I didn't really want to travel and put an extra couple of hours on my day (A15, Midwifery, Lower Tariff HEI).*

*Because it was close by, I knew that I'd already found a nursery for my daughter, nearby (A19, Social Work, Higher Tariff HEI).*

### 3.7 Choice of degree course

All students were asked their reasons for choosing to study a particular subject. Table 6 shows similarities and differences between the three groups. For example, a large proportion of both mothers and matched non-mothers chose Subjects allied to Medicine (29 per cent and 27 per cent), which includes courses such as Nursing, Midwifery and Physiotherapy. Only 11 per cent of younger female students chose these courses. On the other hand, almost a fifth of mothers (19 per cent) chose Social Studies, compared with only 9 per cent of similar-aged non-mothers and 8 per cent of younger students. Similarly, 13 per cent of mothers chose Education, compared with only 7 per cent of non-mothers and 5 per cent of younger female students. Younger women and matched non-mothers were more likely than mothers to choose Biology, Veterinary Science, Agriculture and Related courses (13 per cent and 11 per cent, respectively, compared with 7 per cent of mothers) and Creative Arts and Design (both at 12 per cent, compared with 7 per cent of mothers). Younger students were more likely than both older groups of women to choose Interdisciplinary subjects, Business and Admin, Physical Sciences, Linguistics and Classics and Historical and Philosophical Sciences.

Table 6: Choice of course by motherhood status

	Student Mothers (%)	Non-mothers (%)	All female non-mothers (%)
Medicine and Dentistry	1%	4%	2%
<b>Subjects allied to Medicine</b>	<b>27%</b>	<b>29%</b>	<b>11%</b>
Biology, Veterinary Sci, Agriculture and related	7%	11%	13%
Physical Sciences	3%	2%	5%
Mathematical and Computer Sciences	2%	2%	3%
Engineering, Technologies	1%	1%	2%
Architecture, Building and Planning	1%	1%	1%
<b>Social Studies</b>	<b>19%</b>	<b>9%</b>	<b>8%</b>
Law	2%	2%	4%
Business and Admin	4%	3%	7%
Mass Communications and Documentation	1%	1%	2%
Linguistics and Classics	3%	3%	5%
Languages	0%	2%	3%
Historical and Philosophical Sciences	3%	2%	5%
Creative Arts and Design	7%	12%	12%
<b>Education</b>	<b>13%</b>	<b>7%</b>	<b>5%</b>
Interdisciplinary Subjects	6%	11%	14%
Total (=100%)	480	8518	8518

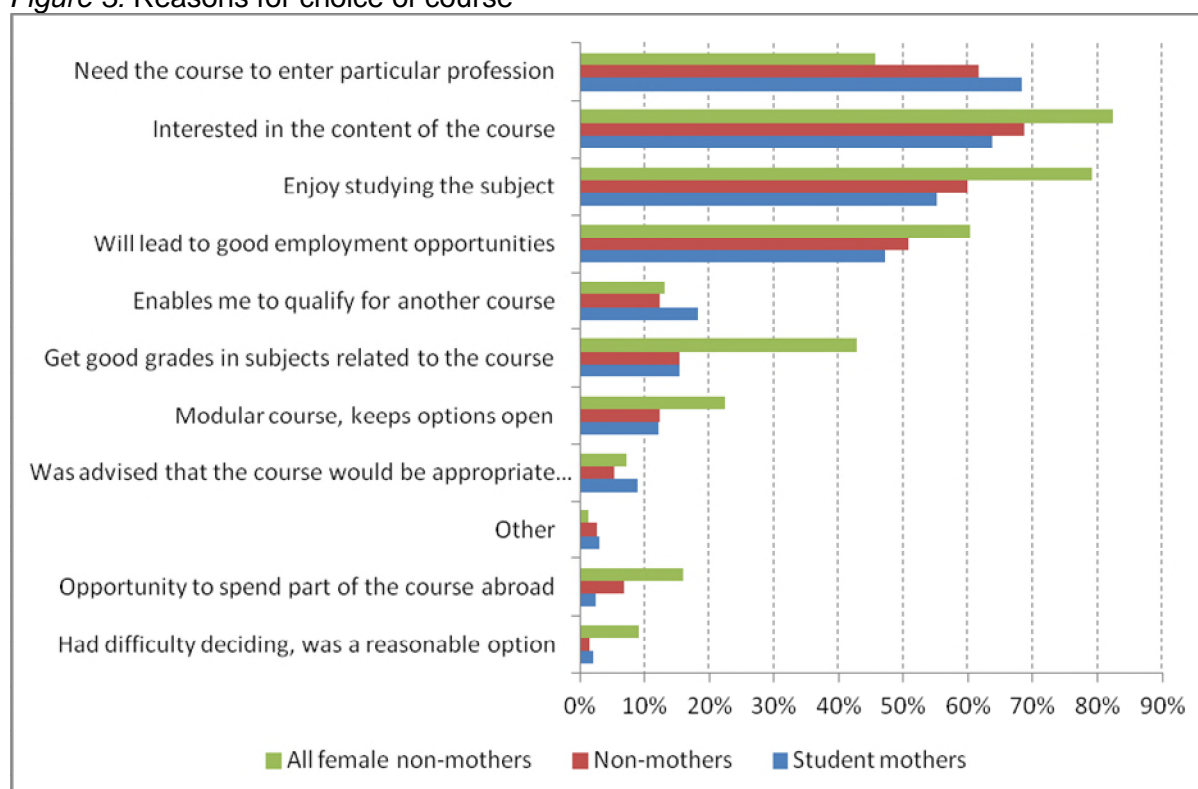
Source: Futuretrack data, Wave 2 (percentages of student mothers/matched non-mothers weighted by CEM weight; all female non-mothers weighted by Futuretrack weight).

### 3.8 Reasons for choice of degree course

All respondents were asked about their reasons for choosing their course. Many of the student mothers were very clear about the qualifications that they needed to enter a particular profession: 68 per cent of mothers gave this as a reason for choosing their course (62 per cent of similarly aged non-mothers, and 46 per cent of younger students). Mothers were also significantly more likely than the other two groups to choose a course because it enabled them to qualify for another course (e.g., a PGCE for teaching) (18 per cent of mothers, 12 per cent of non-mothers and 13 per cent of younger female non-mothers). Younger female students were more likely to choose a course because they got good grades in the subject at school (43 per cent), they were interested in the content of the course (82 per cent) and enjoyed studying the subject (79 per cent). They were also more likely than the older groups to be undecided in their choices and to say that their particular choice of subject allowed them to keep their options open (22 per cent).



Figure 3: Reasons for choice of course



Source: Futuretrack wave 1: student mothers = 1611; matched non-mothers = 20203; all female non-mothers = 20203. All female applicants who had entered HE in 2006 (CEM Matched; all female non-mothers weighted by Futuretrack weight).

Respondents to the survey also provided written statements to support their decisions. Mothers often reported a career change after a period of child-rearing:

*I am changing career - from maths teaching to medicine, after a career break to bring up my family. This break gave me the time and space to consider the reasons for my original degree course and subsequent career path and to consider which skills, talents and interests had not been fully developed (Medicine & Dentistry, Highest tariff HEI)*

*The course I chose is vocational and will lead to a lifelong career in which there are many avenues to explore. It will also give me a middle class income, enabling me to raise my child alone (Education, Medium Tariff HEI).*

When interviewees were asked about their choice of course, their decisions centred around two main factors:

#### 1) Relationship to previous job:

*I kind of freaked out that I wouldn't be able to handle university as a new mother doing a serious subject, and I was also a bit tired of education. I'd been out in the real world for a few years and doing a job and stuff and I started to think well maybe I should do something that directly leads to a job. So I started to look at vocational options and the obvious one to do was Events Management because that was what I was already doing (A13, Events Management, Lower Tariff HEI, did not complete).*

2) Always wanted to do it; long-term interest:

*I had a best friend who was a midwife and she lived on our street, and I'd always hankered after the idea and as I got older I thought that my chance was coming (A12, Midwifery, Lower Tariff HEI, did not complete).*

*I got married about 22 years old, and then I kind of just, sort of, worked in pubs and restaurants with him, but it wasn't something I...really wanted to do long-term, so when my youngest daughter of the four children I had at the time was approaching school age, I decided I wanted to train to do something that I was really interested in, that, you know... a job that I really wanted to do. So I did some research, and came up with speech and language therapy, you know, as a career, and that required getting a degree in speech sciences (A21, Speech Sciences, Highest Tariff HEI, completed).*

### 3.9 Summing up

While student mothers have similar broad aspirations to other students when entering HE, in that they hope that their studies will allow them to develop a career they would like, what sets them apart from the broader student population is the very specific nature of the careers they have in mind – they do not simply want to have a good job, they want to have a particular job in education, midwifery and other health professions, etc. Realising a long-standing ambition to go to university, which, in many cases, had been denied to them when they were younger, was also commonly mentioned by student mothers as a reason for entering HE. These reasons combine to give a picture of a group who had high expectations of their HE experience, and it is perhaps inevitable, that, as will be seen, in many cases their experiences did not live up to these expectations.

When looking at the reasons that student mothers, and similarly aged non-mothers, gave for entering HE, the lack of outside influence is very obvious. Unlike traditional students coming straight from school, the student mothers, as would perhaps be expected, had received little support and advice from teachers, family, friends and other sources of careers guidance. This will be discussed further in subsequent sections.

Student mothers were somewhat more likely to attend medium and lower tariff HEIs. Traditionally, the type of HEI a student attends has been closely related to their social class, but in the case of student mothers, proximity to home was the overwhelming factor that determined their choice of HEI. If their most local HEI was a higher tariff HEI they would go to a higher tariff HEI, but if it was a lower tariff HEI then they would go to a lower tariff one. A secondary issue was the vocationality of the courses studied by many student parents, as some vocational courses are more likely to be available at lower tariff HEIs, but this appears to be very much a secondary influence on the choices of mothers.

## CHAPTER 4: THE HIGHER EDUCATION EXPERIENCE

### 4.1 Introduction

We now move on to look at the experiences of HE students and their views on various aspects of being a student, any particular barriers and difficulties encountered, the development of skills, the clarity of career plans, whether or not they used the careers service and what would help mothers the most in succeeding at HE.

### 4.2 Satisfaction with the HE experience

All groups were generally positive about many aspects of their HE experience, although the percentage of positive comments tended to decline over time as they reached the end of their course. Table 7 shows that mothers tended to be more positive than the other groups at the start of the course. Not surprisingly, only around a third of both mothers and non-mothers said that there were excellent opportunities for extra-curricular activities around the campus, compared with around a half of the younger students. This could well reflect the fact that both groups were less likely than younger students to live on campus and were therefore less likely to engage in such activities, rather than the fact that such activities did not exist. It is also likely to reflect the location of some types of course these groups are more likely to study. At a significant proportion of HEIs, subjects such as education and the health sciences are taught on smaller satellite campuses, separate to the main campus and the activities provided there.

At the end of the course, mothers and matched non-mothers were more likely than younger non-mothers to think that the amount of work required for the course was excessive (28 per cent of mothers, compared with 27 per cent of matched non-mothers and 22 per cent of all female non-mothers). Similar-aged non-mothers were closer to the mothers in their overall appraisal of the HE experience at the end of their courses than to the younger non-mothers.

Table 7: Agreement with statements on the HE experience<sup>8</sup>, over time and by motherhood status

	After Year 1			At end of course		
	Student mother	Non-mother	All female non-mothers	Student mother	Non-mother	All female non-mothers
Being a student at the university or college where I studied was a positive experience overall	78%	74%	79%	71%	71%	73%
On the whole, the tuition and learning support I received on my course were excellent	61%	55%	57%	59%	59%	55%
The amount of work I had to complete on my course was excessive	19%	18%	15%	28%	27%	22%
I was given good feedback on my progress	47%	42%	38%	45%	44%	36%
There were excellent opportunities for extra-curricular activities on or around the campus	36%	38%	52%	31%	31%	46%

Source: Futuretrack, Waves 2 and 3, CEM matched sample, differences significant ( $\alpha < 0.05$ ) (Chi-Square). Differences between student mothers and non-mothers at the end of course with the statement 'Being a student at the university or college where I studied was a positive experience overall' not significant. Wave 2: Student Mothers = 1790-1812, Non-mothers = 22218-22362, All female non-mothers = 22218-22362; Wave 3: Student Mothers = 865-897, Non-mothers = 11215-11395, All female non-mothers = 11215-11395.

### 4.3 Skills development

The study also aimed to examine any differences between groups in the type of skills developed as a result of HE. In Wave 3 (at the end of their courses), all respondents were asked questions relating to skills development (Table 8). Mothers were more likely than matched non-mothers and younger non-mothers to report development in presentation skills, problem-solving skills, self-confidence and spoken communication, although there were no large differences between groups.

<sup>8</sup> Agreement = '1' or '2' on a 7-point scale

Table 8: Development of skills

How far has your course enabled you to develop the following skills very much:	Student mother	Non-mother	All female non-mothers
Logical thinking	29%	27%	30%
Presentation skills	33%	29%	31%
Problem-solving skills	27%	23%	25%
Research skills	50%	47%	52%
Self-confidence	28%	23%	23%
Self-discipline	27%	26%	26%
Self-reliance	32%	28%	32%
Specialist knowledge	46%	47%	41%
Spoken communication	28%	23%	24%
Time management	30%	23%	31%
Written communication	37%	32%	37%

Source: Futuretrack Wave 3 (weighted) all differences significant ( $\alpha < 0.05$ ) (Chi-Square). Student Mothers = 877-884, Non-mothers = 11289-11312, All female non-mothers = 11289-11312.

In the interviews, mothers were generally positive, but had varied experiences of HE and the skills they had developed as a result of their degree course:

*Because I did my dissertation in research, I didn't have any sort of research skills before, so I've got also research and analytical and critical thinking skills, you know, that I've worked on through doing different, not only my dissertation but even just writing essays and stuff, so really, you know, critical thinking skills and things (A20, Primary Education, Higher Tariff HEI).*

*...there are a lot of skills within getting a degree, and a lot of employers don't actually care what degree you've got. They're looking for the skills that you've gained, like the time management, the organisation, the writing skills, and whatever other skills that I've got. The time management is probably the best one, and the organisation and, sort of, like the ability to prioritise, and things like that, although I think I had all those before I went to university (A17, Sport and Exercise Science, Lower Tariff HEI).*

*I slightly lose confidence in my opinions, you know, and just can't... it's always, sort of, second-guessing myself, and I think it definitely gave me a bit of confidence again in dealing with other people, definitely (A18, Film and TV, Higher Tariff HEI).*

*...it's very hard to put your finger on the skills that you learn. I mean, I think, you know, lots of the skills I've had because I was slightly older going in, and because I was a mom of, at the beginning, four children, so I'd been... I think, you know, lots of the skills that I have have been through learning them over the years, as well as just what I learned from the four years of the course (A21, Speech Sciences, Higher Tariff HEI).*

#### 4.4 Support systems, barriers and difficulties

During the qualitative interviews conducted in 2014, student mothers were asked about the support they received during their HE studies, both from the university and from their own informal networks.

## 4.5 Facilitators

The main support systems and facilitators appeared to be partners, the student mothers' own drive and determination to succeed, friends and family (especially for unpartnered mothers), and more infrequently, university support (both formal and informal).

Respondents were asked about the level of support, if any, offered by partners:

*I think the thing that made it for me was the fact that I'd got somebody else at home full-time, I would not have been able to manage placements if I'd got to do the school run, that would've been a problem, you know? And childcare, even, there was not really a facility for childcare, had I had to have used childcare I would've had to have left again because there wasn't really any (A9, Dental Hygiene, Higher Tariff HEI).*

*...he literally took over the mum role, you know, everything in the house; I literally did the college work, you know, the uni work, and my work, and that was it (A2, English, Lower Tariff HEI).*

*You know, my husband's a grown-up. We had a child, he regarded our child as much his responsibility as mine. We talked everything through before we started. He encouraged me to go back to uni. He knew I was no longer happy in IT. He was very supportive. He took on things to free me up (A4, Physiotherapy, Medium Tariff HEI).*

Other mothers were given less support by partners. The following example was given by a mother who split up from her partner while in her first year at university:

*He was not really doing anything, he was unemployed and continues to be unemployed, so he was...he was helping with childcare but he was also meant to be getting a job so we did put my daughter into nursery. And there was funding for that (A13, Events Management, Lower Tariff HEI).*

When asked if her partner helped her while studying, another single mother said:

*It's part of the reason he went, really (A19, Social Work, Higher Tariff HEI).*

Other mothers described their own drive and determination as a key facilitator in getting through an often very difficult process:

*I just think it was mainly just my determination... There was no way I wasn't going to do it, and I was going to do it whatever. I mean quite a few people dropped out of the course that had got children that couldn't manage, different to mine, so I just think it... I was just going to do it and that was the end of it... (A15, Midwifery, Lower Tariff HEI).*

*...the fact that I knew I was lucky to have the chance, and it had to work, so I had to treat it with equal importance, as if it was my job, so I was just completely focused and single-minded about it (A5, English, Medium Tariff HEI).*

Others were given help and support by particular lecturers and tutors or, in the case of some courses where a high proportion of student mothers were enrolled, a more supportive course structure and a high level of flexibility and understanding:

*...they [lecturers and tutors] never dropped anything on us quickly, because they knew that all of us had other commitments (A2, English, Lower Tariff HEI).*

*I felt very well supported because I'm not academic so I was very well supported by the academic practice, and they were very good, you know, and I had deadlines extended and stuff. I was very happy (A15, Midwifery Lower Tariff HEI).*

*The tutors were fine, the tutors were okay about everything, and...they knew I might not be able to put in the work during... necessarily during university, but I'd work all night to get a piece done (A1, Art and Design, Medium Tariff HEI).*

*Once I'd got through my first year, obviously I got to know the tutors, and they were really quite flexible. For example, I think it was early in my second year, one of the sessions I was supposed to attend was due to finish at six on a Friday, whereas I had wraparound childcare for a couple of days a week, but it closed at quarter past five on a Friday, so obviously I couldn't do the six o'clock, but when I explained that to the tutor, he moved the whole session, so that it finished early (A5, English, Medium Tariff HEI).*

Other comments related to the support provided by other mothers in a similar situation:

*I think us all being mature students and having those experiences and having that home life as well, we supported each other. That was really good (A6, Psychology, Medium Tariff HEI).*

*Well, the other mothers that were there, we were very supportive of each other (A1, Art and Design, Medium Tariff HEI).*

#### 4.6 Barriers

The main barriers and difficulties encountered by the mothers fell into five main categories, some relating to course structure and timetabling, some to financial problems and others relating to time management and the difficulties of juggling study with childcare and often work.

- Timetabling and lack of structure
- Work placements
- Lack of support
- Financial difficulties
- Juggling/time management

Many respondents talked about the difficulties of academic timetabling and lack of structure:

*I'd sort of fly up to Uni, say, for a morning lecture, and then I'd have to be back in work in the afternoon. Or say there was an afternoon lecture, I'd have to be in work in the morning, or I'd do an evening shift. So, I was managing all that, really, and making sure that I was still... Because obviously, my job was paying my bills, so obviously, the needs of that service had to come first, really....It was difficult in the sense that I got very, very little time to relax or, you know, to just do ordinary things, really. My family were very supportive, so... But yes, it was hard, at times. Hard, yes (A6, Psychology, Medium Tariff HEI).*

*...they're so erratic, the hours that the lecturers are on, so if I could have managed to do everything in two days in uni, and then the rest in work, then that would have been*

*easier, but what would happen would be it would be spread over the whole week, and sometimes during the day, there would be, sort of, two hours break, and then that's when I would cycle to work and try and catch up on work (A18, Film and TV, Higher Tariff HEI).*

*The college frequently cancelled lectures at the last minute, just by sticking a post-it note on the lecture room door, not even contacting students. This meant I was quite often paying for childcare unnecessarily. The days I was required to be in college changed every term, making it difficult to plan ahead in terms of childcare (A24, Social Work, Lower Tariff HEI).*

Placements represented a particular problem for those women who were already struggling with course timetabling and their additional childcare responsibilities. This seemed to be a "crunch point" for many, when the demands of both roles proved overwhelming:

*...there weren't enough hours in the day for me to keep up. And at that point in the course you're on placement a lot. You're out in hospitals doing six week placements and different specialisations of physio (A4, Physiotherapy, Medium Tariff HEI, did not complete degree).*

*I thought, I don't really need this at this moment in time in my life because I've got no support at home, so something's got to give, and that had to give (A14, Midwifery, Higher Tariff HEI, did not complete degree).*

The additional hours involved and the rigidity of the timetabling, as well as extra travelling time, sometimes proved to be overwhelming and for many, the reality of placements had not been anticipated when applying for a particular course:

*That was very different, you had to do whatever hours you were given. That was quite difficult actually, for all concerned, because you didn't know often until three or four days until you started, what your off duty was, we called it, what your rota was (A12, Midwifery, Lower Tariff HEI).*

*And actually they pulled our names out of a hat when it came to our placements. They took no consideration into where we, you know... and that was very hard because there were girls that were in my cohort that lived... that had no children and no commitments at all. And they got... you know, they got placed at the hospital that I could have walked to from my house in five minutes, whereas I got placed at a hospital that was an hour's drive away. That was quite difficult to deal with. And, you know, the response was, well, tough, you know. Tough. You're no different from the next person. We're not going to give you special priority because you're a parent (A16, Midwifery, Medium Tariff HEI).*

As with the example above, many other mothers reported on a lack of support for student parents having to cope with childcare responsibilities:

*It would be nice for the lecturers to know I was a parent, you know, that flexibility, you know if I can't make... if I have an ill child. You know, they understand that and they're like, okay, you can do the work at home or something (A7, Architectural Design, Lower Tariff HEI).*



Financial difficulties were also mentioned by many of the mothers, as many had given up jobs in order to embark on a degree, while others were struggling to complete the degree full-time while also working part-time and looking after children:

*Yes, and obviously I lost my income as well, so yes it was financially difficult, but it was for the long term gain (A5, English, Medium Tariff HEI).*

*...obviously we needed to take into account that our financial situation was going to change, you know, and when you're living on a student bursary life isn't as easy, maybe. But even when you've got a wage I don't think it'd go any better, to be honest (A9, Dental Hygiene, Higher Tariff HEI).*

Mothers described some of the issues around trying to juggle so many demands at once. One had a new baby and described her daily routine which combined childcare with study, although she later added that she had rarely attended lectures due to these demands:

*It worked out quite well because I had to get up to feed the baby at around 3 am and then, you know, it took me an hour to feed and change the nappy and feed again, and after that hour I was already quite awake, so I could stay up and study for another three or four hours until the next feed. So it worked quite well! (A3, Psychology, Higher Tariff HEI).*

*...still had to fit everything around work, and things like that, as well, unlike the 18, 19-year-olds who said, I can't fit everything in! Really? Yes, try having a nine-year-old with a learning disability at home, plus having to fit in work, plus having to fit in study, and everything else. [Yes. Did you work while you were studying?] I did. I worked ten hours a week at Tesco's (A17, Sport and Exercise Science, Medium Tariff HEI).*

Others reported more positive experiences of juggling, however. One woman reported on the experience of having her whole family studying at the same time (her husband doing an OU course and her two school-aged children doing GCSEs and A levels):

*It added to it because I think it gave them a different viewpoint. And we were all studying together so it, sort of normalised the situation in some ways (A1, Art and Design, Medium Tariff HEI).*

#### 4.7 Clarity of career plans

The interviews and the data on choice of course have already demonstrated that student mothers often had a clear occupation in mind when they originally chose their degree course. In the surveys, respondents were asked to rate themselves on a scale of '1' to '7' where 1 means 'I have a clear idea about the occupation I eventually want to enter and the qualifications required to do so' and 7 means 'I have no idea what I will do after I complete the course I have applied for'. This exercise was repeated in all four waves of the survey. Figure 4 displays the frequencies of those who rated themselves as a '1' on this scale.

A total of 63 per cent of student mothers agreed fully with this statement during the application process which compares to 58 per cent of matched non-mothers and 29 per cent of younger non-mothers. After their first year in HE, agreement with this statement had decreased dramatically among all students; however, the proportion of mothers agreeing with the statement is still comparatively higher than both of the other groups at 39 per cent. During the last year in HE, the proportion of mothers reporting that they have a clear idea

has increased again, but not to the same level as during the application process (the same trend occurs with matched non-mothers but still represents a lower proportion than the mothers). After graduation, there is no observable difference between students with and without children, at which point the proportion of mothers agreeing that they have a clear idea reduces considerably to 36 per cent. It is difficult to say why this is the case: perhaps mothers and similar aged non-mothers are more disillusioned about their labour market choices after graduation or are less likely to seek and obtain careers advice during HE (Section 4.8 explains more in detail about the differences in careers advice during HE). Younger students, who do not change dramatically from their last year in HE and after graduation (32 per cent compared with 29 per cent) may be slower to make clear career choices.

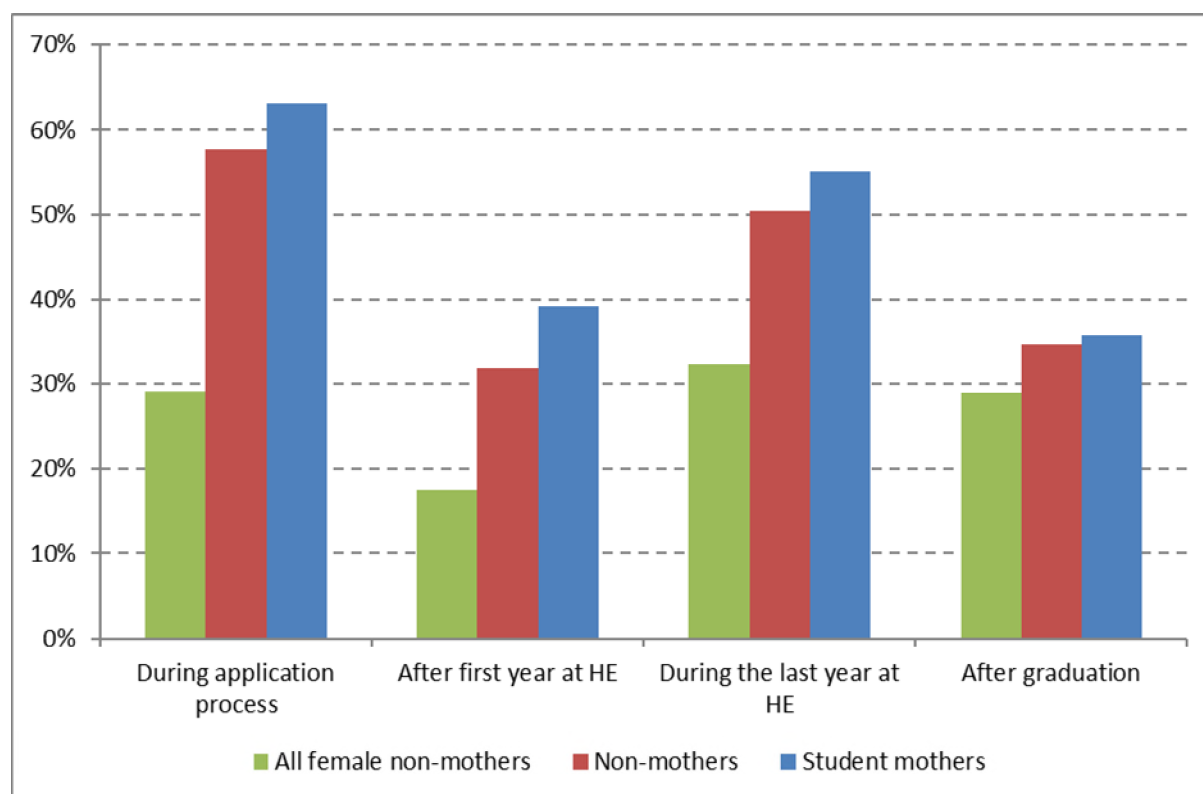
For example, one of the interviewed mothers reflected upon her choice of degree subject:

*I think, if I had have realised how hard the PGCE was going to be on my time, I wouldn't have necessarily gone down that route, and in that case, I might have perhaps done a different degree, something that was more work related, that would have perhaps have furthered my career...(A2, English Language, Lower Tariff HEI, completed degree but not PGCE).*

Another reported that she had returned to her original occupation but preferred not to go into management, which her degree could have allowed her to do:

*I didn't want to move too high up any ladder that took me right away from dealing with people directly. So as a deputy manager, I was managing a staff team and the building and the service, but I was also, I had my own caseload, still, which is what I wanted, and that's where I wanted to be. So in my case, I wouldn't say it [degree] helped my career. I mean, people were very impressed, so it helped my ego, I suppose, but no, not my career (A6, Psychology, Medium Tariff HEI).*

Figure 4: Agreement with 'I have a clear idea about the occupation I eventually want to enter and the qualifications required to do so'



Source: Futuretrack 2006: Matched Data (weighted); Wave 1 (during application process) and wave 2 (after first year at HE), wave 3 (during the last year at HE), wave 4 (after graduation).  
 Wave 1: Student Mothers = 1625, Non-mothers = 20301, all female non-mothers = 20301;  
 Wave 2: Student Mothers = 1892, Non-mothers = 22888, all female non-mothers = 22888;  
 Wave 3: Student Mothers = 901, Non-mothers = 11412, all female non-mothers = 11412;  
 Wave 4: Student Mothers = 497, Non-mothers = 8500, all female non-mothers = 8500.

The interviews also demonstrated that student mothers generally had clear career plans when they applied to university, choosing to do a vocationally-orientated course such as Midwifery, Social Work or Education. The following mother wanted to be a teacher and had planned well in advance, determined to reach her end goal:

*I already knew what I wanted to do when I had planned the courses, planned my route and was hell bent on getting there (A5, English, Medium Tariff HEI).*

#### 4.8 Careers advice during Higher Education

All students were specifically asked about their use of careers advice during HE. Interestingly, there was no clear picture relating to differences in the use of careers advice. Student mothers and matched non-mothers were quite similar in their use of careers services, although mothers were less likely to have used the HEI careers service website (36 per cent of mothers, compared with 41 per cent of similar-aged non-mothers and 55 per cent of younger non-mothers). Younger students were generally more likely to use the careers service during HE than older students, both mothers and non-mothers. Even here, however, many of the initiatives provided by the careers service appear under-used (or alternatively, they were not offered at their HEI).

Table 9: Careers advice during the last year of study

	Student Mothers	Non-Mothers	All female non-mothers
University-wide careers event for final year students	21%	22%	36%
Careers Service sessions to develop employment-related skills	6%	6%	9%
Compulsory module to develop employment-related skills	17%	17%	16%
Optional module to develop employment-related skills	7%	7%	7%
Careers information from employer or work organisation rep	15%	11%	18%
Advice on CV writing	41%	41%	50%
Advice on completing application forms	27%	25%	28%
Interview technique training	20%	19%	18%
Careers event for students doing same type of course	29%	29%	36%
Careers event for particular occupation or industry	16%	14%	25%
Other Careers Service event	8%	13%	17%
One-to-one Careers Service advice session	20%	23%	27%
Talked to Careers Service advisor about course or career	19%	18%	23%
Careers Service information or advice by email or telephone	14%	10%	13%
Visited Careers Service website	36%	41%	55%
Visited other careers websites, e.g. Prospects	39%	37%	55%
Other	6%	9%	3%
Total	669	9924	9924

Source: Futuretrack data, Wave 3 (percentages of student mothers/matched non-mothers weighted by CEM weight; all female non-mothers weighted by Futuretrack weight).

If students had not visited the careers service, they were asked why this was the case. In line with previous findings, the data clearly shows that a majority of student mothers (55 per cent) knew what they wanted to do already and how to do it (Table 10), compared with 43 per cent of non-mothers and 36 per cent of younger non-mothers. However, similar-aged non-mothers and younger female students were more likely to think that the careers service would not offer the kind of advice they required (21 per cent and 24 per cent, respectively), when compared with mothers (12 per cent). It may be that mothers were simply less able to spend time visiting the careers service, especially those with young children. Table 9 (above) shows that mothers had spent time visiting other websites (39 per cent) and had sought advice on certain activities such as CV writing (41 per cent) and completing application forms, however (27 per cent), similar to other students.

Callender and Wilkinson (2012) similarly tracked part-time students and their use of the careers service. When asked why students had not used the careers service, 45 per cent stated that they already had a clear idea of what they wanted to do. Almost a third (32 per cent) felt that they already had experience and knowledge to decide upon their career options.

Table 10: Reasons for not visiting Careers Service during the last year of study

	Student Mothers	Non-Mothers	All female non-mothers
University/college has no Careers Service	1%	3%	2%
Already know what will do in the future and how to do it	55%	43%	36%
Not ready to make career plans yet	8%	7%	13%
Postpone making career plans until finished exams and coursework	12%	14%	17%
Not got round to it yet, but plan to do so	15%	18%	25%
Do not know what information or advice Careers Service could give	10%	13%	21%
Do not think Careers Service offers the kind of information or advice I require	12%	21%	24%
Other	9%	7%	7%
Total	414	4228	4228

Source: Futuretrack data, Wave 3 (percentages of student mothers/matched non-mothers weighted by CEM weight; all female non-mothers weighted by Futuretrack weight).

In the optional text boxes within the survey questionnaire, some mothers referred to the lack of tailored careers advice for their specific circumstances:

*Found that there was more emphasis on younger student careers, not careers for the mature students with family/time commitments (Business and Administration Studies, High Tariff HEI).*

Many mothers (and mature students) followed vocational courses which were, in many cases, taught away from the main campus which made access to careers services and extra-curricular activities more difficult:

*We are not on main campus, which is 80 miles away, there were no events arranged for us at all (Subjects allied to Medicine, Medium Tariff HEI).*

Interview data also demonstrated similar findings, i.e., that mothers did not generally draw on advice from the careers service and when they did, this tended to be disappointing:

*I knew more about, you know, Organisational Psychology than the person who was there to advise me. So it wasn't really helpful (A3, Psychology, Higher Tariff HEI).*

One woman expressed frustration that the advice provided was not geared towards her own needs. As a mature student, she felt that the careers service was not helpful and that more useful advice could have involved:

*...understanding the local job market, you know, I wasn't in a position where I was going to move (A10, MSc in Research Methods, Higher Tariff HEI).*

Although acknowledging that she was on a vocationally-orientated degree course (Midwifery), one mother said that there was little extra help provided by the university:

*...in terms of kind of registering with the NMC [National Midwifery Council] and all those kind of practical things, actually, you know, we didn't get any help from the university with that, either. That was the kind of thing that, yes, we just, kind of, had to find out for ourselves (A16, Midwifery, Medium Tariff HEI).*

It is interesting to note that the student mothers who were interviewed did not go to the careers service even when everything seemed to be going wrong with their course and they needed to rethink their career aspirations. It may be that the careers advice was too inaccessible or perceived to be geared only to younger students. On the other hand, it may also be, as was seen when the student mothers were deciding to go to HE, that they make decisions without drawing on other sources of advice and as such, are simply used to doing without advice of any kind.

One mother dropped out of her Midwifery degree. When asked by the interviewer to explain what happened, she said:

*So I just stopped and thought well, I'm going to think about this for a while, and then I kind of thought, well I kind of drifted into supply teaching, which is what I'd been doing before. Then it took me a long time, well it felt like a long time to decide, after about six weeks I went back the uni, well they made me go back and tell them what I was going to do. And they sort of sorted it all out. I put £15,000 into that course, my mum had to pay, because that was the single thing that was tricky, because we had the kids and I wasn't earning. So I went back there, by that time, what happened in the end was I said right, I've got to leave the course...(A12, Midwifery, Lower Tariff HEI).*

Other mothers were similarly reluctant to approach anyone for help within the university when things began to go wrong, and many dropped out without finding appropriate support. As with careers advice, it may be that they perceived this as not useful or they were unfamiliar or uncomfortable with seeking advice more generally.

#### **4.9 What would help student mothers the most while they are studying?**

In the semi-structured interviews, a question was asked about what the university could have done to help them while studying. Responses varied but centred upon developing support networks of similar mature students, better timetabling of lectures, availability of childcare, more information about hardship funding and generally a greater understanding of the demands faced by student mothers and a greater level of flexibility, particularly when emergencies arose.

*....try to tailor the university day to fit in with school so that parents don't have the childcare issues, and I would try to ensure that there were crèche facilities for pre-school age children that were open to everybody, not just half a dozen places or whatever, just... and not just for mothers; for parents (A20, Primary Education, Higher Tariff HEI).*

*....if institutions want to get...working parents back into studying and they want to encourage them to do a degree, I would just say consider the fact that they do need to be at home after school, because... Yes, either that or, otherwise they're going to have to arrange for out of school clubs (A17, Sport and Exercise Science, Lower Tariff HEI).*

One mother talked about the financial difficulties related to childcare:

*.... it would have been helpful if the, I don't know, if there was more kind of subsidies, for the childcare, for people studying, rather than having to pay full whack, but I think that's not going to ever happen (A19, Social Work, Higher Tariff HEI).*

When asked if she had applied for hardship funding, she said:

*No, I didn't. Because I didn't find out about that until the last year. I was so annoyed. I didn't find out about that until it was too late. Otherwise, I would have applied for those, lots.*

Two mothers commented later that there was a distinct need for more part-time courses in Nursing and Midwifery which might encourage more mothers to apply and allow them to complete their courses while bringing up their own children.

#### 4.10 Summing up

Support networks were crucial for student mothers in enabling them to enter and remain in HE. Both practical and emotional support from partners played an important role in helping student mothers remain on course and alleviating potential problems. Having a partner (or in the case of single mothers, other family members) who saw studying as worthwhile and valuable, and who was willing to make personal sacrifices to help the student mother achieve their own ambitions, was a key enabling feature. Although the previous literature suggested that student mothers were still burdened with the majority of domestic tasks, many partners in the study reported here had flexible jobs which allowed them to take on more domestic responsibilities and childcare, for which the student mothers were extremely grateful. Student mothers with such supportive social networks were able to piece together a patchwork of childcare and other support that somehow made studying possible.

Support from the university was also important, but interviews indicated that this was very variable. Courses and HEIs with a 'critical mass' of student mothers tended to give much more consideration to their specific needs and to timetable with them in mind. Those courses with very few student parents and a high proportion of young, traditional students, did not provide similar support. This is perhaps inevitable, as university administration prepares timetables with the average student in mind, but the message that some student mothers received, that they had chosen to do a particular course, knowing that they were different, and it was up to them to make it work, was something of a concern. The student mothers who appear to have had the best experiences were those who had a good rapport with lecturers and other staff and whose HEIs regarded getting student mothers through their courses very much as a partnership with effort expended on both sides.

However, even when HEIs provided a great deal of support for student mothers, there are some features of particular courses that proved to be both necessary and problematic for student mothers. For example, some practical courses inevitably require a large number of contact hours, reducing the flexibility of student mothers to work around childcare availability. Similarly, vocational courses such as midwifery, teaching and social work include placements. Again, these placements took up a lot of time and, in the case of midwifery in particular, were often outside conventional working hours.

Use of the university careers service was uncommon amongst student mothers, as well as other students of a similar age. To a large extent, this reflects the clear ideas student mothers had about their future careers and the vocationality of their courses – they already knew what they wanted to do and how to do it. However, interviews with student mothers who had dropped out of their courses indicated that they were unlikely to seek advice from

the careers service even when they were forced to rethink their career plans. In some cases this reflects the perceived unsuitability of the service for mature students, but it also highlights two other issues. Firstly, student mothers consistently demonstrate a lack of familiarity with people who may provide them with advice. They sought advice from few people when deciding to enter HE and this is replicated when they are (re)thinking their career plans. Secondly, the majority of student mothers had been employed prior to deciding to enter HE, and this prior career represented a 'fall-back' option – if things did not work out, they often returned to this former career for which they were already qualified.



## CHAPTER 5: ENTERING THE LABOUR MARKET

### 5.1 Introduction

The following section focuses upon what happened after students graduated and embarked upon their first post-HE activities, either within the labour market or elsewhere. The Futuretrack data set allows us to compare the current activity of mothers and non-mothers, as well as younger female non-mothers.

### 5.2 Current Activity

At the time of the last wave of the survey (2012), over 70 per cent of all groups were employed or self-employed. However, whilst only 7 per cent of mothers (and 4 per cent of younger students) reported that they were self-employed, this was the case for 11 per cent of matched non-mothers. Figure 3 in Section 1 showed that just under 20 per cent of all mothers indicated that their degree course would enable them to qualify for another course. Interview data also revealed that a high proportion of student mothers entered a particular degree course which required further training (e.g., a PGCE qualification for those wanting to become teachers). It is therefore not surprising that 11 per cent mothers were engaged in further study at the time of the last survey. A further 14 per cent of younger students were also engaged in further study. Only between 11 and 12 per cent of all groups were unemployed and looking for work.

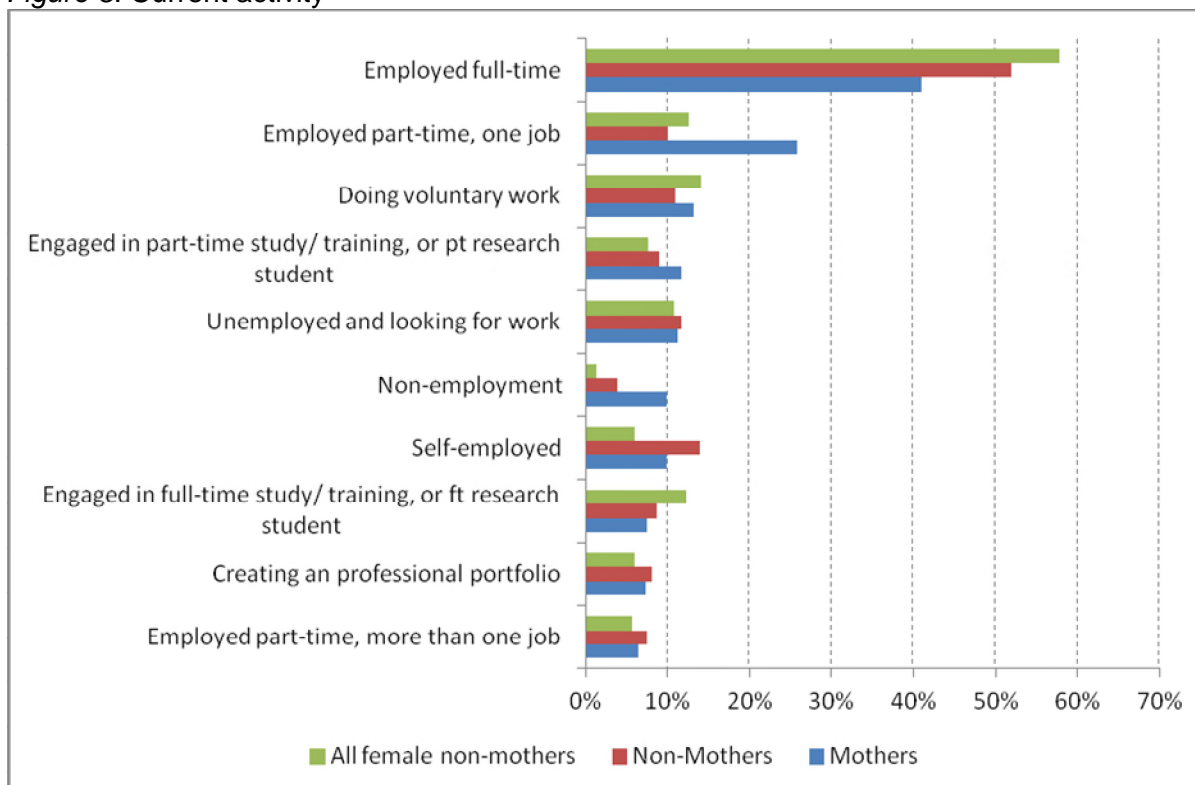
Table 11: Current Activity

	Mothers	Non-Mothers	All female non-mothers
Employee	66%	64%	69%
Self-employed	7%	11%	4%
Studying	11%	10%	14%
Unemployed and looking for work	11%	12%	11%
Other	4%	4%	2%
Total	482	8502	8502

Source: Futuretrack data Wave 4 (percentages of student mothers/matched non-mothers weighted by CEM weight; all female non-mothers weighted by Futuretrack weight). All differences significant ( $\alpha < 0.05$ ) (Chi-Square);

When we look more closely at the current activity of mothers compared with other students, we see a more differentiated picture, particularly in terms of part-time and full-time employment. For example, 41 per cent of all student mothers reported that they were working full-time, which compares to 52 per cent of matched non-mothers and 58 per cent of younger non-mothers. Student mothers were much more likely to be working part-time in one job in comparison (26 per cent) with similar-aged non-mothers (10 per cent) and younger non-mothers (13 per cent). They were also more likely to not be in employment or looking for work (10 per cent) than similar non-mothers (4 per cent) and younger non-mothers (1.2 per cent), which may demonstrate further career breaks to look after children. Having devoted so much time to studying, a number of the student mothers interviewed expressed a desire to 'make it up' to their children by now spending more time with them, as well as to support their partner's career, in the same way that their partner had supported their studying. As noted above, older non-mothers were more likely than the other two groups to be self-employed.

Figure 5: Current activity



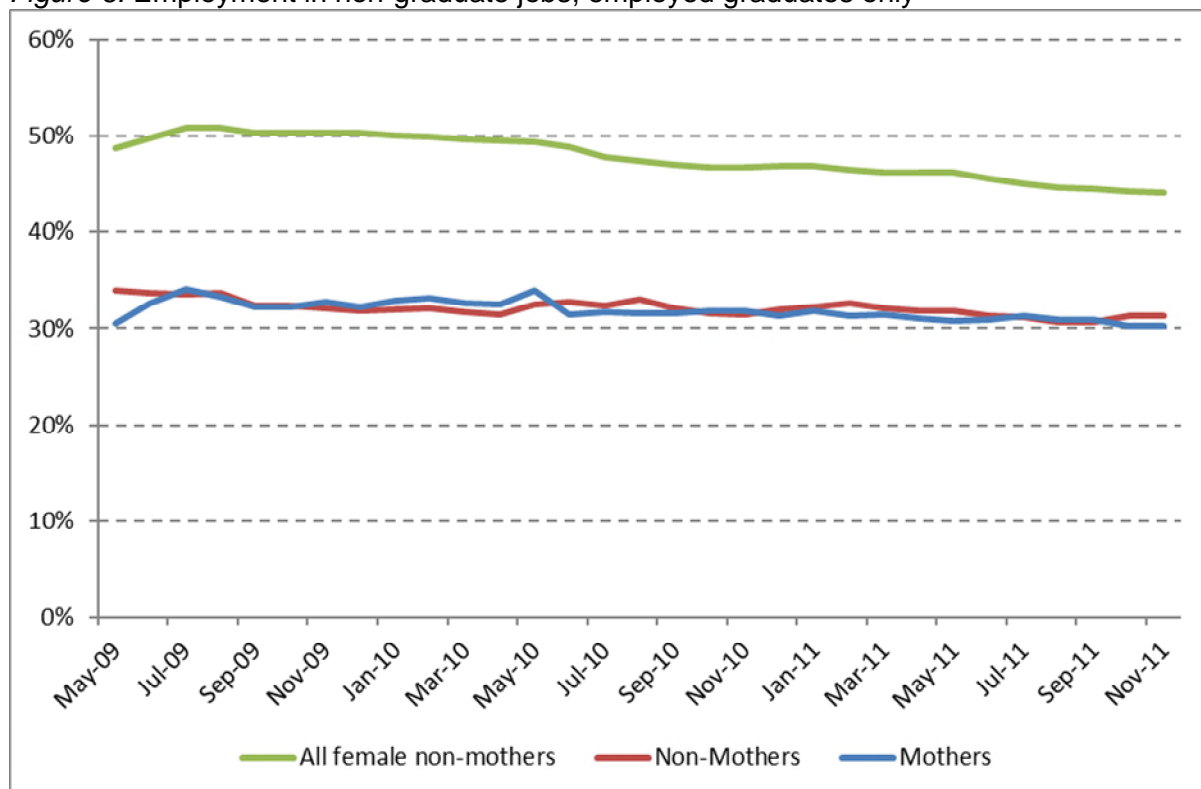
Source: Futuretrack wave 4: Student mothers = 481, Non-mothers = 8536, All female non-mothers = 8536 (CEM Matched; all female non-mothers weighted by Futuretrack weight).

### 5.3 Non-graduate employment

Figure 6 examines changes in non-graduate employment<sup>9</sup>. Directly after graduation, around a third of matched mothers and non-mothers worked in non-graduate employment, and this proportion remained relatively stable two and a half years later. Whilst the persistent high levels of graduates in non-graduate jobs is an alarming finding that has previously been reported (Purcell et al., 2013 pp 20), there is little difference between mothers and similar non-mothers. Younger graduates were more likely to be in non-graduate employment than the older groups, perhaps reflecting their lack of clarity regarding career plans, although the figures did reduce from around 50 per cent to 44 per cent over time. They may also be taking more time to decide upon their options, which may include travelling and other types of work which may lead to the job they really want at a later stage. It must also be noted that Futuretrack graduates were entering the labour market shortly after the onset of the 2008/9 financial crisis and austerity measures put in place by the government. Young people have been badly hit by the crisis and it is perhaps little surprise that such a high proportion of Futuretrack students were in non-graduate jobs at this point.

<sup>9</sup> For more on the classification of graduate jobs, see: [http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/findings/elias\\_purcell\\_soche\\_final.pdf](http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/findings/elias_purcell_soche_final.pdf)

Figure 6: Employment in non-graduate jobs, employed graduates only



Source: Futuretrack 2006: wave 4: Mothers 137-47 (May 09-Nov 11), Non-mothers 3049-803 (May 09-Nov 11), All female graduates 3049-803 (May 09-Nov 11). (Mothers and matched non-mothers CEM Matched; all female non-mothers weighted by Futuretrack weight)

In order to disentangle different factors influencing employment in non-graduate employment, a hierarchical logistic regression model was estimated. The dependent variable, skill-appropriate employment was coded with '1' if classified as graduate employment and '0' for non-graduate employment. The first model, in which only motherhood and socioeconomic status (SES) were included, shows that in general, student mothers were significantly more likely than non-mothers to enter graduate employment and those coming from lower social classes were less likely to enter graduate employment than those from higher social classes. However, in model 2, when age, subject, class of degree and type of HEI are included, the impact of motherhood becomes insignificant. Whilst the impact of SES remains constant, the impact of motherhood disappears in the context of these other variables. Motherhood as such does not have any immediate impact on the likelihood of graduate employment whilst age, subject group, class of degree and type of HEI does. Older women are more likely than younger women to enter graduate employment; those doing Subjects allied to Medicine and Education do better compared with those doing Physical Sciences; those attending the highest tariff HEIs do better than those attending lower tariff ones; and those getting a better class of degree are more successful in gaining graduate employment than those not doing so. It appears that those mothers surviving the HE experience do well in gaining graduate employment, although we will see in the following section that the types of graduate jobs undertaken by female graduates also vary by motherhood status.

Table 12: Logistic regression on Graduate Employment

	Model 1	Model 2
	B	B
Student mother	<b>0.615***</b>	0.034
Managerial and professional occupations	Reference Category	
Intermediate occupations	-0.209**	-0.217**
Routine and manual occupations	<b>-0.408***</b>	<b>-0.403***</b>
Age: 21 or older (in 2006)		0.319***
Medicine & Dentistry		21.006
Subjects allied to Medicine		<b>1.479***</b>
Biology, Vet Science, Agriculture & related		-0.413**
Physical Sciences	Reference Category	
Mathematical & Comp Sciences		0.36
Engineering, Technologies		1.062****
Architecture, Building & Planning		-0.447
Social Studies		0.087
Law		-0.304
Business & Admin studies		-0.288
Mass communication and Documentation		0.081
Linguistics and Classics		-0.394*
Languages		-0.035
Hist & Philosophical studies		-0.313
Creative Arts & Design		-0.345*
Education		<b>0.842***</b>
Interdisciplinary subjects		-0.161
Class of Degree: First Class Honours		<b>0.452***</b>
Class of Degree: Upper Second Class Honours	Reference Category	
Class of Degree: Other		-0.378***
HEI: High/Highest	Reference Category	
HEI: Low/Medium		<b>-0.325***</b>
HEI: Other		-0.086
Constant	0.452***	0.421**
-2 Log likelihood	8624.370	7864.248
Cox & Snell R Square	0.009	0.12
Nagelkerke R Square	0.012	0.162
n	6403	6403

Source: Futuretrack data Wave 4, \* $\alpha \leq 0.05$ ; \*\* $\alpha \leq 0.01$ ; \*\*\* $\alpha \leq 0.001$ . Results for missing SES, missing subject and missing class of degree were included in the models but not shown here.

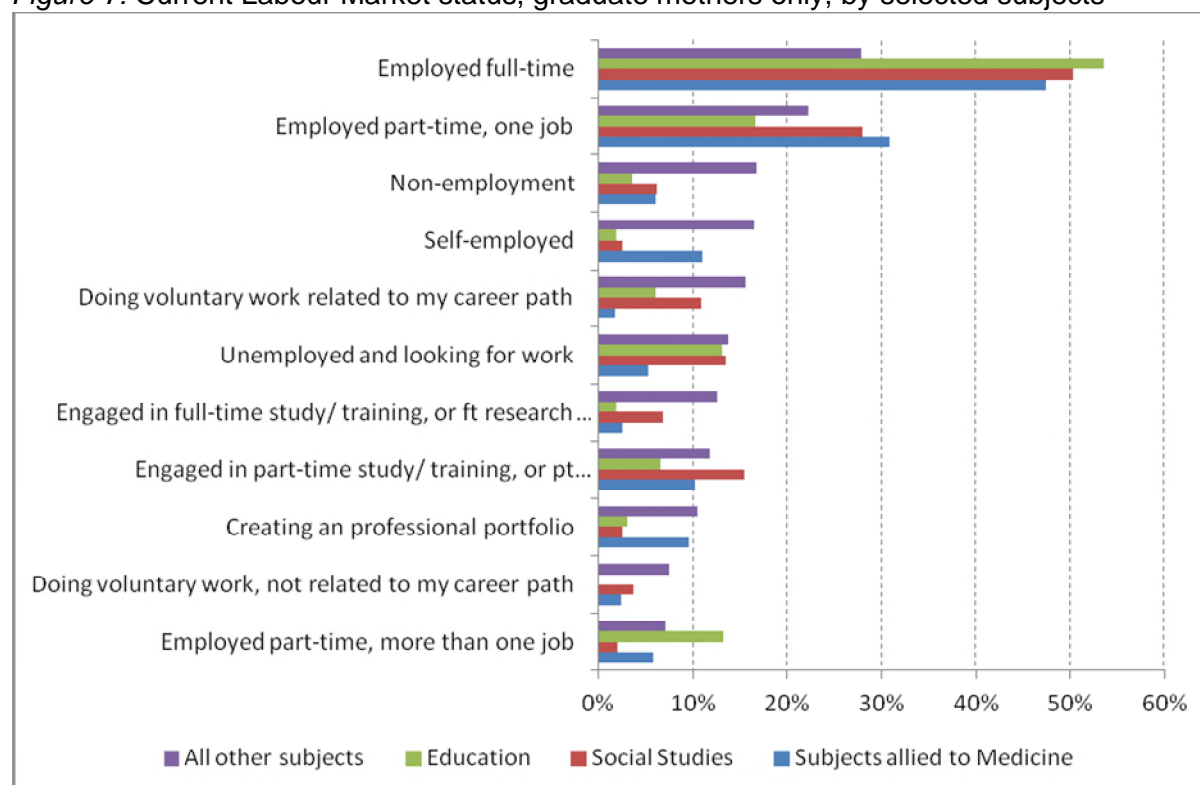
## 5.4 The typical occupational pathways of mothers in Subjects allied to Medicine, Social Studies and Education

Table 6 highlighted the high proportion of student mothers in Subjects allied to Medicine, Social Studies and Education which cover the courses in which approximately 60 per cent of mothers were enrolled. These professions, with the exception of teaching, are considered 'new graduate professions' in that they are jobs that could have been done previously without a degree, but now do require a degree qualification (while the skill requirement to do the jobs actually remains very similar). They are also very stereotypically 'women's work'.

The following section follows the typical pathways of mothers in these subjects. As this section will cover within-group differences between mothers, analysis only includes mothers in the selected subjects.

Figure 7 shows the current labour market status of mothers graduating with degrees in these selected subjects<sup>10</sup>. Over half (54 per cent) of all graduates from Education courses entered full-time employment and another 30 per cent worked part-time, either in one job or in two jobs. A further 13 per cent were unemployed and looking for work. Half of all mothers graduating in Social Studies worked full-time and another 30 per cent worked part-time, the vast majority in only one job. A high proportion were engaged in further part-time or full-time study or training (22 per cent), whereas smaller proportions were doing voluntary work related to their career path (11 per cent) or were unemployed and looking for work (14 per cent).

Figure 7: Current Labour Market status, graduate mothers only, by selected subjects



Source: Futuretrack data wave 4 (CEM weighted data): All other subjects = 195, Education = 62, Social Studies = 92, Subjects allied to Medicine = 131.

<sup>10</sup> Note that numbers can be small within some of these groups.

Compared to graduates from Social Studies and Education courses, graduates from Subjects allied to Medicine were the least likely to enter a full-time occupation (47 per cent), with over a third reporting that they worked part-time (a small proportion of these had more than one part-time job). They were also the least likely to be currently unemployed (5 per cent) or doing voluntary work (2 per cent). On the other hand, they were more likely than the other two subject groups to be self-employed (11 per cent).

Of course, the figures above do not tell us what kinds of jobs these graduates were doing and so we explored this further. Due to the high numbers of mothers working part-time (Figure 7), we divided them by full-time/part-time status, which highlighted some differences in occupations. The following section identifies the main occupations for mothers in the selected subjects.

*Table 13: Most popular HE subjects and final occupation (full-time and part-time employees, mothers only)*

HE Subject	Full-time	Part-time
<b>Subjects allied to Medicine</b>	Nurses	Midwives
	Midwives	Nurses
	Occupational therapists	Occupational therapists
<b>Social Studies</b>	Social workers	Care workers and home carers
	Care workers and home carers	Social workers
		Business and related associate professionals
<b>Education</b>	Primary and nursery school teachers	Primary and nursery school teachers
	Secondary school teachers	Teaching assistants
		Sales and retail

Source: Futuretrack data, wave 4, Subjects allied to Medicine, n = 131, Social Studies, n = 92, Education, n = 62

Table 13 shows that the same three occupations appear to be the most popular career destination for those graduating in Subjects allied to Medicine, irrespective of full-time or part-time status (Nursing, Midwifery and Occupational therapy). On the other hand, the interview data had outlined some of the difficulties for women with children trying to work full-time in Midwifery:

*I think part of the difficulty, as well, with working part-time, especially in my role, because I was what we call integrated, so I worked in the community based from a GP's surgery, had my own caseload, but then I was on-call to go and work in the hospital for... looking after ladies in labour. So actually I might only go to labour ward maybe once a week or once every two weeks, or a home birth or something like that. And I found it really difficult because every time you'd go there some policy or procedure had changed. Whereas, had I not had a child, I would probably... I would have worked full-time (A16, Midwifery, Medium Tariff HEI).*

For those graduating in Social Studies, however, only 18 per cent of those working part-time were employed as social workers, compared with 65 per cent of those working full-time. A

further 10 per cent of those working part-time were working in care jobs not requiring a degree and a further small proportion were working in business jobs, presumably unrelated to their degree subject. In the interviews, one woman graduated in Social Work but then decided to put her career on hold until her daughter was a bit older:

*I just didn't think statutory social work was appropriate, with my daughter, the age that she was at. I couldn't handle it, and it was just too much (A19, Social Work, Higher Tariff HEI).*

For those with a degree in Education, none of the part-time workers were working as teachers in secondary schools, and only 12 per cent were working full-time as secondary school teachers. On the other hand, 52 per cent of the full-time workers were working as primary or nursery school teachers. Almost a fifth of those working part-time were working as teaching assistants, low-paid jobs not requiring a degree. A small proportion were working in retail jobs unrelated to their degree subject. The interview data highlighted that many mothers had gone into Education, hoping to go into teaching. However, the reality of the job, as demonstrated within the placements or during the PGCE, was often very different to their expectations and many dropped out or changed their plans:

*I was on my final placement and something just changed. I can't put my finger on it but I just, I felt it wasn't the same, you know, and I thought, I felt I wasn't giving as much as I should have. I wasn't getting as involved with the children as I should have been and everything, and I thought you know, it's not for me after all so I didn't finish the final placement (A20, Primary Education, Higher Tariff HEI, did not complete full degree).*

## 5.5 Reasons for taking a particular job

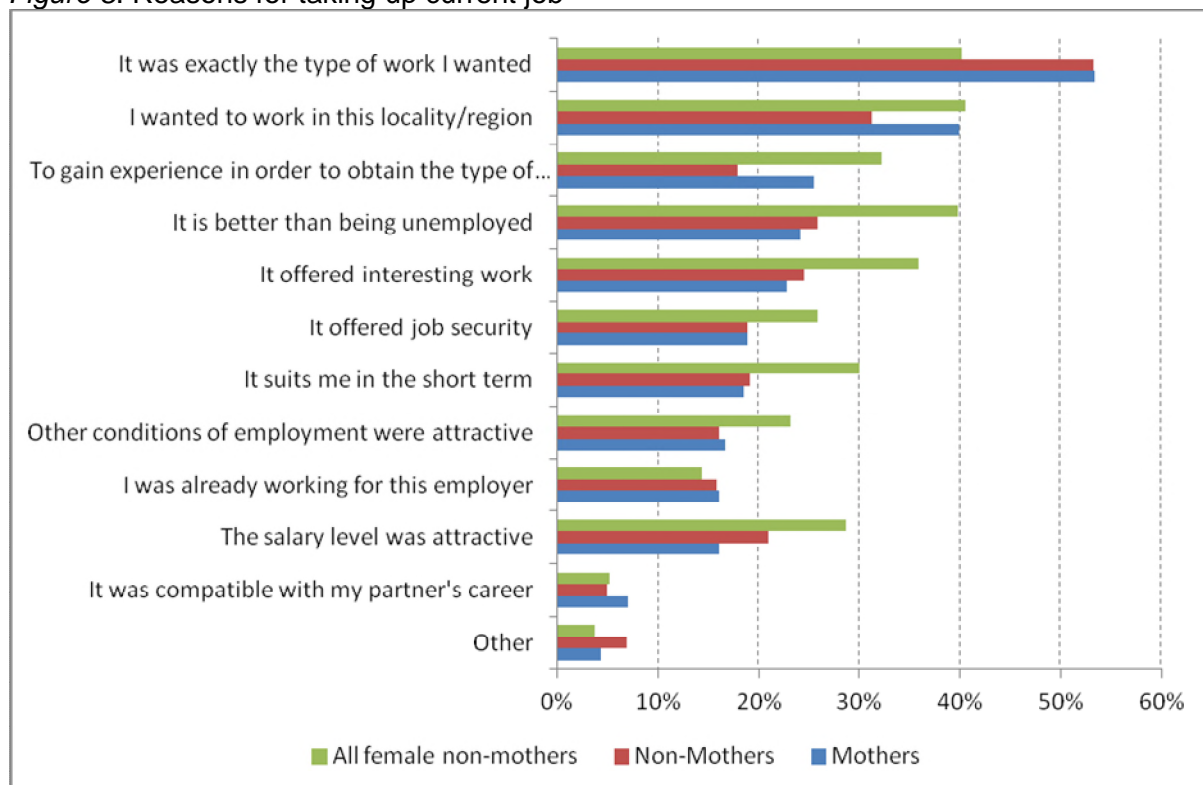
Employed graduates were asked why they had taken up their specific jobs after graduation. A high proportion of both mothers and matched non-mothers (over 50 per cent of both groups) stated that it was exactly the type of work they wanted, compared with only 40 per cent of younger non-mothers. Interestingly, mothers and younger students were more likely than older non-mothers to state that they wanted to work in this locality or region. However, this is likely to be for different reasons: for mothers, their decisions mirror their decisions in choosing an HEI, in that they would prefer to stay where they are, due to childcare and partners' jobs. Younger students may have chosen to move for a particular job (e.g., London) because it provided more opportunities, both occupationally and socially.

Younger students were more likely than other women to state they took the job because it offered interesting work, the salary and other conditions of employment were attractive, and that it offered job security (perhaps particularly important during the recession). They were also more likely to say that the job suited them in the short-term and that they wanted to gain experience in order to obtain the type of job they really wanted, suggesting that the current job was acting as a stepping stone to the job they would prefer. Mothers were more likely to say that they were already working for this employer and that it was compatible with their partner's career (although perhaps surprisingly, these figures were relatively low and did not differ as much as expected from similar-aged non-mothers and all female non-mothers). Interestingly, however, mothers were less likely than other women to say that the job offered interesting work and that the salary level was attractive. We explore more on wages in the following section.

When comparing those mothers in graduate and non-graduate employment, only 21 per cent of those mothers currently working in a non-graduate job stated that they took their current

job because it was exactly the kind of job they wanted (compared with 59 per cent of all employed student mothers working in a skill-appropriate job). Most of the student mothers currently working in a non-graduate job stated that their job was better than being unemployed (55 per cent) and that it suited them in the short term.

Figure 8: Reasons for taking up current job



Source: Futuretrack data wave 4: Student Mothers = 373, Non-mothers = 6441, All female graduates = 6441 (Mothers and matched non-mothers CEM Matched; all female non-mothers weighted by Futuretrack weight).

In written comments, one mother stated that she ‘was on Jobseekers Allowance, and had enormous pressure to get a job even with children to look after, so took what I was offered first. To be fair not much was being offered!’ (Biology, Vet Science, Agriculture & Related, Higher Tariff HEI).

Interview data revealed a mixed picture, with some mothers progressing in the career they had envisaged at the start of their courses and others either putting their careers on hold, working in the same area as before or caring for children on a full-time basis. One woman went back into teaching after starting a Midwifery degree. Although still teaching French as before, she has introduced a new course at her school on child development and sex education:

*I realised that teaching wasn't as bad as all that. Yes, learnt a lot and I used what I learnt in my daily life now, so there is that, you know, there's teaching the child development, and quite a few of the kids are really interested in it. So I'd never done that because I didn't have the knowledge before. The midwifery course gave me the knowledge to teach this subject (A12, Midwifery, Lower Tariff HEI).*

Another mother is planning to set up her own business eventually, although she is currently looking after her five children full-time:



*...some things that friends have said and other people that I've spoken to would probably trust me more knowing that I'd got a previous qualification in nursing, you know. Not that nursing's really relevant to massage, but it gives me more of an understanding, you know, if somebody says they've got a particular problem, because you'd still need to be insured and take histories and things like that, I've got more of an awareness of what they're talking about when they say they've got a particular illness, and whether it would be a good idea for them to have a massage or not (A9, Dental Hygiene, Higher Tariff HEI; did not complete 2006 course but went on to complete a Nursing degree in 2012).*

After completing a Midwifery degree, one mother reported that she was currently training to be a health visitor which still involved a lot of antenatal and postnatal work, did not involve on-call work and also provided far more progression opportunities than midwifery:

*...with the health visiting, I'm, kind of, doing the things that I loved about midwifery, the caseloads and that kind of... you know, the community side of things (A16, Midwifery, Medium Tariff HEI).*

Mothers were also asked about the impact of motherhood on their careers and this prompted a variety of responses which demonstrated clearly that mothers are not on an equal footing with a) fathers or b) non-mothers. This appeared to be the case, irrespective of whether or not the mother had completed her degree. In some cases, women had deliberately taken some time out after completing their degrees, weighing up their employment options and debating what would work best with their childcare responsibilities, such as taking jobs that are in the same field but at a lower level, e.g., teaching assistant rather than teacher, support worker rather than a social worker/midwife. For example:

*I think if I didn't have children now I would be able... I'm pretty sure I would be able to get a job and work in what I want to work, but now I'll just have to do it in another way... in a different way (A3, Psychology, Higher Tariff HEI, completed degree).*

*Well yes, I mean I do as a mum definitely, because I'm the one that's always had to make the compromises. It was always me that had to arrange the childcare, and I worked part-time. Although we did attempt to both work a half week at first, and that lasted about three months, when our eldest was tiny (A12, Midwifery, Lower Tariff HEI, did not complete degree).*

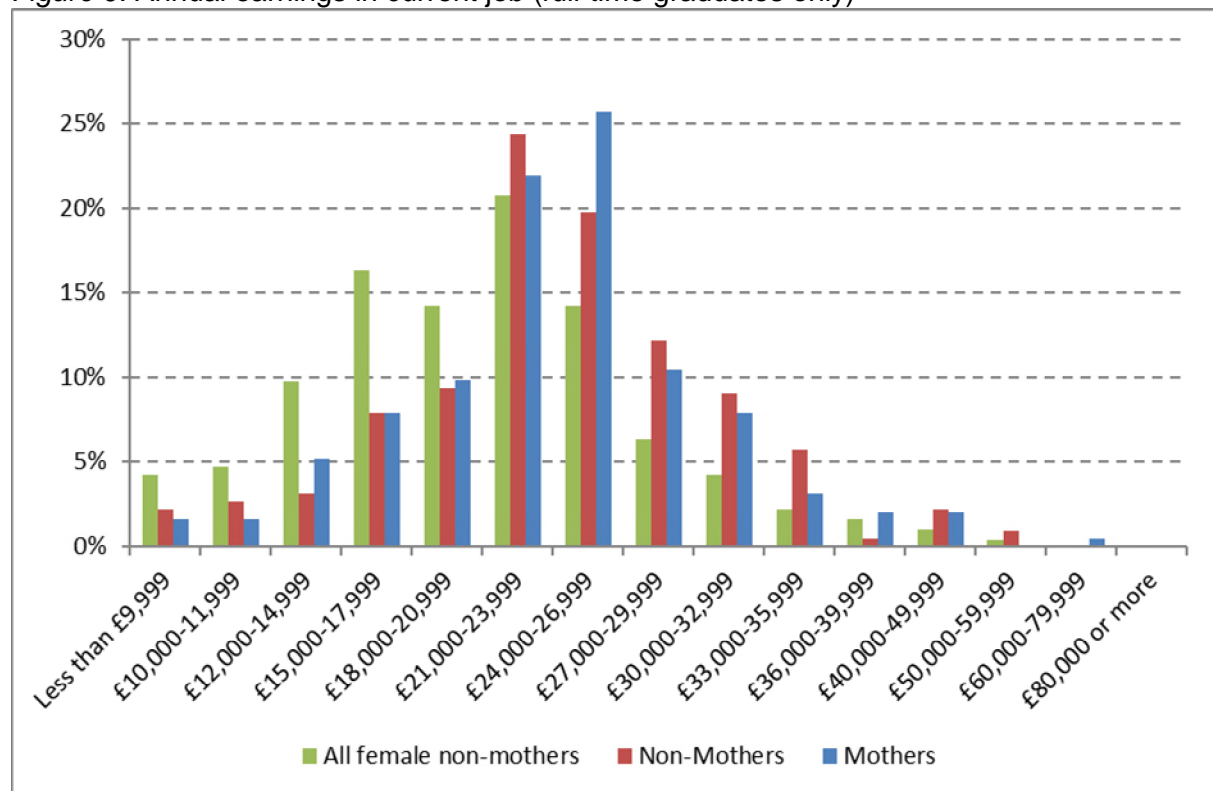
*I am (ambitious). But I think, being a parent kind of, I don't know... because I'm looking at jobs at the moment, and I can't do certain things, because of the hours, because I need to be at home. And being a parent does kind of sink that a bit (A19, Social Work, Higher Tariff HEI, completed degree).*

## **5.6 Earnings (full-time workers only)**

In an assessment of earnings, we only examined full-time workers, which substantially reduced the number of mothers for analysis (as we saw earlier, student mothers were much more likely to work part-time after graduating than both other groups). However, among this group, non-mothers' modal earnings category was £21,000-23,999, whereas the highest frequency for mothers' earnings was £24,000-26,999. Non-mothers tended to be more likely than mothers to be represented in the higher earnings categories above this level, on the other hand, whereas younger students tended to be represented in the lower salary categories, perhaps reflecting again that they were less likely to move into graduate work

straight after graduating and that they are less experienced within the workplace more generally.

Figure 9: Annual earnings in current job (full-time graduates only)



Source: Futuretrack 2006, Wave 4: Mothers = 191, Non-mothers = 4930, All female graduates = 4930. (Mothers and matched non-mothers CEM Matched; all female non-mothers weighted by Futuretrack weight).

### 5.7 Beyond career and earnings: other outcomes from HE

We already know that the majority of student mothers and matched non-mothers reported that being a student was a positive experience overall. The interview data also allowed us to focus more on the positive aspects of HE, above and beyond career outcomes. Most of the mothers highlighted the many benefits of being stretched, opening up new ideas and opportunities, personal fulfilment and also of being good role models for their children:

*I think whatever age you are when you go to university, I think the education is much broader than the subject you're actually learning...you have to, sort of, scrap yourself and start again, really. And open your brain to the millions of other possibilities that there are in the world. And, I think everybody should be forced to go (A1, Art and Design, Medium Tariff HEI).*

*I think that it woke me up to be curious again about what's going on in the world. I think I'd got really lethargic and lazy, to be honest, I was well and truly in a rut, doing the nine to five, and being quite wrapped up in my own little family unit, and not really questioning anything else, and I think going to university just makes you enquire about the world again (A5, English, Medium Tariff HEI).*

*I think it highers your expectations for yourself, and also for your children... and they've also seen the pitfalls as well (A2, English, Lower Tariff HEI).*

*I think that they've seen that you need to work hard to achieve something, and nothing is ever easy and sacrifices need to be made if you want to do something...I think the fact that I have actually achieved all these things it gives me somewhat of a platform to talk from, you know, I can say, look, I went to university, I think you should try this, or, you know, I think life's experiences give you somewhere to talk from when you're trying to explain, you know, something to your kids (A9, Dental Hygiene, Higher Tariff HEI).*

*Oh God, I can't even start to tell you, it was the best thing I ever did, you know. Walking into that college that day to do my course was the best thing I ever did because I was, I had no confidence, I didn't think that I was an achiever. I struggled all through school because obviously I'm older, I'm coming up to 50, it wasn't something that was recognised in school. But yes, so I thought that I would never ever be able to do it, and ...I'm broader minded, I think that it's made me a better parent, I've been able to like encourage my kids more. And I just, yes, definitely, I can't even start to tell you how fantastic it makes me feel (A15, Midwifery, Lower Tariff HEI).*

On the other hand, many of the mothers (sometimes simultaneously) expressed doubts that their degree had been a good investment and many said that they would definitely not be able to afford the current tuition fees and would advise their own children to think about alternatives to HE. One woman began by saying:

*I was, well I still am, the only person in my family that's ever gone to university. So, I'm pretty sure that is a good thing, for my [daughter] to see. Because I'm predominantly from a working class family, and I don't think that's in a lot of my cousins' kind of scope really. They don't really think about it as an option for them. Which is sad (A19, Social Work, Higher Tariff HEI).*

However, she later went on to say that she was unsure about whether or not university was a good investment:

*I think you could kind of progress, you'd be better off progressing through the workplace, rather than paying all this money out, which starts gaining interest as soon as you start receiving it.*

Another mother expressed similar doubts:

*I don't feel like everybody should go to university, I think a lot of the times there's other kind of routes to do what you want to do. Having said that, for a lot of things, yes I probably would say it's a good investment, although I do think the kind of fees system now is obscene and I think if I'd have been going at 18, that would've been quite off-putting. Now it's kind of like well I've got 14 grand of student debt and I only did a year and I didn't get a degree out of it so what difference does it make? (A13, Events Management, Lower Tariff HEI).*

## 5.8 Student fathers

Although not the focus of this research study, we were also able to analyse similar data for the small number of student fathers in the same cohort. In wave 2, 2.5 per cent of the

sample could be identified as men living with children, and one per cent stated that their youngest child was under 5 years old. Sixty per cent of fathers were 26 and over when they applied for higher education in 2006. Similarly to mothers, the highest proportion of fathers were studying Subjects allied to Medicine (11 per cent) and Social Studies (11 per cent), and a further 12 per cent were studying Interdisciplinary Studies. In contrast to mothers, a high proportion of fathers were also studying Mathematical and Computer Science (11 per cent) (based on wave 2; see also Appendix, Table A1).

Fathers' main reasons for applying to HE were that it was part of their longer-term career plans (75 per cent) and that they wanted to realise their potential (64 per cent). The main reasons for choosing their course was that they were interested in the content of the course (69 per cent) and that they enjoyed studying the subject (63 per cent). The main reasons for fathers to choose their HEI was that it offered a particular course (57 per cent); the close proximity to their home (48 per cent); and the general reputation of the HEI (43 per cent).

## CHAPTER 6: OVERALL CONCLUSIONS

The following section draws together the main findings from the research. We begin by outlining the major differences found between student mothers and other students (including non-mothers of the same age). We then discuss differences in early post-HE labour market participation and other outcomes and finish with a series of recommendations. Our findings echo much of the previous research done in this area but have the advantage of drawing on a unique longitudinal dataset which provides quantitative and qualitative evidence of outcomes for student mothers, in comparison with similar-aged non-mothers and younger female students. In this way, we were able to identify factors which influence the specific impact of motherhood upon applying to HE, the overall HE experience and later outcomes.

### 6.1 How different are student mothers from other students?

Student mothers are very different from all other female students entering HE: having children has an impact on most people's careers, and in the case of student mothers, it has an impact before entering HE, during HE and afterwards. The age of children also matters, in that those with pre-school children often require more time and flexibility to cope with emergencies, and formal childcare is expensive. A higher proportion of student mothers are from lower SES backgrounds and are more likely to study locally than all other female students (as they are significantly older than the typical student, their lower SES is likely to mean that they were the ones who did not participate in HE when they were 18 as fewer people, and particularly fewer people from lower SES groups, went into HE at that time).

Even when matched by age and gender, student mothers are still more likely than similar-aged women without children to be from lower SES backgrounds. They are also more likely to choose lower tariff HEIs and to choose particular subjects, e.g., Social Studies, Subjects allied to Medicine and Education (similar-aged women without children are also different from the "traditional" student who enters HE at 18 or 19 but seem to occupy a middle ground between the two extremes). Motherhood, in other words, does seem to restrict choices, above and beyond the effects of age and gender. Student mothers typically study these very female-dominated subjects and aspire to female-dominated careers – it is unclear how much of this is because they think these careers will be more family-friendly but many certainly consider these jobs to be a step up from their previous positions. However, these jobs are predominantly newly graduating professions in the public sector: nursing, social work and midwifery, which would not have required a degree in the past. The reality of such jobs is perhaps far from what was initially expected.

For many student mothers, and mature students generally from lower SES groups, HE is an opportunity that was not open to them when they were younger, but coming to it later in life brings with it different expectations and attitudes. Motherhood appears to add yet another factor for consideration, beyond SES and age. HE is more 'risky' if you have children, if you have other commitments and have given up work for it, if you have to take out a loan, if you had a bad experience of education first time round, if you think that the other students will be very different from you, etc. This perceived risk may in turn lead mothers to have to justify their decision more, by focussing on a specific job that they will get at the end of the degree. This is reflected in their choice of HEI: they study close to home because they have to (prestige is something they cannot afford to consider), and this may be a disadvantage to them if their plans turn out badly and they are looking to get a job simply on the basis that they are a graduate.

Student mothers are very positive in general about the overall HE experience, even though satisfaction with various aspects of that experience reduces over time for all groups of students. Mothers are more likely than other students to think that their course helped them in skills development, especially problem-solving, self-confidence, spoken and written communication and time management. This may reflect the lower base from which the student mothers have started, in terms of socioeconomic status, when compared with other students, and could support arguments that the “value added” by an HEI is more important than the proportion of students who end up in graduate jobs (as measured by the Destinations of Leavers from Higher Education (DLHE), (Higher Education Statistics Agency)).

There appears to be a lack of early information for student mothers about what specific jobs entail, e.g., Midwifery, Social Work and Teaching, and these are the jobs which the majority of mothers are working towards. Placements often represent a crunch point, either during the degree itself or during a post-graduate year (e.g., PGCE). Most mothers have not visited the careers service or the student union during their time in HE, although this lack of engagement is very similar to other mature female students (primarily due to a perceived lack of time and relevance).

Of those mothers who dropped out of HE, many did so because of the various barriers and difficulties of managing childcare and studying (and often work); work placements seem particularly difficult and many learn during this period that the career they had chosen is not what they had anticipated.

Family support and social networks are crucial. HE requires a lot of hard work and determination, not just on the part of the student mother, but also by their partners and other family support networks.

## 6.2 On entering the labour market

Many mothers compromise when entering the labour market by putting their careers on hold or going back to their old jobs (social work, midwifery and teaching are not as family-friendly or attractive as first thought). Many are exhausted from the overall HE experience and feel that they need to take some time out or devote some more time to their children and partners.

A similar proportion of mothers and other mature student women are employed in non-graduate jobs, but mothers are more likely to choose a job because it is local. These limited choices mirror their initial decisions regarding HE: choice of university was primarily based on proximity to their homes.

Mothers are more likely to be working part-time, doing voluntary work or not in employment (and not looking for work). Again, this could reflect the decision by many to take some time out to spend on children after the demands of HE. Those working part-time tend not to be in the more senior jobs they had originally anticipated, e.g., social workers or secondary school teachers, as such jobs are not typically available on a part-time basis. Instead, they are working as support workers or teaching assistants, jobs which could be done without a degree.

Even if they go back to the job they had before, or are working in a lower-level support role as described above, student mothers often do so with a greater appreciation of that job and, in many cases, aspirations for the future or for other things they might do (including further study) or how they might develop that job into being more like something they want. We

should not underestimate the true value of education to student mothers (or anyone else). While there are some people who had very bad experiences, overall, there was an intrinsic value of HE for many mothers, beyond simple employment outcomes. Many talked of the impact on their children, acting as good role models and being able to discuss HE with their children as they themselves started to make career choices. Other positive (and potentially non-measurable) outcomes for mothers included self-fulfilment, greater self-confidence, gaining a broader outlook on the world, and a general appreciation of the skills they have gained.

Our initial aims were to examine 'whether or not inequalities break down as a result of HE and whether or not student mothers can achieve social mobility, in comparison with other students of similar ages without children'. What we have found is that inequalities do not appear to break down as a result of HE. Some student mothers can and do achieve social mobility, in that they progress into a better job than before and perceive themselves as now having the resources and the experience to advise their own children about their career options. However, the limited choices of HEIs, the limited number of courses specifically chosen by student mothers, the difficulties encountered on their HE journey, and the similarly limited occupational choices made after HE, do seem to suggest that this is a group of students who experience relatively poor social mobility, in comparison with other students.

The data showed that younger students were more likely than mature students (both mothers and non-mothers) to be in non-graduate jobs and earning lower salaries overall soon after qualifying from HE. On the basis of these findings, one could assume that student mothers and non-mothers alike have been relatively successful in their outcomes, in comparison with this younger group. Labour market outcomes can be misleading, however. It must be remembered that younger students have a greater degree of flexibility in that they are more able to take some time out after studying to reflect on their options, go travelling, take on internships and other (unpaid) work, leading towards the job they want. The interviews carried out in 2014 (5-6 years after graduating) showed that the majority of student mothers had not moved into the jobs they initially anticipated (only 9 out of 24 were doing the job they expected or had moved into an even better job). Labour market outcomes measured at a later point with this cohort (e.g., 5-10 years after graduation) would give a much clearer picture of the "success" of the 2006 cohort of UCAS applicants. This would also include a crucial period (the 2008/9 economic crisis) which has affected all workers and was certainly not anticipated by our students when they first applied in 2005/6.

### 6.3 Preliminary recommendations

- **There is a need for HEIs to engage more with student mothers, even before they have decided upon their degree course.** Mothers come with high expectations of particular jobs but are regularly disappointed after starting the course, especially during placements. HEIs need to actively target such women upon application to HE and provide some tailored advice (having qualified nurses, social workers and teachers speak at an Open Day with real-life examples of what particular jobs entail; alternatively putting up podcasts on the HEI websites for the most popular subject choices). HEIs do not want to lose students during HE, so it makes sense for them to ensure that these women have chosen the right course. HEI support for student mothers is very patchy. It is better on courses and at HEIs with a lot of student parents or mature students. However, student mothers should not be 'ghettoised' into particular, very vocational courses at often lower-ranked universities. Other universities could do more.

- **HEIs need to be able to identify student mothers from the outset, or they will be unable to provide targeted support.** This requires a specific question upon registering for HE which helps to identify specific groups of students. This doesn't mean stigmatising students: student mothers are only one group among many which can gain from such support, but they are less likely to look for it than other groups of students.
- **Careers advice needs to be more relevant to student mothers and could perhaps be offered in a different way** than the offer for "traditional" students with more time available (e.g., targeted, flexible initiatives for mature students or those with additional responsibilities, bringing in experts in the most popular subject areas to provide a reality-check and to give real-life advice).
- **HEIs need to consider the impact of timetabling on student mothers:** the expense of childcare can mean that many mothers may miss lectures and tutorials, rather than have to pay for additional periods of childcare. In courses where there are lots of similar-aged women (e.g., Nursing, Education), it would make sense to timetable according to their needs (e.g., one or two long days, rather than lectures scattered across the week). Timetables should be rigorously maintained and adhered to, and if changes are made, student mothers need to be given special provision such as being provided with full lecture notes and assignments via the internet.
- **More courses should be offered on a part-time basis, especially those which attract a high number of mothers.** Many commented upon the difficulties of managing a full-time course alongside childcare responsibilities and in many cases, a part-time job. It seems likely that a higher proportion of those who had studied on full-time courses because they had to (i.e., because they were not offered anywhere close by on a part-time basis) would have preferred to do the same course on a part-time basis, which may also have reduced the number of drop-outs from these courses.
- **Lecturers and course directors need to act more like employers in allowing some flexibility for mothers:** people in a work setting are covered by employment laws which allow a degree of flexibility for additional care responsibilities (e.g., emergency time off, flexible working arrangements, etc.). No such formal allowance is made for students within a university setting, meaning that many women struggle to cope. In the absence of formal arrangements, HEIs need to be more flexible in terms of assignment-setting and assigning students to placements: **mothers have additional responsibilities and should be given priority in terms of finding placements within a reasonable distance of home.** Many student mothers seem reluctant to ask for special consideration but then find it particularly difficult to cope when emergencies occur; as a result, many drop out of the system.
- **There is a need to move beyond simple categorisations of "success" from HE (i.e., a graduate job).** The 'value added' provided by an HE is perhaps a much better indicator, especially for non-traditional students who start from a particularly low base and struggle with additional responsibilities during the course. Any existing measures of employment outcomes need to factor in the journey of individual students, not just the end product. Additional questions gauging satisfaction with HE and personal views of what is a successful outcome would be useful.



## CHAPTER 7: BIBLIOGRAPHY

Alsop, R., Gonzalez-Arnal, S. and Kilkey, M. (2008) 'The widening participation agenda: the marginal place of care', *Gender and Education* 20 (6): 623–637.

Archer, L., M. Hutchings, and A. Ross (2003) *Higher education and social class*. London: Routledge.

Atfield, G. and H. Behle (2010) *Widening access and equal opportunities: the HE experience of non-traditional students*. Futuretrack Working Paper Number 6. Warwick, IER.

Behle, H. (2014) 'European Mobility of UK educated graduates. Who stays, who goes?' *Higher Education Quarterly* 68 (3): 288 – 304.

Brennan, J. and Osborne, M. (2008) 'Higher education's many diversities: of students, institutions and experiences; and outcomes?' *Research Papers in Education* 23 (2): 179–190.

Brooks, R. (2012) 'Student-parents and higher education: a cross-national comparison', *Journal of Education Policy* 27 (3): 423–439.

Brown, L. and Watson, P. (2010) 'Understanding the experiences of female doctoral students', *Journal of Further and Higher Education* 34 (3): 385–404.

Callender, C. (2010) Bursaries and institutional aid in higher education in England: Do they safeguard and promote fair access? *Oxford Review of Education* 36 (1): 45–62.

Callender, C. and Wilkinson, D (2012) *Futuretrack: part-time higher education students – the benefits of part-time higher education after three years of study. A report to the Higher Education Careers Services Unit*. October.

Crozier, G., Reay, D., Clayton, J., Colliander, L. and Grinstead, J. (2008) 'Different strokes for different folks: diverse students in diverse institutions– experiences of higher education', *Research Papers in Education* 23 (2): 167–177.

Destinations of Leavers from Higher Education (DLHE), Higher Education Statistics Agency. Available from [https://www.hesa.ac.uk/index.php/index.php?option=com\\_pubs&task=show\\_pub\\_detail&pub\\_id=1708&Itemid=633](https://www.hesa.ac.uk/index.php/index.php?option=com_pubs&task=show_pub_detail&pub_id=1708&Itemid=633)

Elias, P. and K. Purcell (2004) 'Is Mass Higher Education Working? Evidence from the Labour Market Experiences of Recent Graduates', *National Institute Economic Review*, No. 90, November: 60-74.

Gonzalez-Arnal, S. and Kilkey, M. (2009) 'Contextualizing rationality: mature student carers and higher education in England'. *Feminist Economics* 15(1): 85–111.

Greenbank, P. and Hepworth, S. (2008) 'Improving the career decision-making behaviour of working-class students: Do economic barriers stand in the way?' *Journal of European Industrial Training* 32 (7): 492-509.

Haleman, D. L. (2004) 'Great expectations: single mothers in higher education', *International Journal of Qualitative Studies in Education*, 17(6): 769-784.

Heward, C. (1996) Women and careers in higher education. What is the problem? in: L. Morley & V. Walsh (Eds) *Breaking boundaries: women in higher education*, London: Taylor & Francis.

Hinton-Smith, T. (2012) *Lone parents' experiences as higher education students*, Leicester, NIACE.

Kuperberg, A. (2009) 'Motherhood and Graduate Education: 1970–2000', *Population Research Policy Review* 28: 473–504.

Lacus, S., King, G. and Porro, G. (2009) cem: Software for Coarsened Exact Matching, *Journal of Statistical Software* 30 (9): 1-27.

Leonard, D. (2001) *A woman's guide to doctoral studies*. Buckingham: Open University Press.

Lister, P. G. (2003) 'It's like you can't be a whole person, a mother who studies'. Lifelong learning: mature women students with caring commitments in social work education', *Social Work Education* 22 (2): 125-138.

Lynch, K. D. (2008) 'Gender roles and the American academe: a case study of graduate student mothers', *Gender and Education* 20 (6): 585–605.

Marandet, E. and Wainwright, W. (2009) 'Discourses of Integration and Exclusion: Equal Opportunities for University Students with Dependent Children?' *Space and Polity*, 13 (2): 109–125.

Marandet, E. and Wainwright, W. (2010) 'Invisible experiences: understanding the choices and needs of university students with dependent children', *British Educational Research Journal* 36 (5): 787–805.

Mills, C.W. (1959) *The sociological imagination*. London: Oxford University Press.

Moreau, M-P and Kerner, C. (2012) 'Supporting Student Parents in Higher Education: A policy analysis'. Nuffield funded research.

Moss, D. (2004) 'Creating space for learning: conceptualizing women and higher education through space and time', *Gender and Education*, 16 (3): 283-302.

Nerad, M., and J. Cerny (1999) Widening the circle: Another look at women graduate students. *Communicator* XXXII, no. 6: 1–7. Berkeley: University of California.

NUS (2009) *Meet the parents*. The experience of students with children in further and higher education.

NUS and Million + (2012) *Never too late to learn: mature students in higher education*.

Osborne, M., Marks, A. and Turner, E. (2004) 'Becoming a Mature Student: How Adult Applicants Weigh the Advantages and Disadvantages of Higher Education', *Higher Education* 48 (3): 291-315.

O'Shea, C. and Stone, C. (2011) Transformations and self-discovery: mature-age women's reflections on returning to university study, *Studies in Continuing Education* 33 (3): 273-288.

Purcell, K., Elias, P. and Atfield, G. (2009) 'Analysing the relationship between higher education participation and educational and career development patterns and outcomes: a new classification of higher education institutions', [http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/findings/ft3.1\\_wp1\\_access\\_tariff\\_classification.pdf](http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/findings/ft3.1_wp1_access_tariff_classification.pdf)

Purcell, K., Elias, P., Atfield, G. Behle, H. et al. (2013) 'Futuretrack Stage 4: transitions into employment, further study and other outcomes', [http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/stage\\_4\\_report\\_final\\_30\\_10\\_2013.pdf](http://www2.warwick.ac.uk/fac/soc/ier/futuretrack/stage_4_report_final_30_10_2013.pdf)

Reay, D., Ball, S. and David, M. (2002) 'It's Taking Me a Long Time but I'll Get There in the End': mature students on access courses and higher education choice, *British Educational Research Journal* 28 (1): 5-19.

Reay, D. (2003) A Risky Business? Mature Working-class Women Students and Access to Higher Education, *Gender and Education* 15 (3): 301-317.

Shuetze, H. & Slowey, M. (2002) Participation and exclusion: a comparative analysis of nontraditional students and lifelong learners in higher education, *Higher Education* 44: 309-327.

Smith, S. (1996) Uncovering key aspects of experience: The use of in-depth interviews in a study of women returners to education. In E.S. Lyon, and J. Busfield (eds), *Methodological imaginations*, 58-74. UK: Macmillan Press.

Sweet, S. and Moen, P. (2007) 'Integrating Educational Careers in Work and Family', *Community, Work and Family* 10 (2): 231-250.

Walkup, V.J. (2005) *A Voyage round my SWAMs (students who are mothers): A research journey*. Paper presented at the 5<sup>th</sup> International GEA conference, Cardiff University, March 29<sup>th</sup> -30<sup>th</sup>, 2005.

Wisley, S. A. (2013) Comparisons of Adult and Traditional College-Age Student Mothers: Reasons for College Enrollment and Views of How Enrollment Affects Children, *Journal of College Student Development* 54 (2), March/April: 209-214.

## APPENDIX 1: SEARCH STRATEGIES FOR THE LITERATURE REVIEW

The literature search began in August 2013 and was updated several times over the course of the project, ending in August 2014.

Searches were limited to 1995 onwards, in English. The initial search from IBSS yielded over 37,000 hits so was then limited to the UK or England only.

Search terms		Items
Higher Education and	Mother(s) and/or Parent(s) and/or Father(s) and/or Child(ren)	
University and	Mother(s) and/or Parent(s) and/or Father(s) and/or Child(ren)	
Student(s) and	Mother(s) and/or Parent(s) and/or Father(s) and/or Child(ren)	
Mature women students		
Databases:	IBSS	14+4
	Education Research Complete	53+111
	British Education Index	0
	ERIC/Proquest Educational databases, including AEI, BEI, ERIC	0
	Scopus	0

Initial articles collected were then checked for any relevant articles or book chapters within their bibliographies and further references were added, if the above criteria were met, regarding date and language, as well as relevance. All articles were read and assessed for suitability, and retained if deemed relevant.

## APPENDIX 2:

### Higher Education Institutions Classification

#### Highest tariff universities

University of Bath  
University of Birmingham  
Brighton and Sussex Medical School  
University of Bristol  
University of Cambridge  
University College London  
University of Durham  
University of Edinburgh  
University of Glasgow  
Hull York Medical School  
Imperial College London  
King's College London  
University of Leeds  
University of London Institute in Paris (University of London)  
London School of Economics  
University of Manchester  
University of Newcastle  
University of Nottingham  
Oxford University  
Peninsula Medical School  
Royal Veterinary College (University of London)  
University of St Andrews  
St George's Hospital Medical School (University of London)  
University of Sheffield  
University of Southampton  
University of Strathclyde  
University of Warwick  
University of York

#### High tariff universities

University of Aberdeen  
Aston University Birmingham  
Brunel University  
Cardiff University  
City University  
University of Dundee  
University of East Anglia  
University of Essex  
University of Exeter  
Glasgow Caledonian University  
Goldsmiths College, London  
Heriot-Watt University  
Heythrop College (University of London)  
University of Hull  
Keele University  
University of Kent  
Lancaster University  
University of Leicester  
University of Liverpool  
The School of Pharmacy (University of London)  
Loughborough University  
Medway School of Pharmacy  
Northumbria University  
Oxford Brookes University

Queen Margaret Univ College  
Queen Mary, London  
Queen's University Belfast  
University of Reading  
Robert Gordon University  
Royal Holloway, London  
School of Oriental and African Studies University of London  
University of Stirling  
University of Surrey  
University of Sussex  
University of Wales, Aberystwyth  
University of Wales Swansea

**Medium tariff universities**

University of Abertay Dundee  
Anglia Ruskin University  
Bath Spa University  
Bournemouth University  
University of Bradford  
University of Brighton  
Canterbury Christ Church  
UCE / Birmingham City  
University of Central Lancashire  
University of Chester  
University of Chichester  
Coventry University  
De Montfort University  
Edge Hill University  
University of Glamorgan  
University of Gloucestershire  
University of Hertfordshire  
University of Huddersfield  
Leeds Metropolitan University  
University of Lincoln  
Liverpool John Moores University  
Manchester Metropolitan Univ  
Napier University  
Nottingham Trent University  
University of Paisley / West of Scotland  
University of Portsmouth  
University of Plymouth  
University of Salford  
Sheffield Hallam University  
Staffordshire University  
University of Sunderland  
University of Teesside  
University of Ulster  
University of Wales, Bangor  
University of Wales, Lampeter  
University of Westminster  
University of the West of England  
University of Winchester  
York St John University

**Lower tariff universities**

American InterContinental University - London  
University of Bedfordshire / Luton  
Bell College  
Birmingham College of Food, Tourism & Creative Studies

Bishop Grosseteste University College, Lincoln  
University of Bolton  
University of Buckingham  
Buckinghamshire Chilterns UG  
University of Cumbria  
University of Derby  
University of East London  
University of Greenwich  
Kingston University  
Leeds Trinity & All Saints  
Liverpool Hope University  
London Metropolitan University  
London South Bank University  
Marjon - The College of St Mark & St John, Plymouth  
Middlesex University  
Newman College of Higher Education  
University of Northampton  
The North East Wales Institute  
Richmond, The American International University in London  
Roehampton University  
Ruskin College Oxford  
St Martin's College  
St Marys College, Twickenham  
Southampton Solent University  
Swansea Institute / Met Uni  
Thames Valley University  
Trinity College Carmarthen  
UHI Millennium Institute  
University of Wales Institute Cardiff  
University of Wales, Newport  
University of Wolverhampton  
University of Worcester

**General HE colleges**

Askham Bryan College  
Barking College  
Basingstoke College of Technology  
Blackburn College: East Lancashire Institute of Higher Education  
Blackpool and The Fylde College  
Bradford College  
Bridgwater College  
Bristol Filton College  
Bristol, City of Bristol College  
Carmarthenshire College  
Chesterfield College  
Chichester College  
City College, Birmingham  
City College Manchester  
City and Islington College  
City of Sunderland College  
Colchester Institute  
Coleg Llandrillo Cymru  
Coleg Menai  
College of West Anglia  
Cornwall College  
Croydon College  
Dearne Valley College  
Dewsbury College  
Doncaster College

Duchy College  
Dudley College of Technology  
East Surrey College  
Exeter College  
Farnborough College of Technology  
Gloucestershire College of Arts and Technology  
Great Yarmouth College  
Grimsby Institute of Further and Higher Education  
Guildford College of Further and Higher Education  
Halton College  
Havering College of Further and Higher Education  
Hertford Regional College  
Highbury College  
Hopwood Hall College  
Hull College  
Leeds: Park Lane College  
Leicester College  
Liverpool Community College  
Loughborough College  
Manchester College of Arts and Technology  
Matthew Boulton College of Further and Higher Education  
Neath Port Talbot College  
NESCOT  
Newcastle College  
New College Durham  
New College Nottingham  
Northbrook College Sussex  
North East Worcestershire College  
North Lindsey College  
North Warwickshire and Hinckley College  
Norwich City College of Further and Higher Education  
Pembrokeshire College  
The People's College Nottingham  
Peterborough Regional College  
Rotherham College of Arts and Technology  
St Helens College  
Salisbury College  
Sheffield College  
Solihull College  
Somerset College of Arts and Technology  
South Birmingham College  
South Devon College  
South Downs College  
South East Essex College  
South Nottingham College  
Southport College  
Staffordshire University Regional Federation  
Stamford College  
Stockport College of Further & Higher Education  
Stratford upon Avon College  
Suffolk College  
Sutton Coldfield College  
Swansea College  
Swindon College  
Tyne Metropolitan College  
Wakefield College  
Warwickshire College  
West Herts College, Watford  
Westminster Kingsway College



West Thames College  
West Suffolk College  
Wigan and Leigh College  
Wiltshire College  
Wirral Metropolitan College  
Worcester College of Technology  
York College  
Yorkshire Coast College of Further and Higher Education

**Specialist HE colleges**

The Arts Institute at Bournemouth  
Bishop Burton College  
British College of Osteopathic Medicine  
British School of Osteopathy  
Capel Manor College, Enfield, Middlesex  
Central School of Speech and Drama  
Cleveland College of Art and Design  
Cliff College  
The College of Agriculture, Food and Rural Enterprise  
Cumbria Institute of the Arts  
Dartington College of Arts  
Edinburgh College of Art  
European Business School, London  
European School of Osteopathy  
Glamorgan Centre for Art and Design Technology  
The Glasgow School of Art  
Greenwich School of Management  
Harper Adams University College  
Herefordshire College of Art and Design  
Holborn College  
Kent Institute of Art and Design  
Leeds College of Art & Design  
Leeds College of Music  
The Liverpool Institute for Performing Arts  
London School of Commerce  
Mountview Academy of Theatre Arts  
Myerscough College  
The Norwich School of Art and Design  
Plymouth College of Art and Design  
Ravensbourne College of Design and Communication  
Regents Business School London  
Rose Bruford College  
Royal Academy of Dance  
Royal Agricultural College  
Royal Welsh College of Music and Drama  
SAE Institute  
Scottish Agricultural College  
Sparsholt College Hampshire  
Stranmillis University College, Belfast  
The Surrey Institute of Art and Design, University College  
University of the Arts London  
University College Falmouth  
Welsh College of Horticulture  
Wimbledon School of Art  
Writtle College

## APPENDIX 3: INTERVIEW TOPIC GUIDES

### STUDENT MOTHERS INTERVIEW GUIDE FOR TELEPHONE INTERVIEWS WITH MOTHERS WHO COMPLETED THEIR COURSE

The research is being conducted for the Nuffield Foundation by the Institute for Employment Research. The research is exploring whether or not HE has the ability to increase opportunities for all students or whether there are particular difficulties and challenges for student mothers which need to be addressed in the future. We are very keen to hear about your own experiences of Higher Education and what has happened since you applied for your course. There are no right or wrong answers.

Everything you say will be treated in the strictest confidence and the anonymity of you, your university and your place of work is guaranteed in any report or any other publication produced from the research. The aim of the research is to provide recommendations for policy-makers which will help student mothers in the future.

#### **University/subject/completed or not:**

Which University did you apply to in 2005/6?

Which degree course did you apply for?

Did you start that course?

Did you complete that course?

#### **Reasons for choosing university and course:**

Why did you want to go to university in the first place?

And why did you apply to do that particular course at that particular university?

Looking back, do you think you would go to university again?

[IF NO] Why not?

[IF YES] Do you think you would apply to do the same or a different course? What about the university – would you apply to the same or a different university?

#### **Juggling parenthood with study:**

How easy or difficult was it for you to do your degree while also taking care of your child(ren)?

Did you have a partner while you were studying? [IF YES] What were they doing at the time? [TYPE OF JOB, TRAVEL INVOLVED, ETC.]

Were you also working while you were doing your course? [IF SO, HOW EASY OR DIFFICULT WAS THAT TO MANAGE? INCLUDE TYPE OF JOB, E.G. RELATED TO COURSE OR SHORT-TERM JOB]

When you were doing your course, were there any particular issues which you found difficult to manage that wouldn't have been an issue for other students without children? [E.G., COURSEWORK DEADLINES, TIMETABLING ISSUES, SCHOOL HOLIDAYS, CHILDCARE COSTS AND AVAILABILITY, COMMUTING TIME, LOSS OF INCOME ETC.]

In the end, do you think any of these issues affected your academic work?

And what about your childcare responsibilities?

What helped you the most in managing to deal with your studying and your childcare responsibilities? [E.G., INFORMAL CHILDCARE, SPOUSE SUPPORT, GOOD TEACHERS, OTHER MOTHERS AT UNI, ETC.]

What support would you recommend that the university could have offered student mothers? Did you receive this kind of support?

### **Careers advice:**

Did you receive any careers advice during your course?

[IF NOT, KNOWLEDGE OF SUCH SUPPORT OR LACK OF INTEREST, NEGATIVE PERCEPTIONS OF CAREERS SUPPORT, NO TIME TO VISIT OR EXPLORE IN ANY DETAIL?]

[IF YES]: What did you think of that advice?

How well do you think your university was able to adapt the careers advice provided to your own situation as a student mother?

Could they have done anything else to provide suitable careers advice? [E.G., ANY PARTICULAR SUPPORT WHICH WAS DIFFERENT FOR MOTHERS THAN FOR OTHER STUDENTS]

### **Clarity of career plans and changes to those plans:**

When you applied to university, did you have a clear plan about what you wanted to do at the end of your course? [IF YES, WHAT WAS THAT?]

And could you tell me if things turned out the way you expected when you applied? [IF NOT, ANY POSITIVE AND NEGATIVE CHANGES, EG. DIFFERENT INTERESTS DURING THE COURSE, BETTER JOB OPTIONS; OR BAD CHOICE OF COURSE, POOR JOB PROSPECTS AFTER GRADUATING, LOCAL LABOUR MARKET PROSPECTS, RECESSION]

### **Employment outcomes:**

And what are you doing now? [CHECK EMPLOYED OR NOT, FURTHER STUDY; HOW LONG DOING THIS JOB/STUDY]

[IF WORKING, PROBE FOR JOB TITLE; SECTOR; PART-TIME V FULL-TIME; SELF-EMPLOYED, SAME JOB AS BEFORE UNI, ETC.]

And is this what you imagined you'd be doing when you finished your course? [IF NOT, WHAT CHANGED? WERE THERE ANY PARTICULAR THINGS WHICH STOPPED YOU DOING WHAT YOU WANTED TO DO; ANY POSITIVE AND NEGATIVE CHANGES, EG. BETTER CHOICES, RECESSION, INABILITY TO RELOCATE OR TRAVEL FOR WORK, PARTNER'S JOB, SCHOOLS]

[IF WORKING only]: And can you see yourself staying in this job in the longer-term? If not, why not? [PROBE FOR SALARY, PROMOTION PROSPECTS, JOB SATISFACTION, TRAINING, FRIENDLY ENVIRONMENT, WORKING HOURS, ETC.]

[IF LOOKING FOR WORK]: What kind of job are you looking for? [PROBE FOR WHAT'S IMPORTANT TO THEM IN LOOKING FOR A JOB?]

[IF NOT WORKING OR NOT CURRENTLY LOOKING FOR WORK]: Can I ask what you're doing instead? [PROBE FOR CHILDCARE, ELDERCARE, TRAVEL, RETIRED, OTHER]

And what can you see yourself doing in the longer-term? [IF PLANNING TO WORK IN THE FUTURE]: When might you start looking for work and what kind of job will you look for [PROBE FOR WHAT'S IMPORTANT TO THEM IN LOOKING FOR A JOB?]

[IF WORKING, LOOKING FOR WORK OR MIGHT WORK IN FUTURE]: Do you feel that your course provided you with particular skills which you're using now or can use in your future work?

Do you think that your career prospects improved overall as a result of your degree? [IF NOT, WHY?]

Did you work before you went to university? [IF YES]: What did you do?

Do you think that going to university was a good investment, given your career and other achievements to date?

Do you think that being a parent has had an impact on your career? [IF YES OR NO] Has anything else had an impact on your career?

**Other outcomes:**

Do you think that doing a degree has been a positive experience overall? [e.g., MORE THAN PAY, E.G., SELF-CONFIDENCE, WIDER INTERESTS, ROLE MODEL FOR CHILDREN, MEETING NEW PEOPLE, ETC.]

Anything else you want to add?

## **STUDENT MOTHERS INTERVIEW GUIDE FOR TELEPHONE INTERVIEWS WITH MOTHERS WHO DID NOT COMPLETE THEIR COURSE**

The research is being conducted for the Nuffield Foundation by the Institute for Employment Research. The research is exploring whether or not HE has the ability to increase opportunities for all students or whether there are particular difficulties and challenges for student mothers which need to be addressed in the future. We are very keen to hear about your own experiences of Higher Education and what has happened since you applied for your course. There are no right or wrong answers.

Everything you say will be treated in the strictest confidence and the anonymity of you, your university and your place of work is guaranteed in any report or any other publication produced from the research. The aim of the research is to provide recommendations for policy-makers which will help student mothers in the future.

### **University/subject/completed or not:**

To start off with, I wonder if we can just re-cap on which University you applied to in 2005/6?

Which degree course did you apply for?

And did you actually start that course? [IF YES, HOW FAR DID YOU GET IN COMPLETING THE COURSE?]

Do you plan to return to higher education?

[IF YES]: Have you made any arrangements to return to a course? [FIND OUT IF SAME OR DIFFERENT COURSE AND UNIVERSITY; ANY INFORMAL PLANS TO DO SO IN FUTURE AND WHEN?]

[IF NOT]: Could you tell me why not? [PROBE FOR JOB, CHILDCARE, EXPENSE, OTHER?]

### **Reasons for choosing university and course:**

Can I ask why you wanted to go to university?

And why did you apply to do that particular course at that particular university? [PROBE FOR TOP-UP ON PREVIOUS WORK EXPERIENCE, JOB REQUIREMENTS, NEW INTEREST; WORK-FAMILY CHOICES, LOCATION OF UNI]

Do you mind me asking if you had a partner when you applied to go to university? [IF YES] What were they doing at the time? [PROBE FOR TYPE OF JOB, TRAVEL INVOLVED, ETC.]

### **Clarity of career plans and changes to those plans:**

When you applied to university, did you have a clear plan about what you wanted to do **at the end of your course**? [PROBE FOR UPSKILLING, CHANGE OF DIRECTION, FINDING FAMILY-FRIENDLY EMPLOYMENT, ETC.]

And could you tell me if things have turned out better or worse than you expected since you applied to university? [IF NOT, PROBE FOR POSITIVE AND NEGATIVE CHANGES, EG. BETTER/WORSE JOB OPTIONS; POOR JOB PROSPECTS; LOCAL LABOUR MARKET PROSPECTS; RECESSION]

### **Employment outcomes:**

You said in your email to us that you were working/not currently working. Can I just double-check what you're doing now? [CHECK EMPLOYED OR NOT, FURTHER STUDY; HOW LONG DOING THIS JOB/STUDY]

[IF WORKING, PROBE FOR JOB TITLE; SECTOR; PART-TIME V FULL-TIME; SELF-EMPLOYED, SAME JOB AS BEFORE APPLYING TO UNI, ETC.]

[ASK ALL EXCEPT THOSE LOOKING FOR WORK] And is this what you imagined you'd be doing at this point in your life? [IF NOT, WHAT CHANGED? WERE THERE ANY PARTICULAR THINGS WHICH STOPPED YOU DOING WHAT YOU WANTED TO DO; PROBE FOR POSITIVE AND NEGATIVE CHANGES, EG. BETTER CHOICES, RECESSION, INABILITY TO RELOCATE OR TRAVEL FOR WORK, PARTNER'S JOB, SCHOOLS]

[IF WORKING]: And can you see yourself staying in this job in the longer-term? If not, why not? [PROBE FOR SALARY, PROMOTION PROSPECTS, JOB SATISFACTION, TRAINING, FRIENDLY ENVIRONMENT, WORKING HOURS, ETC.]

[IF LOOKING FOR WORK]: What kind of job are you looking for? [PROBE FOR WHAT'S IMPORTANT TO THEM IN LOOKING FOR A JOB?]

[IF NOT WORKING OR NOT CURRENTLY LOOKING FOR WORK]: Can I ask what you're doing instead? [PROBE FOR CHILDCARE, ELDERCARE, TRAVEL, RETIRED, OTHER]

And what can you see yourself doing in the longer-term? [IF PLANNING TO WORK IN THE FUTURE]: When might you start looking for work and what kind of job will you look for [PROBE FOR WHAT'S IMPORTANT TO THEM IN LOOKING FOR A JOB?]

And do you think that your career prospects would have improved overall as a result of doing a degree? [IF NOT, WHY?]

[ASK ALL]: Did you work before you applied to go to university? [IF YES]: What did you do?

Do you think that going to university is a good investment?

Do you think that being a parent has had an impact on your career? [IF YES OR NO] Has anything else had an impact on your career?

Anything else you want to add?

## APPENDIX 4: Additional tables

**Table A1: Subject Choice of fathers**

	Student Father	All other male students
Medicine & Dentistry	4%	3%
Subjects allied to Medicine	11%	5%
Biology, Vet Sci, Agr & related	6%	7%
Physical Sciences	4%	7%
Mathematical & Comp Sci	11%	12%
Engineering, Technologies	7%	11%
Architecture, Build & Plan	4%	3%
Social Studies	11%	7%
Law	4%	4%
Business & Admin studies	9%	10%
Mass communication and Documentation	1%	3%
Linguistics and Classics	1%	1%
Languages	1%	1%
Hist & Philosophical studies	6%	4%
Creative Arts & Design	8%	8%
Education	2%	1%
Interdisciplinary subjects	11%	14%
Total	100 %	100%

Source: Futuretrack 2006, Wave 2: weighted data, n (unweighted) = 14057