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Parental care and employment in early childhood

Shirley Dex and Kelly Ward

**Institute of Education
University of London**



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**Parental care and employment in early childhood.
Analysis of the Millennium Cohort Study (MCS)
Sweeps 1 and 2**

Shirley Dex and Kelly Ward

Institute of Education, University of London



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CONTENTS

TABLES	iii
FIGURES	vi
ACKNOWLEDGEMENTS	vii
EXECUTIVE SUMMARY	ix
1 INTRODUCTION	1
2 MOTHERS' EMPLOYMENT AROUND CHILDBIRTH	10
2.1 When pregnant	10
2.2 Maternity leave	12
2.3 Maternity pay	16
2.4 Returning to same employer	17
2.5 When child aged 9-10 months old	18
2.6 Extent of flexible working arrangements for employed mothers	19
2.7 Employment trajectories	22
2.8 Summary	24
3 FATHERS' EMPLOYMENT AROUND CHILDBIRTH AND ITS RELATION TO MOTHERS' BEHAVIOUR	26
3.1 Fathers' employment when child aged 9-10 months	26
3.2 Type of leave father took around birth of child	27
3.3 Access to flexible work	30
3.3 Summary	33
4 COUPLES' EMPLOYMENT IN EARLY CHILDHOOD	35
4.1 Pregnancy	35
4.2 When child aged 9-10 months	35
4.3 Childcare when child aged 9-10 months	40
4.4 Summary	43
5 PARENTS' EMPLOYMENT UP TO AGE 3	45
5.1 Mother's employment when child aged 3	45
5.2 Mother's employment trajectories since childbirth	50
5.3 Couples' employment status when child aged 3	57
5.4 Changes in family employment status and hours of work	59
5.5 Family income and poverty measures at age 3	63
5.6 Summary	65
6 PARENTS' INVOLVEMENT WITH THEIR CHILD	66
6.1 Resident parents' feelings about time they spend with child	66
6.2 Extent resident parents look after an ill 3 year old child	68
6.3 Parents' feelings about their relationship with their 3 year old child	70
6.4 Fathers' involvement in certain activities with their child	71
6.5 Absent fathers' involvement with their child	74
6.6 Summary	77

7	CHILD'S HEALTH AND DEVELOPMENT UP TO AGE 3	78
	7.1 Literature on child outcomes	78
	7.2 Child health and development at 9-10 months	80
	7.3 Measures of child health at age 3	81
	7.4 Correlates of child's strengths and difficulties questions at age 3	82
	7.5 Summary	84
8	MOTHERS' HEALTH AND WELL-BEING	86
	8.1 During pregnancy	86
	8.2 When child aged 9-10 months	87
	8.3 When child aged 3	89
	8.4 Summary	91
9	CONCLUSIONS	93
	9.1 Maternity leave	93
	9.2 Paternity leave	94
	9.3 Flexible working arrangements	95
	9.4 Poverty and employment	95
	9.5 Health and well-being	96
	BIBLIOGRAPHY	97
	APPENDICES	
	A Additional tables by country	101
	B Health and development questionnaires	107

TABLES

2.1	Whether mothers worked during pregnancy, by ethnicity	10
2.2	Mothers' employment when pregnant by whether cohort baby is first or later birth, by ethnicity	11
2.3	Mothers' employment when pregnant, by occupation	12
2.4	Mothers' employment when pregnant, by education	12
2.5	Mothers' post childbirth duration of maternity leave, by family type	14
2.6	Mothers' post childbirth duration of maternity leave, by ethnicity	14
2.7	Mothers' duration of maternity leave, by mothers' occupation	15
2.8	Mothers' duration of maternity leave, by father's occupation	15
2.9	Mothers' duration of maternity leave, by education	16
2.10	Mothers' maternity pay, by occupation	17
2.11	Mothers' maternity pay, by ethnicity	17
2.12	Mothers' return to work after maternity leave (up to baby 9-10 months only)	18
2.13	Mothers' employment, by country	18
2.14	Employed mothers' access to flexible working arrangements, by ethnicity	20
2.15	Employed mothers' use of flexible working arrangements, by ethnicity	21
2.16	Employed mothers' access to flexible working arrangements, by occupation	22
2.17	Employed mothers' use of flexible working arrangements, by occupation	23
3.1	Fathers' employment status, by country	26
3.2	Fathers' employment status, by ethnicity	27
3.3	Type of leave taken by employed fathers, by ethnicity	27
3.4	Type of leave taken by employed fathers, by whether it was paid	28
3.5	Type of leave taken by employed fathers, by ethnicity	29
3.6	Type of leave taken by employed fathers, by occupation	29
3.7	Relationship between employed mothers' and fathers' leave	30
3.8	Employed fathers' access to flexible working arrangements, by ethnicity	31
3.9	Employed fathers' use of flexible working arrangements, by ethnicity	32
3.10	Employed fathers' access to flexible working arrangements, by occupation	33
3.11	Employed fathers' use of flexible working arrangements, by occupation	34
4.1	Families' employment status at pregnancy, by age of mother at birth	35
4.2	Number of other siblings in the family, by families' employment status at pregnancy	36
4.3	Couples' economic and partnership status prior to birth of cohort baby, by couples' economic and partnership status when cohort baby aged 9-10 months	37
4.4	Couples' economic and partnership status when cohort baby aged 9-10 months, by mothers' ethnicity	38
4.5	Couples' economic and partnership status when cohort baby aged 9-10 months, by fathers' ethnicity	38
4.6	Couples' economic partnership status when the cohort baby was 9-10 months old, by mother's occupation	39
4.7	Mothers' partnership and economic status, by childcare arrangements	41

4.8	Type of care while mother at work, by ethnicity	42
4.9	Use of types of care, by occupation of employed mothers	42
4.10	Mothers who use childcare and report they pay for it	43
5.1	Mothers' economic activity when cohort child aged 3, by ethnicity	45
5.2	Mothers' economic activity when cohort child aged 3, by highest educational qualification	46
5.3	Employed mothers' use of flexible working arrangements, by occupation	47
5.4	Employed mothers' use of flexible working arrangements, by ethnicity	48
5.5	Employed mothers offered family friendly provisions by their employer, by occupation	49
5.6	Employed mothers' offered family-friendly provisions by their employer, by ethnicity	50
5.7	Mothers' economic activity status when cohort baby aged 9-10 months, by mothers' economic activity status when child aged 3	51
5.8	Mothers' employment trajectories since the birth of the cohort baby, by family situation	54
5.9	Mothers' amalgamated employment trajectories to when child aged 3	55
5.10	Mothers' employment trajectory from pregnancy to when child aged 3, by mothers' education	56
5.11	Couples' partnership and economic status when child aged 3, by ethnicity	57
5.12	Total number of children in the household when child aged 3, by couples' partnership and employment status	58
5.13	Couples' partnership and employment status when child aged 9-10 months, by status when child aged 3	61
5.14	Whether fathers took leave following the birth of the cohort baby, by work status when child aged 3	62
5.15	Whether mothers took maternity leave following the birth of the cohort baby, by work status when child aged 3	62
5.16	Household income when cohort child aged 3, by mothers' ethnicity	64
5.17	Poverty status when cohort baby aged 9-10 months old, by household income when child aged 3	64
6.1	Mothers' and fathers' views of time spent with 9-10 month old baby, by employment status	66
6.2	Employed parents' reports of time spent with the baby at age 9-10 months and age 3, by ethnicity	67
6.3	Who mainly looks after 3 year old child when ill, by ethnicity, mother reports	68
6.4	Who mainly looks after 3 year old when ill, by family economic partnership, mother reports	69
6.5	Who mainly looks after 3 year old child when ill, by mother's occupation, mother reports	69
6.6	Who mainly looks after the child when ill, at different ages of the child, mother reports	70
6.7	How often fathers read to 3 year old cohort child, by their education level	71
6.8	Extent of fathers' activities with the child, by his employment status	72
6.9	Extent of fathers' activities with the child, by his ethnicity	73

6.10	Extent of fathers' reading with the child, by type of leave taken around the birth	74
6.11	In-contact absent fathers' relationships with the 9-10 month child, by ethnicity, mother reports	74
6.12	In-contact absent fathers' interests in 9-10 month child, by friendliness of his relationship with mother, mother reports	75
6.13	In-contact absent fathers' frequencies of contact with 9-10 month child, mother reports	75
6.14	In-contact absent fathers' frequencies of contact with the child between 9-10 months and age 3, mother reports	76
7.1	Baby's health aged 9-10 months, by mothers' ethnicity	80
7.2	Whether child has any longstanding illness when aged 3, by mothers' employment status	81
7.3	Whether child has any longstanding illness when aged 3, by mothers' occupation	81
8.1	Mothers' problems during pregnancy, by ethnicity	86
8.2	Mothers' depression scores when baby 9-10 months old, by ethnicity	89
A2.1	Mothers' employment when pregnant	101
A2.2	Mothers' duration of maternity leave	101
A2.3	Mothers' maternity pay	101
A2.4	Employed mothers' access to flexible working arrangements	102
A2.5	Employed mothers' use of flexible working arrangements	102
A3.1	Type of leave taken	103
A3.2	Employed fathers' access to flexible working arrangements	103
A3.3	Employed fathers' use of flexible working arrangements	104
A5.1	Employed mothers' use of flexible working arrangements	104
A5.2	Employed mothers' offered family friendly provisions	105
A5.3	Mothers' employment trajectory from pregnancy to when cohort child aged 3, by mothers' occupation	106
B1	Strengths and difficulties questionnaire (SDQ) at MCS-2	108
B2	Malaise questionnaire at MCS-1	109
B3	Kessler questionnaire at MCS-2	110

FIGURES

2.1	Mothers' employment status at MCS-1 interview, by NVQ level	19
2.2	Mothers' employment status when cohort baby aged 9-10 months, by ethnicity	20
2.3	Mother's employment trajectories from pregnancy through to when cohort child aged 9-10 months	25
4.1	Couples' economic and partnership status when cohort baby aged 9-10 months, by income	40
5.1	Mothers' employment trajectories from pregnancy to when child aged 3	53
5.2	Mothers' employment status during pregnancy, by employment status when child aged 3	59
5.3	Mothers' employment status when cohort baby aged 9-10 months, by employment status when child aged 3	60
5.4	Economic activity status of parents, by household income	63
8.1	Mother's general health when cohort baby aged 9-10 months, by ethnicity	87
8.2	Mother's health compared with a year ago when child aged 3, by occupation	90

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EXECUTIVE SUMMARY

Introduction

It has long been recognised that parents' roles in caring for their children are inextricably linked to their status in the labour market and that gender equalities and inequalities in the labour market rest on choices parents make within households. Family policy becomes relevant, therefore, to gender equality issues in employment.

The analysis contained in this report uses the newly available Millennium Cohort Study (MCS) data to contribute further understanding to mothers' and fathers' roles. The MCS is a nationally representative sample of parents of babies born from September 2000 to December 2001, across the 4 countries of the UK. However, in this analysis, we focus only on the three countries of Great Britain. The first sweep was carried out when the baby was 9-10 months old with 16,588 mothers and 11,935 fathers; the second sweep at age 3 contains information on 14,048 families (mothers) and 9,747 fathers.

These new longitudinal data offer the potential to complement the Equal Opportunities Commission's (EOC) other research on parents and, at the same time, its larger sample of fathers and over-representation of parents from ethnic minority groups offer more detail on their experiences. The focus is on childbirth and the early years up to a child's 3rd birthday.¹

These data offers us a better understanding of parents' involvement with their young child and its subsequent outcomes up to age 3. They present a picture of parents' circumstances at the point when family policy in Great Britain began to change. However, since policy has gone on to change further since these children were born, we need to see the experiences of MCS families as a baseline against which further developments may be assessed. We would expect Millennium children and parents to reflect changes that result from family policies which give parents more time to spend with their children around their birth, with possibly more behavioural changes to come as subsequent enhancements to entitlements kick in.

¹ It should be noted that at the time of the first MCS interview in 2000/01, pregnant women were entitled to 18 weeks ordinary maternity leave paid at 90 per cent of her average weekly earnings or £75, whichever was greater, for 6 weeks. After this time a standard rate of £75 was applicable. Women with at least one year's service were entitled to additional maternity leave which ended 29 weeks after childbirth. There was no statutory entitlement to paid paternity leave but parents were entitled to unpaid parental leave.

Mothers' employment around childbirth

Around 17 out of 20 (86 per cent) mothers having their first baby around the Millennium were employed when pregnant, whereas six in ten (59 per cent) having their second or subsequent child were in employment. Mothers' employment status at pregnancy largely determined their employment status when the child was aged 9-10 months. Four out of five mothers who were in a job when pregnant reported taking maternity leave and the majority of these returned to work within 9-10 months of the child's birth. There were few differences by country, ethnicity or qualification showing that taking maternity leave had become standard by 2001 for female employees across Britain. Most mothers (91 per cent) who were not employed during pregnancy were not employed when the baby was 9-10 months old.

Length of maternity leave was related to educational qualifications, occupation and partner's occupation. Women with lower qualifications in skilled manual, personal and sales occupations and semi or unskilled jobs with a partner also in one of these occupations were more likely than other mothers to return to work within 3 months of the child's birth: 49 per cent of mothers in semi and unskilled jobs compared with 28 per cent of mothers in professional and managerial jobs. However, mothers with no qualifications or overseas qualifications were the groups most likely to say they were still on leave 9-10 months after the baby was born.

Mothers' access to and use of flexible working arrangements varied by the type of arrangement, mothers' socio-economic group and ethnicity. Part-time work was the most widely available and used flexible working arrangement and, with the exception of this and special shifts, arrangements were substantially less likely to be available to mothers in manual, personal or sales occupations. But in most cases, these mothers who had access to flexible working were more likely, or at least equally likely, to use them as mothers in higher occupations.

Fathers' employment around the birth of their child

Most fathers (80 per cent) took some kind of leave around the birth of their child; paternity leave and annual leave were the most common types taken. Fathers employed in manual occupations were less likely to take leave than those from managerial jobs, while Bangladeshi and Pakistani fathers were the least likely to take any form of leave.

Fathers' access to and use of flexible working arrangements varied substantially by type of arrangement, socio-economic status and ethnicity. Fathers in non-manual occupations tended to have far higher access to all types of arrangements than those in lower socio-economic groups but fathers in lower paid, manual occupations tended to use certain arrangements such as part-time working, job-sharing, special shifts

and 9-day fortnights to a greater degree than those in higher level occupations. This suggests that extending access to flexible working arrangements may help lower skilled employees most who, although they currently have less access to these arrangements, are more likely to use them.

Overall, fathers had less access than mothers to each type of flexible working arrangement and their use of arrangements, when they were available, was often far lower than mothers' use.

Couples' employment in early childhood

The number of earners in the family was strongly related to the age of the mother when she gave birth. The majority (77 per cent) of mothers in two earner couples were aged 27 or older and half gave birth to their first child. In contrast, 33 per cent of lone parents were aged 20 and under and around 30 per cent aged 21 to 26. Of those lone mothers who were employed during pregnancy, the majority (70 per cent) gave birth to their first child.

Father only earner families were the predominant pattern among Bangladeshi and Pakistani families (67 per cent) and to a lesser extent Indian families (47 per cent), as judged by the mother's ethnicity, when the child was 9-10 months old. These father only earner families accounted for 33 per cent of White families, who were equally likely to have 1.5 earners where the father worked full-time.

Black Caribbean (50 per cent) and Black African (43 per cent) mothers were the most likely to be lone parents, compared with 5 per cent of Indian and Bangladeshi mothers.

Over childbirth, 26 per cent of two earner couple families moved to the father only earner model. There were also other shifts to more traditional families where the father became the main or sole wage earner, from less traditional patterns where the mother fulfilled this role (only 37 per cent of couple families where only the mother was working during pregnancy still had this employment status when the child was aged 9-10 months). A majority of employed lone parents (52 per cent) moved to no employment during the same period.

Use of formal childcare while mothers worked was most infrequent among mothers in semi-skilled and unskilled jobs (7 per cent) and greatest among higher socio-economic groups (65 per cent of managerial and professional mothers) and two full-time earner couples. Families relied heavily on grandparent care, ranging from between one third to over one half of mothers, depending on her occupation. Fathers were most likely to be used for childcare in couples where the mother was the main

earner (over 70 per cent) whereas grandparents were used to a lesser extent in these than in other families.

Over one third of employed Black Caribbean, White and Black African mothers used formal childcare providers, the most likely to do so. A higher proportion of these groups also paid for childcare, 55 per cent of Black Caribbean mothers. In contrast, Pakistani and Bangladeshi mothers were the least likely to use formal providers or pay for childcare, whilst over one half of employed South Asian mothers used grandparents for childcare.

Parents employment up to age 3

A third of mothers were continuously employed: worked in pregnancy, took maternity leave, returned within 9-10 months of childbirth and continued working without interruptions. This was the single most common pattern. Over 70 per cent of these mothers were in the three highest occupational groups and over half had a degree. They tended to have fewer children than women who were not working. Fewer than one in ten Pakistani and Bangladeshi mothers had worked continuously whereas nearly two in five White, Indian and Black Caribbean mothers had done so.

Employment rates were higher for more highly qualified women while rates of looking after the family increased progressively as the level of educational qualifications fell. Seven out of ten mothers with a degree were in employment when their child was 3 compared with just under a quarter of mothers with no qualifications.

A substantial proportion of mothers had moved into and/or out of work by the time their child was 3. The majority of women who had stopped work before childbirth or who were not employed in pregnancy were not employed when their child was 3, although many had been in employment at some stage during the 3 year period. This shows the intermittent nature of many mothers' employment. Overall, 29 per cent of mothers were employed intermittently between their child being aged 9-10 months and 3 years, whereas 35 per cent had not worked either since pregnancy or before.

The group of mothers who had never been employed when their child was 9-10 months old were the least likely to have changed their employment status by the time the child was 3. Nearly three in five of these mothers had no qualifications and 60 per cent of those who had never worked by the time their child was 3 were in a low income household.

The 1.5 earner partnership where the father worked full-time and the mother part-time, was the most common family type for White (37 per cent) and Indian (33 per cent) mothers when their child was 3. In contrast, the majority of Pakistani (60 per

cent) and Bangladeshi (51 per cent) mothers were in two-parent households where only the father worked. The most common family type for Black Caribbean (27 per cent) and Black African (30 per cent) mothers was lone mothers who were not in employment. Neither parent working was most frequent in Bangladeshi and Pakistani families (17 and 13 per cent respectively), whereas both parents working full time was most frequently seen in Indian (25 per cent) and Black Caribbean (20 per cent) families.

Sizeable groups of lone parents had moved to couple partnership status by the time their child was 3, almost one quarter were in couples by this time. Partnership breakdowns were evident but generally few in number, except among no earner couples with a 9-10 month old child; 22 per cent of these mothers had moved to lone parenthood by the time their child was 3.

Low family income at age 3 was firmly linked to a lack of employment, being in a lone parent household, one or more parents being out of work and ethnicity. On this latter point, the highest frequency of low income households was amongst Bangladeshi (47 per cent), Pakistani and Black Caribbean families (both 40 per cent), in contrast to White and Indian families (17 and 19 per cent).

There was substantial mobility both into and out of low income between the child being 9-10 months and 3 years old. Nearly half of families in poverty when the child was 9-10 months had moved out of low income by the time their child was 3, whereas nearly 10 per cent of those who had been above the poverty line moved into low income during the same period.²

Parents' involvement with their child

Overall, 16 per cent of mothers and 57 per cent of fathers did not feel that they spent enough time with their 9-10 month old child. This was highly correlated to employment status: 59 per cent of mothers employed full-time felt this way compared with 4 per cent who were not employed while for fathers, the proportions were similar at 63 and 8 per cent respectively.

It was mainly the mother who looked after an ill child but the extent to which this task was shared was related to the parents' economic partnership. Sharing was highest in families where the mother was the main breadwinner (49 per cent) or only she was employed (47 per cent), followed by where both parents were employed full-time (43 per cent) or neither parent was employed (42 per cent). There was a greater movement from less traditional to more traditional patterns of care i.e. the mother

² The most common definition of poverty is an income below 60 per cent of median income.

doing most of the care, between the ages of 9-10 months and 3 years, than vice versa.

The vast majority of parents felt that they had a warm relationship with their child. Mothers were slightly more likely than resident fathers to feel this (95 per cent compared with 91 per cent) as were mothers who had been continuously employed compared with those who had never worked (3 per cent of the former and 15 per cent of the latter felt they did not have a warm relationship with their child).

Fathers appeared to be heavily involved with their 3 year old children - half read to them daily and over three-quarters played with them daily - although less so in putting them to bed; around one quarter were involved in this activity on a daily basis, two-thirds weekly. The extent to which fathers read to their child was strongly correlated with his educational qualifications (more frequent the more highly educated) and was most frequent amongst those working full-time. In contrast, playing with children and putting them to bed tended to be done on a daily basis by fathers who were not employed.

Bangladeshi and Pakistani fathers were generally less likely than fathers from other ethnic groups to be involved in these activities with their young children. In the case of reading, this may be due to having lower qualifications and less confident language ability. But the findings also suggest that cultural differences may be playing a part in fathers' involvement.

Sixty-four per cent of absent fathers were still in contact and involved with their 9-10 month old child even though they were not living with the mother and child. The extent of their interest in and contact with their child varied, and was related to how friendly the absent father was with the mother. Where the father had more interest and more contact, he was also far more likely to pay maintenance for the child. By age 3, just under one third of absent but involved fathers had drifted away from their earlier involvement, but just over one third of the less involved at 9-10 months had greater involvement at age 3.

Child health and development

Overall, one in five 9-10 month old children had at least one health problem.³ The extent of these problems varied by the mother's ethnicity; children of Pakistani, White and Indian mothers had the highest rates of health-related problems and children

³ The measure of a baby's health problem is based on having at least one of the following: a problem with hearing; more than 3 recorded minor health problems; two or more accidents; or two or more visits to hospital by the time the baby is 9-10 months old.

with Bangladeshi mothers the lowest. Around 16 per cent of children aged 3 had a long standing illness and this was highly correlated with ill health at age 9-10 months.

Mothers who were employed full-time or in education were slightly less likely to have a child aged 3 with a longstanding illness (13 per cent) than mothers employed part-time or not at all (between 16 and 18 per cent).

Developmental problems⁴ in 3 year old children were associated with not working, especially never working. However, it should be noted from other studies of the same data (Dex and Joshi, 2005) that never working was connected with a range of other characteristics, namely: being a teenage mother; having few or no educational qualifications; and living in a low income family. These factors were significantly associated on their own with worse child outcomes.

The analysis also found a lower likelihood of developmental problems among children who attended formal childcare at age 9-10 months when their mother was at work.

In terms of ethnicity, children with Pakistani or Bangladeshi mothers were the most likely to have some developmental problems at the age of 3, but children in these groups were also subject to growing up in low income families and more disadvantaged circumstances. However, the analysis cannot rule out that some of these mothers may have answered the survey questions in a different way to White mothers and those from other ethnic minority groups, particularly as some may be less fluent in the English language. This suggests the results on ethnic origin should be treated with some caution.

The probability of a child aged 3 having developmental problems was associated with both the mothers' **and** fathers' characteristics. It was significantly increased: the lower the mother's or father's highest educational qualification; the lower their age at the birth of the child; by either parent having a higher depression score when the child was 9-10 months old; and by either parent having had very little employment.

In the case of fathers, children were more likely to have developmental problems if their father had: not used their employer's flexible working options compared with using them; allowed the mother to do all the home based childcare instead of

⁴ The definition of developmental problems comes from the Strengths and Difficulties scale (Goodman, 1997) which is based on mothers' perceptions of their child's development in five areas: emotional symptoms; conduct problems; hyperactivity; peer problems; and the helpfulness, kindness and consideration of the child towards others.

sharing; taken only annual or sick leave around the time of the birth compared with a mixture of paternity and annual leave; or taken no leave around the time of the birth.

Earlier studies of child outcomes have tended to focus on mothers' behaviour. These results suggest it is important to give greater consideration and to examine further, than has previously been the case, fathers' roles in bringing up children.

Mother's health and well-being

Around 14 per cent of mothers reported health problems during pregnancy. These were more prevalent among women who were employed in pregnancy than those who were not, in all ethnic groups. Those most likely to experience difficulties were Black Caribbean mothers who worked, of whom over one in five reported problems.

Mothers' self-reported excellent health and their occupational group were directly linked when the child was 9-10 months old. The rate was highest for managers and professionals (42 per cent) and declined for lower level occupations to 23 per cent for both semi-skilled and unskilled mothers.

Just over one in eight mothers were depressed when their baby was 9-10 months old. This proportion varied according to a number of different factors. A greater proportion, around one in five Indian and Pakistani mothers were depressed, as were a similar proportion of lone mothers, and around one in seven mothers who were not working. In contrast, a lower proportion of married women or mothers working part-time were depressed, slightly over one in ten.

When their child was 3 years old, teenage mothers were more likely to be depressed than older mothers, with the lowest depression scores recorded for mothers aged between 27 and 32 at childbirth. Mothers who were depressed or who had a long-term limiting illness when their child was younger also had higher depression scores when they were 3.

Mothers with a 3 year old in high income households had significantly lower rates of depression than those in low income families. Conversely, a higher depression score was associated with never having been employed.

Conclusions

This analysis has shown that when the Millennium cohort children were born, maternity leave and pay had become standard across Britain and although paternity leave was not yet enshrined as a statutory entitlement, the vast majority of fathers were taking some leave at the time of their baby's birth. It has also shown how certain factors impact crucially upon family life and outcomes for children, such as

parental employment status and, linked to this, parental qualifications and family income. Ethnicity and parental health and well-being also have a significant impact.

Family policy needs to take note of these findings and consider the implications for policy development, but drawing out those implications is a complex process. Certain things are fairly clear however. First, increasing the flexibility available in workplaces, especially for fathers could have a positive impact. Second, where mothers have never worked this is associated with a series of poor outcomes for them and their children. This needs to be tackled, and tackled sooner rather than later. Third, dealing with mothers' and fathers' depression as soon as possible would help to improve child outcomes. The medical world has been aware for some time about the bad effects on children of mothers' depression. These results point to the need to take fathers' depression more seriously also.

.

1 INTRODUCTION

It has long been recognised that parents' roles in caring for their children are inextricably linked to their status in the labour market and that gender equalities and inequalities in the labour market rest on choices parents make within households. Family policy becomes relevant, therefore, to gender equality issues in employment.

Family policy has taken a step change in Great Britain since the 1990s. As well as many legislative changes offering improved entitlements to mothers and fathers to combine care responsibilities with employment, there have been large research efforts put into gaining a better understanding of families and their decision-making. Research on parents has been increasing (Dex, 2003) not least from funders targeting this area of research. The Equal Opportunities Commission (EOC) has carried out a number of projects on mothers and fathers examining these issues. The study of fathers has been particularly interesting since they were relatively neglected in family research before the 1990s, with the consequence that views about fathers tended to rest on stereotypes rather than being grounded in empirical observation. Not surprisingly therefore, serious empirical research has uncovered these stereotypes and revealed considerable variation between fathers as well as some surprising similarities with mothers. However, this area is one of fast-moving change, not least because policy-interventions and entitlements are changing the landscape even while it is being studied.

Although we are much wiser now about mothers' and fathers' respective roles in employment and caring, there are many areas where further understanding is needed. The study of child outcomes depending on their mothers' and fathers' respective caring roles is only beginning to be studied. Examination of the differences between parents according to their ethnicity is also in its infancy. Some issues require longitudinal data for their analysis and this is not always available.

The analysis contained in this report uses the newly available Millennium Cohort Study (MCS) data to contribute further understanding to mothers' and fathers' roles. These new longitudinal data offer the potential to complement the EOC's other research and at the same time offer more detail from its larger sample of fathers and its over-representation of parents' of minority ethnic origin in comparison with white parents. The focus is on childbirth and the early years up to a child's 3rd birthday.

Aims of this research

The aims of the study are to conduct a secondary analysis of the Millennium Cohort Study (MCS) from both a gendered and ethnicity perspective. In particular, analyses aim to explore, for families in Great Britain:

- Life and employment history data of parents.
- The relationship between leave arrangements around the cohort child's birth, subsequent employment and caring arrangements for different types of households.
- Child development and health data in relation to parental characteristics, employment and leave/caring arrangements.
- Available data relating to absent parents.

In all cases above, an ethnicity perspective is offered, focussing in particular on parents of Indian, Pakistani, Bangladeshi, Black Caribbean and Black African identity.

The Millennium Cohort Study data offers a comprehensive understanding of parents' involvement with their young child and subsequent outcomes when the child is aged 3. The experiences of these parents and children provide a window on circumstances at the point when family policy in Great Britain had begun to change. Since policy has gone on to change further since these children were born, we need to see the experiences of MCS families as more of a baseline against which further developments may be taking place. However, we would expect Millennium children and parents to reflect the direction of change resulting from family policies that give parents more time to spend with their children around their birth, with possibly more behaviour change to come as subsequent enhancement to the policy entitlements became embedded.

Legislative and policy changes

Since the Labour Government came to power in 1997, a range of measures have been introduced to help families. These have included enhanced maternity leave rights, parental leave, rights to paternity leave and pay for employees whose children were born on or after 6 April 2003; and leave for family reasons and emergencies. In addition, there have been increases in child benefit and allowances for children given to families, and other changes to welfare benefits through the Working Families Tax Credit system and its successor, the Working Tax Credit scheme. The government introduced a National Childcare Strategy from 1998 and, from 2000, encouraged employers to offer more flexibility to parents at work. It has also given employers a duty to consider employee parents' requests for flexible working arrangements. The details of some of these changes are displayed in Box 1.

Box 1 Details of selected family policy changes

Maternity Leave and pay conditions: Entitlement for mothers to return to their employer after childbirth was introduced in 1973 and also has been subject to regular update and extension in duration, period of paid leave, and the range of mothers covered and eligible for benefit. In 2001, pregnant women were entitled to 18 weeks ordinary maternity leave; regardless of the length of their service to employers (this has since been increased to 26 weeks in 2003). Statutory Maternity Pay was paid at a rate of 90 per cent of a woman's average weekly earnings or £75, whichever was the greater, for the first 6 weeks. After this time a standard rate was applicable of £75. Women who had completed at least one year of service with their employer were also entitled to additional maternity leave, which started at the end of their ordinary maternity leave and ended 29 weeks after the birth of their child. This right to return to the same job up to 29 weeks after childbirth, was part of the earlier provisions. During pregnancy, women were entitled to time off for antenatal care and also had a 2 week compulsory maternity leave period (4 weeks for women who worked in factories). In 2006, the flat rate maternity pay was extended to £108.85 per week for 6 months.

Women who were not entitled to Statutory Maternity Leave may be entitled to Maternity Allowance. This entitled the woman to a maximum of £75 per week in 2001 (£108.85 in 2006), or if her earnings were at least £30 per week, 90 per cent of her earnings but no more than £75. This was payable for 18 weeks. (This provision changed again in 2003.)

Parental leave: The Employment Relations Act 1999 gave working parents the right to take unpaid leave for each child born after December 15th 1999, up to the child's 5th birthday. An extension to these arrangements was announced in 25th April 2001 extending the time off from 13 to 18 weeks for parents of disabled children, and extending the basic arrangements to all children who were under five at 15th December 1999.

Paid paternity leave: Fathers (the law states that this leave is offered to all biological and non biological fathers or partners of mothers, where a declaration is given that they are either the parent of the child or the partner of the mother, and live with the mother in an enduring family relationship) were given the right to 2 weeks consecutive leave from April 2003. During this paternity leave, fathers may also qualify for Statutory Paternity Pay (SPP). Eligible fathers must have worked continuously for their employer for 26 weeks, by the 15th week before the baby is due, and depending on their earnings, fathers were entitled to £100 per week or 90 per cent of their average weekly earnings (from April 2003), whichever was less (this

had risen to £108.85 per week from April 2006). Any fathers who earned below £75 per week were not entitled to any SPP as they may qualify for Income Support, Housing Benefits and other state regulated support.

Working Families Tax Credit (1999-2003): Replacing Family Credit in 1999, this credit was available to working families who were responsible for at least one dependant child under 16 (or under 19 if still in full-time education). This was payable to one and two-parent families. Eligibility rested on the applicant or their partner being over the age of 16, working at least 16 hours per week, regardless of whether they were employed or self-employed and providing they had no more than £8,000 in savings. A childcare tax credit element was calculated under this benefit. A maximum amount of £100 per week was paid for one child and a maximum of £150 per week for two or more children. The benefit was usually paid directly to the person mainly responsible for caring for the child (www.taxcredits.inlandrevenue.gov.uk). This system changed in 2003 to become **Working Tax Credit, Child Tax Credit** and **Childcare Tax Credits** for eligible families.

National Childcare Strategy: Launched in 1998 the National Childcare Strategy proposed to provide accessible, affordable and quality childcare for all children aged up to 14 years old. This strategy included aims that will integrate children's early education and childcare through better support for parents and informal childcarers and new training programmes for formal childcarers. This strategy also introduced a new childcare tax credit for working families (outlined above). It aimed to increase the number of formal childcare places available and in particular in 2001, offered every four year old a free nursery education.

Work-life balance: The Department for Education and Employment launched an initiative in 2000 to widen the extent of flexible working arrangements in Britain's workplaces. This included the Work-Life Balance Challenge fund, offering employers paid help to introduce flexible working arrangements.

The right to request flexible working arrangements: From April 2003, parents of a child under 6 were given a right to request, from their employer, flexible working arrangements of their choice. Their employer was charged with a duty to give their request serious consideration.

Earlier studies

Much of the recent interest in families and parenting is against the background of quite dramatic changes in the demography of the family that have taken place over the past 30 years (Dex, 1999; Utting, 1995). The changing nature of relationships and diversity of family types, the increase in family break-up and solo living, with or

without children, as well as the relative importance of friends and families are often seen as indicators of family instability.

The demographic changes which underlie these family unit changes are well known. They apply to most industrialised countries, and are referred to as 'the second demographic transition' (Van der Kaa, 1987). They include the postponement of marriage and childbearing; the increase in cohabiting unions; the rise in divorce rates and family breakdown; increasing proportions of lone parents; increasing childlessness; and changes in marital and parental roles. In comparison with White households with dependent children, Black ethnic minority groups are far less likely, and Asian and Chinese minority groups far more likely, to live in married couple households. The converse of this is that Black ethnic minority households are far more likely and Asian and Chinese less likely than White households to be lone mother households.

Research has charted family change and new family relationships. Women and mothers have received the most research attention along with families' relationships to the labour market often, in the past, from a mother's perspective (Dex, 1999; 2003). Some elements of the impact of family change on intergenerational relationships have also been investigated (Dex, 1999; 2003). The effects on children of marital dissolution have been reviewed and found generally to be bad for children's outcome, with a tendency to reproduce the same relationship breakdown across generations (Utting, 1995; Kiernan, 1996), although it is not known if outcomes would have been better or worse in a failing relationship kept together just for the children.

Over the period of childbirth there have been a number of larger scale studies focussing on mothers' employment transitions at this juncture. McRae (1991, 1996) reported on postal surveys of women 8-9 months after they had given birth. It was noted in the second survey that there had been a large rise in the speed at which mothers returned to work; 24 per cent of mothers had returned to work by 9 months in the first survey and 45 per cent in the second. Those who had returned to work by this time were more likely to have taken maternity leave, received maternity pay, work in the public sector, to be in partnerships, have higher educational qualifications, and have more children. The Maternity Surveys conducted by the Policy Studies Institute (PSI) in 1979, 1988, 1996 and 2002 also offer detailed examination of mothers' employment over child birth (McRae, 1991, 1996; Callendar et al., 1997; Hudson et al., 2004). However, these studies were not about the whole population of mothers, only employed mothers qualifying for maternity leave at the time in question. None the less, successive generations of mothers taking maternity leave had successively higher rates of return to employment after the maternity

leave, and returned over shorter periods of time. These studies suggested that extensions of unpaid leave for mothers was unlikely to have any impact on their behaviour.

Fathers are central to much of the family change that has occurred and yet this group are much less researched and often caricatured in stereotypes. Their absence is an essential feature of the rise of lone parent mothers; they are centrally involved in marital breakdown; their role or absence, is central to the problem of child poverty which has become the subject of government targets. Their place in the labour market has also changed from one of major breadwinner to one of sharing this role with female partners. We do know that men, on average, do better when married than remaining single (measured across a wide range of indicators) and when they have children compared with remaining childless (Akerlof, 1999). But the reasons for this are not all entirely clear.

Recent research has started to uncover new information about fathers largely from small-scale qualitative sociological studies. Stereotypes have tended to de-value or discount fathers' contributions to the family's domestic division of labour in comparison with those of mothers. In part this has been due to excluding fathers' time inputs to jobs like gardening, DIY, or car maintenance and in part from information about fathers emerging from interviews with mothers. It also seems to be related to the fact that, as managers of home life, mothers can feel they have the greater responsibility. Fathers in lower socio-economic groups have been found to be more likely than fathers in high socio-economic groups to spend time caring for their children, in some cases, while the mother is at work (La Valle et al., 2002, Ferri and Smith, 2003). This is especially the case when mothers work at atypical times of day, although not where mothers are self employed (Bell and LaValle, 2003; Baines et al., 2003). The long hours of work that fathers in higher socio-economic groups undertake, was clearly a factor that limited their involvement and time commitment in family life.

Studies have described in fathers' own words what it is like to be a good father. The breadwinner role has been recognised longest (Burghes et al., 1997; Warin et al., 1999; Hatter et al., 2002). Other roles, namely - helping with the emotional needs of children and their wives; and 'being there' or spending time with the family, are relatively newly documented (Hatter et al., 2002; O'Brien and Shemilt, 2003; Dex, 2003). Some fathers, faced with the conflict between the breadwinner role and the time with the family role, had chosen the breadwinner, although not necessarily without feelings of regret, guilt or sacrifice at neglecting time with the child (Reynolds et al., 2003). In some cases, spending time with children was seen as the mother's role and less of a problem if the father was not present. However, some fathers

thought they had made sacrifices in their own careers in order to spend more time with their children at a certain point in their lives (Reynolds et al., 2003; Maunther et al., 2001; Hatter et al., 2002; O'Brien and Shemilt, 2003). Fathers felt constrained by their workplace's norms and culture (LaValle et al., 2002; Reynolds et al., 2003; O'Brien and Shemilt, 2003). Some jealousy was expressed that women got a better deal in the workplace because it was expected that they could arrange work to suit family life and it was accepted that mothers could do this but not fathers.

Fundamental to fathers' views about their own roles was the claim that having a family and children had changed them. The impression given is that they changed from the laddish culture of being single to being a responsible adult and that this changes their attitude towards work and a career, as noted in Hatter et al. (2002), O'Brien and Shemilt (2003) and Reynolds et al. (2003). This fits with other earlier arguments from sociologists (e.g. Furedi, 2001; Dench, 1996) and criminologists (Farrington et al., 2000) about the socialising and civilising effects of women and families on men.

In the 1980s and 1990s, maternity rights research examined how mothers were responding to their new entitlements to maternity leave. Studies documented new behaviour patterns with mothers returning to their pre-birth jobs in increasing proportions and after shorter and shorter durations out of paid work (Martin and Roberts, 1984; McRae, 1991, 1996). Combined with delaying the start of childbearing, these quick returns have been found to enhance women's labour market status and earning power (Dex et al., 1998; Joshi and Paci, 1997).

The Equal Opportunities Commission has led the way in examining men's behaviour over childbirth and the early years by commissioning representative surveys of both parents around the time of childbirth (Thompson et al., 2005) along side a recent update on mother's behaviour and attitudes (Yaxley et al., 2005). These projects have, amongst other things, focused on parents' use of, and attitudes towards, leave arrangements when they have young children, and the role of fathers. A secondary analysis of two linked datasets of mothers and fathers was analysed to determine if there are distinct household types in terms of their demography and attitudes that behave differently in relation to maternity and paternity leave (Smeaton, 2006). Fathers were found to want to take part, along side mothers, and be involved in fathering their children, with more than half describing their role as 'hands-on' rather than 'supportive'. As many as 94 per cent of fathers took some leave from work following the birth of a child, and for the majority they took more than the statutory entitlement period for paternity leave. Despite this, 70 per cent of mothers said they would have preferred their partner to take more leave. The study found evidence of

employment and income barriers to fathers becoming more involved with their new children at this point in their lives.

The Millennium Cohort Study data (MCS)

The first two Sweeps of the Millennium Cohort Study (MCS-1, MCS-2) were available for analysis. MCS is a nationally representative sample of babies born from September 2000 to December 2001, across the 4 countries of the UK. Sample sizes are sufficient to allow comparisons between the countries of the UK. However, in this analysis, we focus only on the three countries of Great Britain. MCS also over-represented families living in areas of high ethnic minority populations and other disadvantaged areas. These communities are predominantly located in England and the wards selected to be included in MCS were wards in England. The first Sweep was carried out when the baby was 9-10 months old and the second sweep at age 3.

Sweep one contains details about both parents' employment around the time of the cohort baby's birth – including whether they took leave and whether this was paid. More detail and precise timing is available about the mother than about the father.

Where fathers were not living in the same household as the baby, details were collected from the mother at both MCS-1 and MCS-2 about his contact and relationship with the child, whether he was named on the birth certificate, present at the birth and whether maintenance was being paid.

Data for GB are available in MCS-1 for 16,588 mothers and 11,935 fathers. This includes 189 mixed origin mothers; 479 Indian mothers; 892 Pakistani mothers; 371 Bangladeshi mothers; 264 Black Caribbean mothers; and 379 Black African mothers. Numbers of ethnic minority fathers in MCS-1 are as follows: 95 mixed origin fathers; 368 Indian fathers; 621 Pakistani fathers; 265 Bangladeshi fathers; 130 Black Caribbean fathers; and 192 Black African fathers. The data need to be weighted by a special GB weight to represent the national profile of families across GB and this has been done throughout this Report.

MCS-2 data for Great Britain contains information on 14,048 families (mothers) and 9,747 fathers. It provides more details about the cohort child's development and health. It also contains an employment history for the mother but not for the father. The mother's employment history allows us to identify whether mothers who return after maternity leave subsequently gave up work again. This can be linked to whether or not they had another child, or stopped paid work for some other reason. Sweep 2 also contains information about the mothers' and fathers' relationships with the child from a Self Completion CAPI questionnaire they both filled in (separately).

More details about the Millennium Cohort Study can be found for Sweep 1 in Shepherd et al. (2003); Dex and Joshi (2004); Dex and Joshi (2005); and for Sweep 2 in Hansen (2006), and Plewis and Ketende (2006).

Plan of this report

Chapter 2 examines mothers' employment and leave taking around the time of the cohort child's birth. Chapter 3 examines the father's behaviour around the time of birth and whether it is linked to mothers' behaviour while Chapter 4 examines families with two resident parents, their employment status and household income levels. Chapter 5 looks in more detail at parents' employment up to the child being 3, including the longitudinal employment record of the mother. Measures are devised to examine the extent to which parents are involved with their children in Chapter 6 while in Chapter 7, ways in which a child outcome at age 3 is correlated with their earlier experiences and their parents' behaviour are explored. Chapter 8 addresses parental health and well-being. Overall conclusions and policy implications arising from the study are brought together in Chapter 9.

Throughout this report, tables and figures refer to MCS-1 and/or MCS-2 data. MCS-1 data were collected by interview when the cohort child was between 9 and 10 months of age, MCS-2 data were collected by interview when the child was 3. Due to rounding, percentages in the text may total over 100 per cent.

2 MOTHERS' EMPLOYMENT AROUND CHILDBIRTH

2.1 When pregnant

Around 68 per cent of mothers worked during their pregnancy with the cohort child; approximately 70 per cent of White and Black Caribbean mothers compared with 13 per cent of Bangladeshi mothers. Of those who did not work during pregnancy, 23 per cent reported that they had never had a paid job, ranging from 68 per cent of Bangladeshi mothers to 15 per cent of White mothers (Table 2.1).

Table 2.1 Whether mothers worked during pregnancy, by ethnicity

Worked during pregnancy	Mother's ethnicity							Per cent
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	All GB total %
Yes, worked during pregnancy	70.8	60.2	20.8	13.0	69.2	57.0	48.8	67.7
No, did not work during pregnancy	29.2	39.8	79.2	87.0	30.8	43.0	51.3	32.3
Unweighted sample size	13591	475	890	370	263	377	563	16529
Of those who did not work during pregnancy*								
Mother has worked at some point in the past	85.3	56.4	41.6	32.0	75.7	39.1	50.6	77.1
Mother has never had a paid job	14.8	43.6	58.4	68.0	24.3	60.9	49.4	22.9
Unweighted Sample size	4091	195	713	317	92	204	315	5927

Sample: All MCS-1 mothers. * All MCS mothers who did not work during pregnancy and were not working at the time of interview. Weighted by GB weight.

Mothers were far more likely to work during pregnancy if the cohort baby was their first born than if they already had children; 16 per cent and 44 per cent respectively reported not working during pregnancy. This general finding was true across all ethnic groups even though, as Table 2.2 illustrates, there were large differences in employment rates, with Bangladeshi and Pakistani mothers the least likely to be in work and White and Black Caribbean mothers the most likely to be so.

Table 2.2 Mothers' employment when pregnant by whether cohort baby is first or later birth, by ethnicity

Worked during pregnancy	Mother's ethnicity							Per cent
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	All GB total %
Cohort baby was first born								
Yes, worked during pregnancy	86.4	69.9	41.7	34.4	78.0	67.8	60.4	83.9
No, did not work during pregnancy	13.6	30.2	58.3	65.6	22.0	32.2	39.6	16.1
Unweighted Sample size	5874	183	250	81	94	103	232	6817
Cohort baby <u>not</u> first born								
Yes, worked during pregnancy	58.8	55.5	12.2	6.9	65.7	52.9	41.8	56.0
No, did not work during pregnancy	41.2	44.5	87.8	93.1	34.3	47.1	58.2	44.1
Unweighted Sample size	7634	271	596	270	162	266	298	9497

Sample: All MCS-1 mothers. Weighted by GB weight.

Overall, employed mothers in managerial/professional and associate professional jobs, were the most likely to work during their pregnancy, compared to mothers employed in semi-skilled, unskilled and skilled manual occupations (Table 2.3). Similarly, being in paid work while pregnant was highly correlated with mothers' educational qualifications (Table 2.4); 83 per cent of mothers with NVQ levels 4 or 5 were employed while pregnant compared with 76 per cent of those with NVQ 3 and 28 per cent who did not have any NVQ level qualifications. Little variation was found by country, although mothers in Scotland reported slightly higher rates of working during their pregnancy (71 per cent) than mothers in Wales and England (both 67 per cent).

Table 2.3 Mothers' employment when pregnant, by occupation

Worked during pregnancy	Mother's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	All GB total %
Yes, worked during pregnancy	84.9	86.6	76.9	60.1	68.3	53.0	72.7
No, did not work during pregnancy	15.1	13.4	23.1	39.9	31.7	47.0	27.3
Unweighted Sample size	2280	1855	2849	309	4244	3131	14668

Sample: All MCS-1 mothers (excludes approximately 1800 cases of mothers who had never worked). Weighted by GB weight.

Table 2.4 Mothers' employment when pregnant, by education

Worked during pregnancy	Mother's education					Per cent
	NVQ 4 & 5	NVQ 3	NVQ 1 & 2	Overseas qualification	None of these	All GB total %
Yes, worked during pregnancy	83.4	75.8	65.2	39.7	27.8	67.7
No, did not work during pregnancy	16.6	24.2	34.8	60.3	72.2	32.3
Unweighted Sample size	4790	2336	6171	523	2726	16546

Sample: All MCS-1 mothers. Weighted by GB weight.

2.2 Maternity leave

Overall, 54 per cent of all MCS mothers experienced maternity leave, with a slightly higher than average percentage in Scotland (60 per cent). As seen above, the higher a woman's qualifications, the more likely she was to be employed during pregnancy, thus whether or not a woman benefited from maternity leave was highly correlated with her educational qualifications. Taking maternity leave ranged from 16 per cent of mothers without any NVQ level qualifications to 72 per cent with an NVQ level 4 or 5. Since employment rates for different ethnic groups also vary there was a considerable difference between the proportion of White mothers who took maternity leave at one extreme (57 per cent) and Bangladeshi (9 per cent) and Pakistani (15 per cent) mothers at the other.

Four out of five mothers (81 per cent) who were in a job when they became pregnant reported taking maternity leave and the vast majority had returned to work by nine to ten months after the birth of the cohort baby. (Only 17 per cent of these mothers had not returned to work by this time). Of the 19 per cent who stated that their job finished before the birth of their baby, 23 per cent of these reported that they returned to work by the time the child was 9-10 months old. Employed Pakistani and Bangladeshi mothers were the most likely to report their job finished prior to the birth (27 per cent), whilst Indian mothers were the least likely to report this (16 per cent).

Looking just at employees, a slightly higher percentage of mothers in Scotland took maternity leave (95 per cent), than mothers in the other two countries (93 per cent in England and Wales). There were no significant differences by ethnicity, ranging from 93 per cent of Black African mothers to 96 per cent of Indian mothers. There was also surprisingly little difference by qualification: 95 per cent of employee mothers with NVQ levels 4 or 5 (degree or higher) took maternity leave compared with 88 per cent of those with no NVQ level qualification. These relatively narrow ranges of percentages across country, ethnicity and qualification show that taking maternity leave had become fairly standard by 2001 for women employees across Great Britain.⁵

Of mothers who took maternity leave, 42 per cent took between 4 and 6 months, whilst 10 per cent were still on leave 9-10 months after childbirth (Table 2.5). Lone parents who took leave, were far more likely to return to work earlier (48 per cent returned within 3 months) than married mothers (31 per cent) but were also more likely to still be on leave when their child was aged 9-10 months. In terms of ethnicity, Black African mothers were most likely to report still being on leave 9-10 months after the birth, whereas Pakistani/Bangladeshi mothers and mothers of other ethnicity were most likely to return to work within 3 months of the birth (Table 2.6).

Of those mothers who did not go on leave but finished their jobs at pregnancy, 10 per cent of them were back at work by 3 months after the birth and a further 11 per cent had returned between 3 and 6 months.

⁵ See Box 1 p.3 for details of maternity leave and pay entitlement in 2000/01.

Table 2.5 Mothers' post childbirth duration of maternity leave, by family type Per cent

Duration of mother's maternity leave	Mother's family type			All GB total %
	Cohabiting natural parents	Married natural parents	Lone parent	
Up to 3 months	41.5	30.9	48.0	34.5
4 to 6 months	38.8	44.3	26.8	41.9
7-10 months	11.7	14.3	8.7	13.3
Still on leave	8.1	10.5	16.5	10.3
Unweighted Sample size	1750	4838	554	7142

Sample: All MCS-1 mothers who were employed during pregnancy, reported that they went on leave and gave details of when they returned to work following the birth of the cohort member, or reported that they were still on leave at interview. Mothers who had worked during pregnancy but indicated that their job had finished prior to the birth of the cohort child are excluded. All results are weighted by GB weight.

Table 2.6 Mothers' post childbirth duration of maternity leave, by ethnicity Per cent

Duration of mother's maternity leave	Mother's ethnicity						All GB total %
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	
Up to 3 months	34.9	23.4	38.1	27.5	20.8	38.7	34.5
4 to 6 months	42.3	32.1	37.4	33.5	46.3	33.0	41.9
7-10 months	13.0	27.4	7.2	22.4	10.4	14.8	13.3
Still on leave	9.7	17.1	17.3	16.7	22.6	13.5	10.3
Unweighted Sample size	6469	183	114	113	120	145	7144

Sample: As Table 2.5.

Women who worked in skilled manual, personal and sales and semi-skilled and unskilled occupations were far more likely to return to work within 3 months of the birth of their baby than women in other occupations who, in contrast, were more likely to return within 4-6 months (Table 2.7). The speed of return to work after childbirth was also related to their partner's occupation and showed a similar pattern to that described above. Mothers whose partner worked in a lower occupational grouping were more likely to return to work within 3 months, those whose partners were employed in managerial and professional jobs were most likely to return to work within 4 to 6 months (Table 2.8). Similarly, this group was the most likely to have returned to work later or still be on leave at the time of the interview. This suggests that mothers in higher income households can afford to take longer periods of

maternity leave. However, variations in mothers' own maternity leave entitlements may also be behind these results.

Table 2.7 Mothers' duration of maternity leave, by mothers' occupation

Duration of mother's maternity leave	Mother's occupation						All GB total %
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	
Up to 3 months	28.4	24.4	31.5	47.7	45.8	48.6	34.6
4 to 7 months	48.3	45.5	43.8	40.3	34.8	31.2	41.8
7-10 months	15.0	17.2	13.3	4.5	10.1	10.1	13.3
Still on leave	8.2	13.0	11.4	7.4	9.3	10.2	10.3
Unweighted sample size	1571	1335	1570	108	1750	804	7138

Sample: As Table 2.5.

Table 2.8 Mothers' duration of maternity leave, by fathers' occupation

Duration of mother's maternity leave	Father's occupation						All GB total %
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	
Up to 3 months	24.8	29.6	36.8	38.5	42.4	43.7	33.0
4 to 6 months	46.6	46.22	42.2	40.0	42.8	39.3	43.5
7-10 months	16.5	14.2	10.3	12.9	7.0	10.6	13.7
Still on leave	12.2	10.0	10.6	8.6	7.9	6.4	9.8
Unweighted sample size	1970	919	212	1282	258	1244	5885

Sample: As Table 2.5

The duration of maternity leave was also related to educational qualifications (Table 2.9). Those with the highest levels of qualifications returned to work at slower rates than those with lower qualifications. However, although a considerable proportion of mothers without qualifications or with an overseas qualification went back to work very quickly (over 2 in 5 within 3 months), these groups were also the most likely to still be on leave 9-10 months after the birth. Many of those with overseas qualifications are of ethnic minority identity, and may have come to the UK relatively recently.

Table 2.9 Mothers' duration of maternity leave, by education

Duration of mother's maternity leave	Mother's education					Per cent
	NVQ 4 & 5	NVQ 3	NVQ 1 & 2	Overseas Qualification	None of these	All GB total %
Up to 3 months	26.9	38.4	42.3	42.3	42.3	34.6
4 to 6 months	46.1	41.2	38.1	24.8	29.7	41.9
7-10 months	16.4	10.6	10.5	11.2	12.4	13.3
Still on leave	10.6	9.8	9.2	21.7	15.5	10.3
Unweighted sample size	3112	1232	2406	96	306	7152

Sample: As Table 2.5

2.3 Maternity pay

Over 9 in 10 mothers who were employees while pregnant received some maternity pay (Table 2.10). These figures are a huge advance on the experience of earlier generations of pregnant employees. In 4 out of 10 cases this was the statutory minimum rate of maternity pay only and in 5 in 10 cases some supplementary pay over and above statutory minimum pay was also received; 7 per cent of mothers did not receive any maternity pay. Information on the amount of supplementary pay mothers received was not available in the Millennium Cohort Study (see Smeaton and Marsh, 2006, for the most recent information).

Around two-thirds of mothers employed as managers or professionals or associate professionals received additional maternity pay from their employers along with statutory maternity pay; the proportions were considerably lower among mothers in skilled manual, personal and sales, and semi or unskilled occupations (Table 2.10). Furthermore, around 10-13 per cent of mothers in skilled manual, personal and sales or semi-skilled and unskilled jobs indicated that they received no maternity pay at all, compared to 4 per cent of those employed as managers or professionals, or in associate professional occupations. Pakistani/Bangladeshi mothers employed before childbirth were the least likely to receive supplementary maternity pay and the most likely to receive no pay at all (Table 2.11).

Table 2.10 Mothers' maternity pay, by occupation

Maternity pay	Mother's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	All GB total %
Statutory pay only	30.1	29.5	44.8	46.0	52.5	56.8	41.6
Statutory pay plus	65.9	66.6	51.5	41.1	37.3	29.8	51.9
No pay at all	4.0	3.9	3.7	12.8	10.2	13.3	6.5
Unweighted sample size	1727	1435	1832	121	2045	948	8108

Sample: All MCS-1 mothers who were employed during pregnancy and went on maternity leave. Weighted by GB weight.

Table 2.11 Mothers' maternity pay, by ethnicity

Maternity pay	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB Total %
Statutory pay only	41.5	48.2	47.4	39.1	42.5	40.9	41.6
Statutory pay plus	52.2	46.2	40.2	52.3	53.0	44.5	51.9
No pay at all	6.3	5.5	12.5	8.6	4.5	14.5	6.5
Unweighted sample size	7334	212	140	129	129	169	8113

Sample: As Table 2.10.

2.4 Returning to same employer

Overall, 58 per cent of mothers who were employed during their pregnancy returned to work for the same employer following the birth of the cohort baby. Black African, Indian, and Black Caribbean mothers were the most likely and Pakistani/Bangladeshi mothers were the least likely to return to work for the same employer. This latter group was also the most likely not to be working (Table 2.12). Nearly 14 per cent of mothers returned to a different employer following the cohort birth, highest among White mothers.

Table 2.12 Mothers' return to work after maternity leave (up to baby 9-10 months only)

Mother's post birth work status	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB total %
Same employer	58.0	64.7	49.9	63.1	67.7	55.7	58.2
Different employer	13.9	9.8	7.2	9.2	9.7	10.6	13.6
Not working	28.1	25.5	42.9	27.7	22.6	33.7	28.2
Unweighted sample size	9161	262	200	164	165	232	10184

Sample: All MCS-1 mothers who were employed during pregnancy. Weighted by GB weight

2.5 When child aged 9-10 months old

Nearly 45 per cent of all mothers in Britain were employees when the baby was 9-10 months old, just over half of mothers in Scotland (51 per cent) indicated that they were employees. Only 13 per cent of mothers in Britain at this time were employed full-time, again with the highest rate in Scotland (16 per cent).

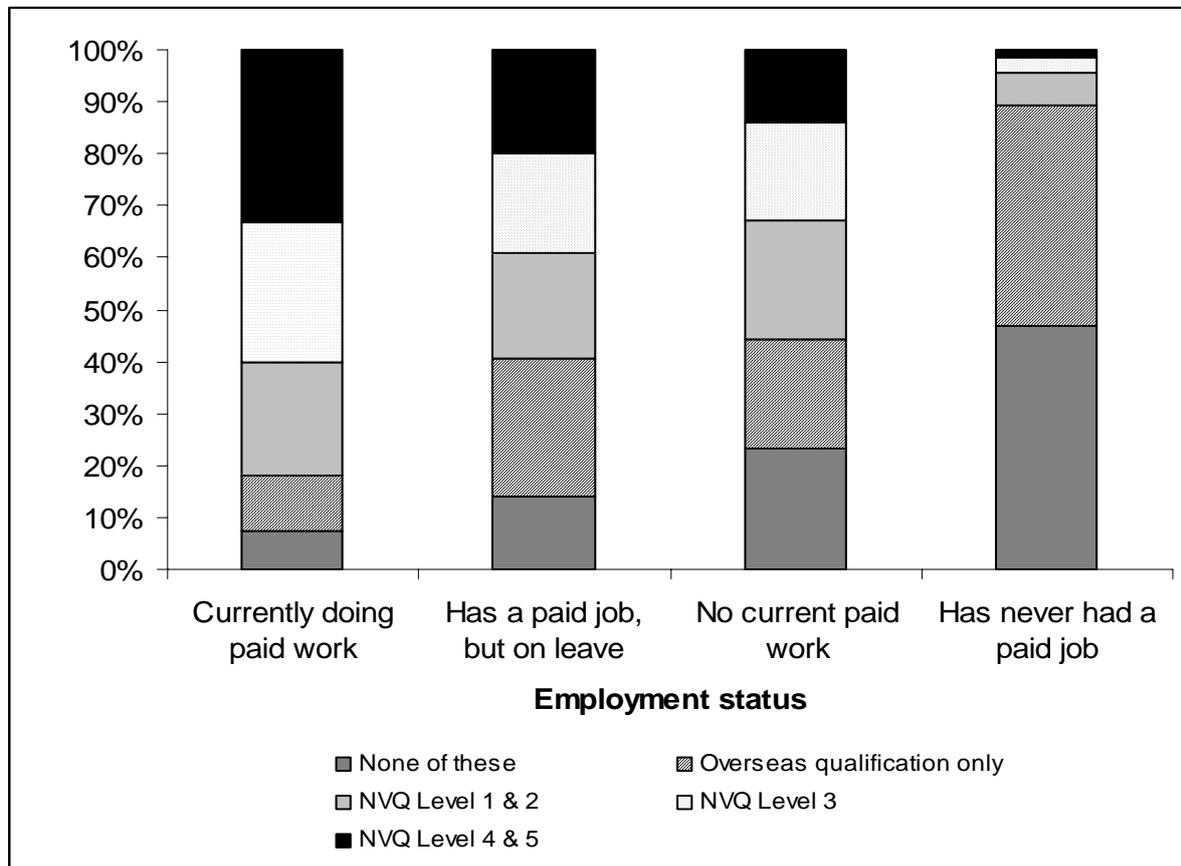
Table 2.13 Mothers' employment, by country

Employment at interview	Country			Per cent
	England	Wales	Scotland	All GB total %
In paid work - employee	43.8	46.5	50.8	44.9
In paid work - self employed	3.9	3.9	3.1	3.8
Has a paid job, but on leave	2.5	2.5	2.1	2.5
No current paid work	42.5	40.6	40.7	42.1
Has never had a paid job	7.3	6.6	3.3	6.8
Unweighted sample size	11499	2754	2327	16580
Mean age of baby at interview, months	9.2	9.2	9.1	9.2
Employed full-time at interview (% of all respondents)	12.4	14.5	16.1	13.3
Unweighted sample size of all employed at interview (% of all respondents)	4797	1253	1218	7268

Sample: All MCS-1 main respondent mothers (natural, foster, adoptive, step). Figures weighted by country and GB weight for total. A Chi square test (116.3291) on mothers by country rejected the null hypothesis that mothers' behaviour was the same in all countries ($p=0.00$). The possibility that higher employment rates in Scotland might be accounted for by variation in the age of the child at interview has been investigated and rejected.

Mothers' employment rates also varied by NVQ level (Figure 2.1), and ethnicity (Figure 2.2) in the same ways and directions as they did for mother's employment at pregnancy.

Figure 2.1 Mothers' employment status at MCS-1 interview, by NVQ level



2.6 Extent of flexible working arrangements for employed mothers

Part-time work was the most common flexible work provision offered to mothers (86 per cent) followed by flexible working hours (42 per cent) and job sharing (36 per cent) (Table 2.14). The extent to which mothers had access to the various types of flexible working arrangements varied considerably by ethnicity although not in any systematic way, which may in part be due to small sample sizes. However, differences may be due to the different types of jobs held by these mothers. For example, Black Caribbean mothers were the most likely to be offered special shift work (37 per cent), whereas Bangladeshi and Pakistani mothers had higher rates of being offered flexible working hours than other groups (58 per cent). Black African mothers were the least likely to be offered flexible working patterns, 19 per cent reported not having access to such arrangements.

There were also slight variations by country, mostly with respect to flexible working hours which 43 per cent of mothers in England were offered compared with 36 per cent of those in Scotland.

Figure 2.2 Mothers' employment status when cohort baby aged 9-10 months, by ethnicity

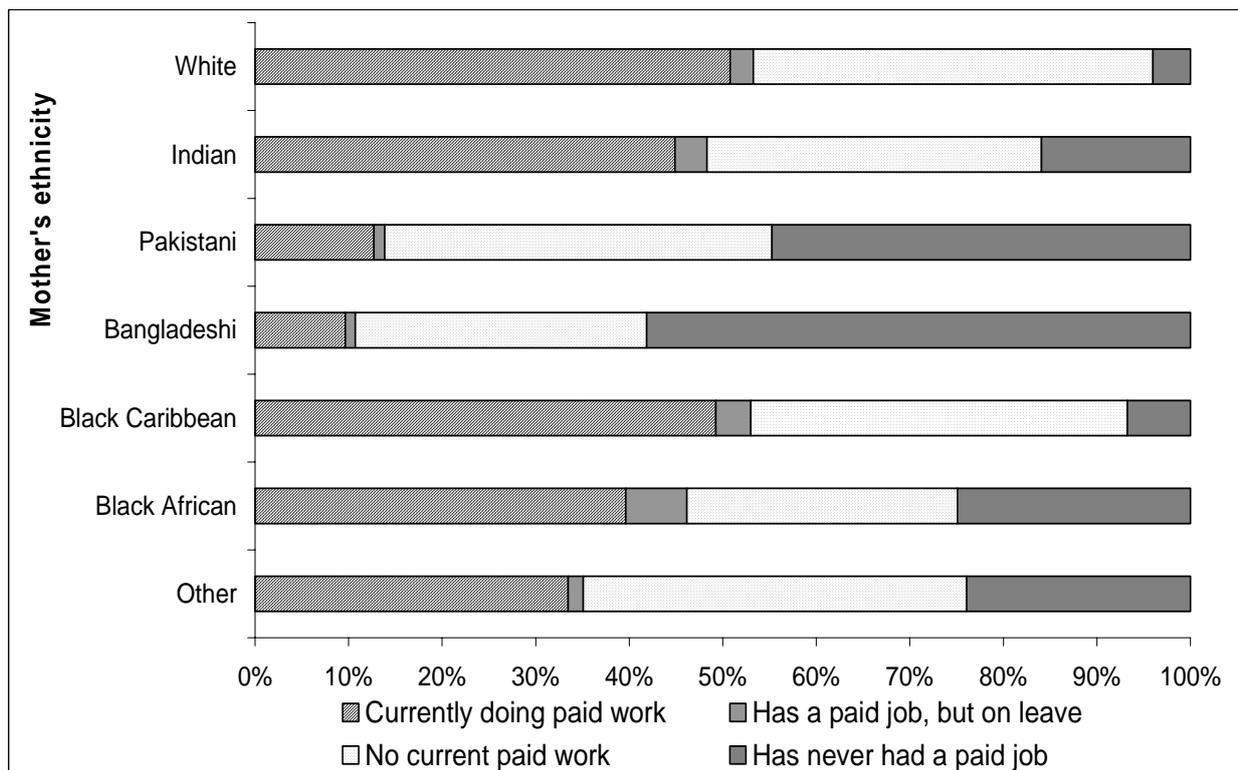


Table 2.14 Employed mothers' access to flexible working arrangements, by ethnicity

Mothers - flexible working patterns offered	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB total %
Part-time working	86.5	83.9	77.7	79.4	62.4	81.0	85.9
Job-sharing	35.9	26.4	37.9	36.9	25.5	36.6	35.7
Flexible working hours	41.4	47.4	58.3	52.4	48.3	46.6	42.0
Working at or from home occasionally	20.9	18.7	24.1	25.0	17.6	15.9	20.9
Working at or from home all the time	5.8	6.9	4.6	5.0	3.4	2.4	5.7
Special shifts (i.e. evenings)	29.4	21.1	17.0	36.8	23.8	22.3	29.0
9-day fortnights/ 4.5 day working week	5.2	7.3	1.3	8.0	4.4	4.7	5.2
School term-time contracts	15.3	11.2	14.6	18.3	8.8	13.9	15.2
None of these	7.1	12.0	4.6	12.9	19.1	10.1	7.4
Maximum sample size	6408	189	129	117	123	143	7108

Sample: All MCS-1 main respondent mothers (natural, foster, adoptive, step) who were in paid work or on leave. Weighted by GB weight.

Mothers' use of these arrangements also varied by ethnicity (Table 2.15). Higher access to part-time work was associated with its higher use, as seen for White and Indian mothers. Broadly similar relationships applied in the case of flexible working hours which Pakistani and Bangladeshi mothers were the most likely to have access to and to use. In other respects the patterns across ethnic groups were complex and not easy to summarise. Black Caribbean mothers had the lowest propensity to use part-time working arrangements when these had been offered, whereas Indian mothers were one of the least likely to be offered job sharing but the most likely to use it.

Table 2.15 Employed mothers' use of flexible working arrangements, by ethnicity

Mothers - flexible working patterns used	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	other	All GB total %
Part-time working	77.5	73.0	68.7	49.5	59.3	69.2	76.7
Job-sharing	22.1	23.5	23.3	9.6	10.3	8.9	21.7
Flexible working hours	56.3	48.9	65.3	58.2	64.1	40.4	56.1
Working at or from home occasionally	51.7	61.6	69.0	47.9	32.5	47.7	51.7
Working at or from home all the time	40.1	17.6	54.3	30.2	0	0	39.0
Special shifts (i.e. evenings)	37.4	16.3	38.6	30.0	28.1	46.6	37.1
9-day fortnights/ 4.5 day working week	8.5	38.4	0	28.1	0	0	9.4
School term-time contracts	20.9	2.2	37.2	23.4	51.8	36.9	21.4
Maximum sample size	5426	148	95	89	76	114	5948

Sample: All MCS-1 main respondent mothers (natural, foster, adoptive, step) who were in paid work or on leave and were offered flexible working arrangement in question. Weighted by GB weight.

Access to flexible working arrangements also differed by occupation (Table 2.16). With the exception of part-time work and special shifts, all other arrangements were substantially less likely to be available to mothers working in skilled manual, personal, sales or semi and unskilled occupations than to mothers in other occupations. However, it was not the case that those occupational groups with less access also used the provisions least, where they were offered (Table 2.17). In fact,

in most cases, mothers in lower skilled, lower paid occupations who had access to these arrangements were more likely, or at least equally likely, to use them as mothers in higher occupations. This suggests that extending access to flexible working arrangements may help lower skilled employees most who, although they currently have less access to these arrangements, are more likely to use them.

Table 2.16 Employed mothers' access to flexible working arrangements, by occupation

Mothers - flexible working patterns offered	Mother's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	All GB total %
Part-time working	86.3	89.8	84.6	75.6	88.4	77.1	85.9
Job-sharing	47.3	52.5	42.0	26.0	18.3	10.0	35.6
Flexible working hours	42.0	48.2	51.6	30.2	34.6	29.8	41.9
Working at or from home occasionally	39.8	28.2	23.3	11.1	3.9	2.9	20.9
Working at or from home all the time	9.4	6.2	8.2	3.3	1.2	1.6	5.6
Special shifts (i.e. evenings)	22.5	34.0	23.4	25.9	36.2	30.9	29.0
9-day fortnights/ 4.5 day working week	7.2	8.8	5.3	3.3	2.3	1.8	5.3
School term-time contracts	22.1	16.8	15.6	13.9	10.6	7.8	15.2
None of these	5.2	5.6	8.1	14.4	7.1	13.1	7.4
Maximum sample size	1453	1234	1591	102	1778	934	7092

Sample: All MCS-1 main respondent mothers (natural, foster, adoptive, step) who were in paid work or on leave. Weighted by GB weight.

2.7 Employment trajectories

The major employment changes in mothers' lives from pregnancy to when the cohort baby was 9-10 months old can be shown pictorially in a tree diagram (Figure 2.3). The starting point is employment status at pregnancy. Because the MCS data contain information about a mother's past employment history, the diagram starts with 3 types of employment status: 'employed', 'never employed' and 'not employed' which means they were not employed at the time, but had previous employment experience.

As indicated earlier, 80 per cent of those who were employed during pregnancy went on maternity leave and the majority of these (84 per cent) were back at work by the time the baby was 9-10 months old. Of the 16 per cent who were not employed at 9-10 months, 27 per cent took some form of maternity leave (and were no longer on leave) but described themselves as no longer working.

Table 2.17 Employed mothers' use of flexible working arrangements, by occupation

Mothers - flexible working patterns used	Mother's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	All GB total %
Part-time working	62.6	74.3	77.6	82.0	86.9	85.9	76.7
Job-sharing	21.9	15.1	26.6	20.6	24.8	24.8	21.7
Flexible working hours	58.6	50.5	64.0	49.3	48.7	55.4	56.1
Working at or from home occasionally	62.4	53.2	36.8	69.0	27.8	23.5	51.7
Working at or from home all the time	35.8	31.1	43.5	0.0	38.0	87.0	38.9
Special shifts (i.e. evenings)	16.8	31.3	31.1	30.4	49.5	56.3	37.1
9-day fortnights/ 4.5 day working week	10.9	10.9	2.7	0.0	4.0	40.4	9.3
School term-time contracts	26.7	9.1	12.8	27.1	29.0	44.1	21.4
Maximum sample size	1222	1096	1311	78	1540	697	5944

Sample: All MCS-1 main respondent mothers (natural, foster, adoptive, step) who were in paid work or on leave and were offered flexible working arrangement in question. Weighted by GB weight.

Twenty per cent of mothers employed while pregnant finished their job and did not go on maternity leave, but it is not known whether this was a preference to stop work, or because they were ineligible for maternity leave with their current employer. Over three-quarters of those who took this route were not working when their child was aged 9-10 months, although approximately one in five had returned to work. The vast majority of women who were not employed during pregnancy were not employed when the baby was 9-10 months old.

These trajectories are explored further in Chapter 5, up to the point where the cohort child was 3 years old.

2.8 Summary

The vast majority of mothers having their first baby around the Millennium were employed when pregnant ranging from 86 per cent of White mothers to 34 per cent of Bangladeshi mothers. A lower proportion of mothers having their second or subsequent child were in employment, between 66 per cent for Black Caribbean and 7 per cent for Bangladeshi mothers. Employment during pregnancy was closely linked to educational qualifications, the higher a mother's qualifications the more likely she was to work.

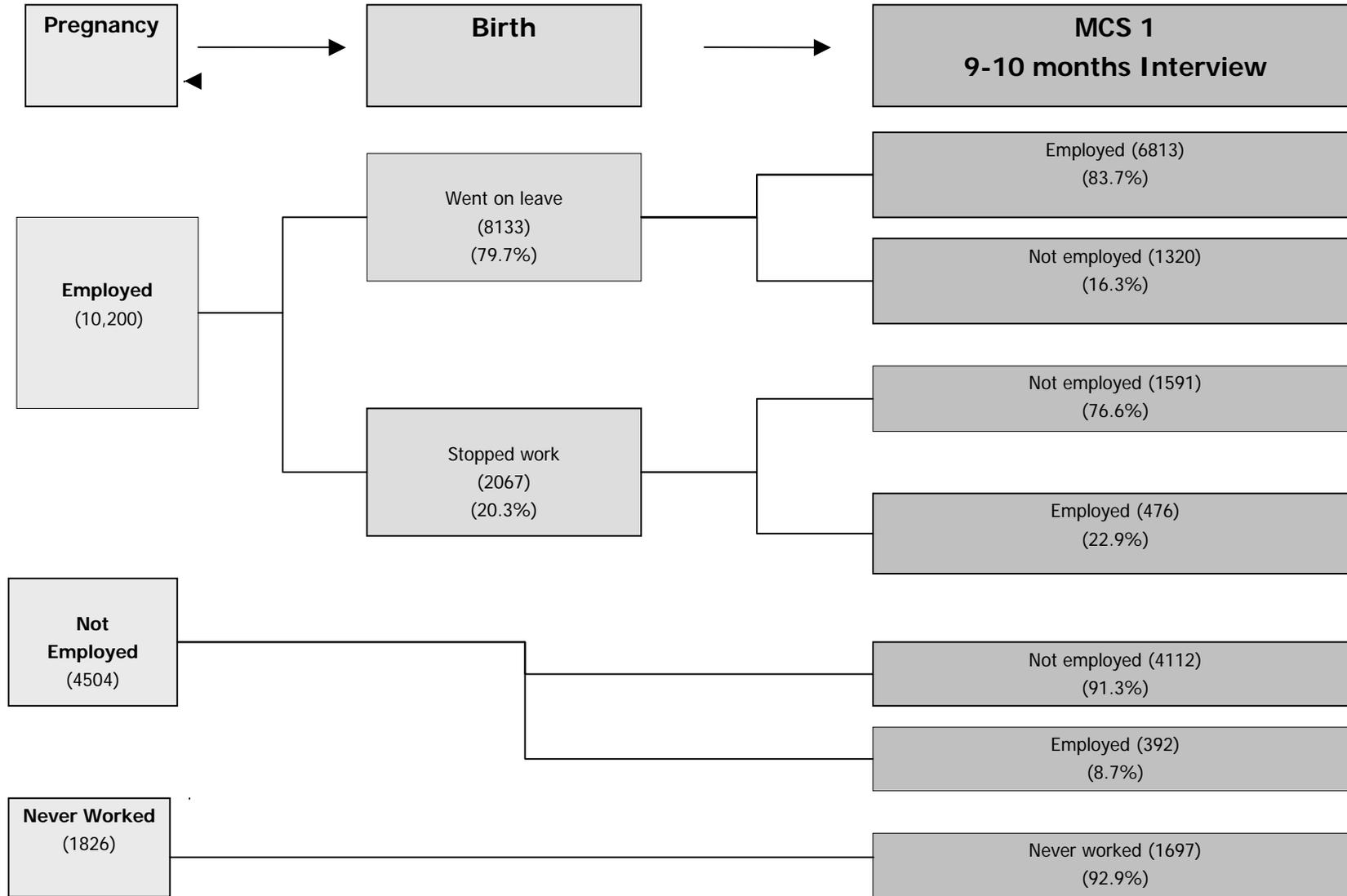
Mothers' employment status at pregnancy largely determined their employment status when the child was aged 9-10 months. Four out of five mothers who were in a job when pregnant reported taking maternity leave and the majority returned to work within 9-10 months of the child's birth. There were few differences by country, ethnicity or qualification showing that taking maternity leave had become standard by 2001 for female employees across Britain. Most mothers who were not employed during pregnancy were not employed when the baby was 9-10 months old.

Length of maternity leave was related to educational qualifications, occupation and partner's occupation. Women with lower qualifications in skilled manual, personal and sales occupations and semi or unskilled jobs with a partner also in one of these occupations were more likely to return to work within 3 months of the child's birth although they were also the group least likely to be in employment. This suggests that mothers in higher income households can take longer periods of maternity leave, although mothers' own maternity leave entitlements may also be a factor.

Mothers in higher socio-economic groups were far more likely than those in lower socio-economic groups to receive supplementary maternity pay from their employer.

Mothers' access to flexible working arrangements varied by the type of arrangement, mothers' socio-economic group and ethnicity. Part-time work was the most widely available and used flexible working arrangement. With the exception of this and special shifts, arrangements were substantially less likely to be available to mothers in manual, personal or sales occupations but in most cases, these mothers were more likely, or at least equally likely, to use them as mothers in higher occupations.

Figure 2.3 Mothers' employment trajectories from pregnancy through to when cohort child aged 9-10 months



3 FATHERS' EMPLOYMENT AROUND CHILDBIRTH AND ITS RELATION TO MOTHERS' BEHAVIOUR

3.1 Fathers' employment when child aged 9-10 months

The vast majority of fathers in Britain were employed (91 per cent) when their child was aged 9-10 months, of whom 16 per cent were self-employed. Most employed fathers worked full-time hours (85 per cent), with minor country variations. Very few fathers reported that they had never had a paid job.

Table 3.1 Fathers' employment status, by country

Employment at interview	Country			Per cent
	England	Wales	Scotland	All GB total %
In paid work -employees	75.3	76.3	76.0	75.2
In paid work – self employed	16.0	12.0	13.4	15.7
No current paid work	8.1	11.0	10.4	8.5
Has never had a paid job	0.6	0.7	0.3	0.6
N unweighted	8317	1905	1706	11928
Employed full-time at interview (% of all respondents)	85.6	83.0	84.7	85.3
Unweighted sample size of all employed at interview	7262	1619	1475	10356

Sample: All MCS-1 main respondent partner fathers (natural, foster, adoptive, step). Figures weighted by country weight for total. A Chi square test (88.4234) on fathers by country rejected the null hypothesis that fathers' behaviour was the same in all countries.

Fathers' employment varied by ethnicity (Table 3.2). Self employment rates were higher in the South Asian ethnic groups with 22 per cent of Pakistani and 20 per cent of Indian fathers reporting they were self employed. Rates for not working or never having worked were lowest for White (8 per cent) and Indian (9 per cent) fathers compared to Bangladeshi (22 per cent) and Black African (21 per cent) fathers.

Table 3.2 Fathers' employment status, by ethnicity

Employment	Father's ethnicity							Per cent
	White	Indian	Pakistani	Bangla- deshi	Black Caribbean	Black African	Other	All GB total %
In paid work – employee	76.5	70.8	59.4	62.3	69.0	68.0	68.9	75.4
In paid work – self employed	15.3	20.1	22.1	15.4	14.2	10.7	16.9	15.6
Not working/Never worked	8.2	9.1	18.6	22.3	16.7	21.3	14.2	9.0
Max unweighted sample size	9963	364	611	263	129	184	364	11878

Sample: All MCS-1 fathers. Weighted by GB weight.

3.2 Type of leave father took around birth of child

Employed fathers were asked whether they took any kind of leave around the birth of their child and whether some or all of it was paid. Forty-three per cent took paternity leave and 50 per cent took some annual leave; around one in five employed fathers did not take any leave at all (Table 3.3).

Table 3.3 Type of leave taken by employed fathers, by ethnicity

Father's ethnicity	Father's leave					Per cent
	Paternity leave	Parental leave	Sick leave	Annual leave	No leave taken	Unweighted sample size
White	43.8	4.7	3.8	51.9	18.3	8933
Indian	37.8	7.0	6.2	42.7	26.1	331
Pakistani	19.6	4.4	1.3	27.7	45.2	496
Bangladeshi	20.5	0.8	1.1	17.1	50.3	194
Black Caribbean	51.9	14.0	5.7	42.3	14.8	101
Black African	46.7	5.2	3.0	36.7	23.2	136
Other	42.2	6.0	2.5	38.7	31.7	302
All GB Total	43.0	4.8	3.8	50.3	19.7	10493

Sample: All MCS-1 employed fathers. Multicoded answers allowed so rows do not add to 100%. Weighted by GB weight.

A sizeable group of fathers took a mix of leave, the most common being paternity leave and annual leave whilst relatively few took sick leave. Of all employed fathers, 18 per cent took solely paternity leave and 5 per cent only parental leave. However,

given that paternity and parental leave may have been confused around the year 2000 (parental leave having only become a statutory entitlement in 1999 and being unpaid), it may be best to think of this as 22 per cent of fathers taking some kind of paternity leave only around the birth of their child. Over a fifth of fathers took a mixture of paternity leave and annual or sick leave and approximately one quarter took solely annual (or sick) leave (see Table 3.5).

The majority of leave arrangements were paid, either in full or part (Table 3.4). The exception was the in case of fathers who took 'other' leave arrangements, where 63 per cent of such leave combinations was unpaid.

Table 3.4 Type of leave taken by employed fathers, by whether it was paid

Type of leave	Paid leave			Unweighted sample size
	All leave paid	Some leave paid	None paid	
Paternity leave only	81.6	4.9	13.5	1967
Parental leave only	69.0	15.6	15.4	521
Paternity leave plus annual or sick leave	92.2	6.4	1.4	2202
Annual or sick leave only	87.2	3.4	9.4	2683
Other	33.6	3.5	62.8	868

Sample: All MCS-1 employed fathers who took some sort of leave. Weighted by GB weight.

Employed Black African (27 per cent) and Black Caribbean (24 per cent) fathers were most likely to report taking only paternity leave whereas Bangladeshi and Pakistani fathers were the least likely to take any form of leave; 53 and 46 per cent respectively did not go on leave around the time of their child's birth (Table 3.5). This lower rate for Bangladeshi and Pakistani fathers is possibly related to their employment status, occupation and cultural expectations.

Fathers who were employed in semi-skilled/unskilled, personal/sales and skilled manual jobs were also less likely to take leave or to take a combination of paternity and annual leave than those from managerial/professional jobs. Fathers' leave arrangements varied little by country but a slightly higher percentage of fathers in Wales (25 per cent) did not take any leave than those in England (21 per cent).

Table 3.5 Type of leave taken by employed fathers, by ethnicity

Type of leave	Father's ethnicity							Per cent
	White	Indian	Pakistani	Bangla- deshi	Black Caribbean	Black African	Other	All GB total %
Paternity leave only	17.7	16.5	11.3	17.1	23.9	26.5	17.2	17.6
Parental leave only	4.6	7.0	4.4	0.7	12.7	5.0	5.6	4.7
Paternity leave plus annual or sick leave	23.2	18.7	8.3	1.9	19.1	19.7	20.3	22.4
Annual or sick leave only	26.6	21.7	18.7	15.4	16.8	14.8	15.1	25.7
Other	8.1	8.2	11.2	12.0	6.6	9.6	6.6	8.2
No leave	19.7	27.9	46.2	53.0	20.9	24.4	35.3	21.3
Unweighted sample size	9296	346	526	211	113	137	314	10943

Sample: All MCS-1 employed fathers. Weighted by GB weight.

Table 3.6 Type of leave taken by employed fathers, by occupation

Type of leave	Father's occupation							Per cent
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi- skilled & unskilled	All GB total %	
Paternity only	17.9	19.3	18.7	15.0	18.4	18.2	17.6	
Parental leave only	5.9	3.9	5.7	4.3	4.7	3.7	4.7	
Paternity leave plus annual leave	30.0	32.3	37.5	11.5	18.2	13.7	22.4	
Annual or sick leave	24.2	21.6	19.4	30.5	24.7	27.2	25.8	
Other	6.7	7.6	3.4	12.1	6.4	7.9	8.2	
No leave	15.3	15.3	15.2	26.2	27.6	29.2	21.3	
Unweighted sample size	3278	1474	335	2404	519	2898	10908	

Sample: All MCS-1 employed fathers. Weighted by GB weight.

Fathers' leave taking differed slightly depending on whether or not their partner took maternity leave (Table 3.7). A slightly higher percentage of fathers (21 per cent) whose partner did not take maternity leave, did not take any leave around the birth of their child compared with those whose partner had taken maternity leave (18 per cent). Across the whole sample of employed pregnant mothers, the proportion of

fathers taking no leave when the mother stopped work for childbirth rose to 28 per cent. There is a small pointer, therefore, to fathers being less likely to take leave when mothers signal that they intend to give up work to care for the baby. We are unable to determine whether this relationship is driven by financial necessity or preferences.

Table 3.7 Relationship between employed mothers' and fathers' leave

Fathers' type of leave	Mothers' maternity leave		Per cent
	No maternity leave taken	Maternity leave taken	All GB total %
Paternity leave only	18.3	18.5	18.4
Parental leave only	4.1	5.0	4.9
Paternity leave plus annual or sick leave	19.5	25.5	24.5
Annual or sick leave only	28.0	25.5	25.9
Other	8.8	7.9	8.0
No leave taken	21.3	17.6	18.2
Unweighted sample size	1322	6464	7786

Sample: All MCS-1 mothers who were employed during pregnancy with an employed partner. Weighted by GB weight.

3.3 Access to flexible work

There were large variations in employed fathers' reported access to flexible working arrangements. Part-time work was accessible to 47 per cent of employed fathers, flexible working hours to 35 per cent, and working at or from home occasionally to 29 per cent (Table 3.8). Fathers had less access than mothers to each type of flexible working arrangement (see Table 2.14). Fathers' use of these arrangements when they were available (Table 3.9) was often much lower than mothers' (Table 2.17), certainly in the case of part-time work, job sharing, school term-time contracts and special shifts. However, fathers were more likely than mothers to use working at or from home occasionally and 9-day fortnights, possibly because these forms of flexible work do not impact upon pay and full-time work patterns.

There were significant differences in fathers' access to flexible working arrangements by country. Approximately 30 per cent of fathers in England were offered occasional working from home compared to 20 per cent in Wales. However, where offered, 37 per cent of fathers in Wales who had access to working at home all the time did so, compared to 20 per cent of fathers in England.

There were differences in fathers' access to and use of flexible working arrangements by ethnicity that were not systematically evident among mothers (Table 3.8). In most cases, Pakistani and Bangladeshi fathers who were employees had lower access to all types of flexible working arrangements than other groups of fathers whereas Black fathers (Caribbean and African) tended to have the highest access. However, father's usage rates by ethnicity did not follow the same patterns as their access rates (Table 3.9). In fact, with the exception of working at or from home, employed Pakistani and Bangladeshi fathers had the highest usage of many types of flexible working arrangements, particularly part-time work and special shifts.

Table 3.8 Employed fathers' access to flexible working arrangements, by ethnicity

Flexible working arrangements offered	Father's ethnicity					Per cent
	White	Indian	Pakistani & Bangladeshi*	Black Caribbean & Black African*	Other	All GB total %
Part-time working	47.6	45.4	38.4	54.3	43.6	47.3
Job-Sharing	20.2	12.8	13.3	26.1	16.2	19.8
Flexible Working Hours	35.3	33.6	29.4	48.1	31.2	35.2
Working at or from home, occasionally	29.9	26.8	8.9	28.9	26.9	29.2
Working at or from home, all the time	8.3	5.5	2.2	3.4	5.7	7.9
Special Shifts (e.g. evenings)	20.1	19.1	14.9	23.8	20.9	20.0
9-Day fortnights/ 4½ day working week	6.9	2.3	3.0	7.0	4.0	6.6
School term-time contracts	6.2	3.2	5.2	8.2	3.7	6.1
None of these	35.7	35.1	44.1	23.7	35.9	35.7
Maximum (N) unweighted	7503	264	527	195	245	8734

Sample: All MCS-1 employed fathers. * Due to small sample sizes it was necessary to combine these two groups together. Weighted by GB weight.

Table 3.9 Employed fathers' use of flexible working arrangements, by ethnicity

Flexible working arrangements used	Father's ethnicity					Per cent
	White	Indian	Pakistani & Bangladeshi*	Black Caribbean & Black African*	Other	All GB total %
Part-time working	6.9	8.5	33.7	9.3	20.4	7.9
Job-Sharing	2.5	18.1	16.3	0.0	5.0	3.0
Flexible Working Hours	54.5	50.8	63.8	52.0	65.5	54.9
Working at or from home, occasionally	61.6	62.9	47.1	55.9	65.0	61.5
Working at or from home, all the time	21.6	31.7	5.6	0.0	31.2	21.6
Special Shifts (i.e. evenings)	19.4	33.6	42.6	27.8	29.8	20.6
9-Day fortnights/ 4½ day working week	32.3	56.3	4.0	17.1	8.3	31.4
School term-time contracts	9.3	6.0	0.0	2.5	28.1	9.1
Maximum (N) unweighted	3338	106	168	92	101	3805

Sample: All MCS-1 employed fathers who were offered flexible working arrangements by their employer. * Due to small sample sizes it was necessary to combine these two groups together. Weighted by GB weight.

There were similar patterns in fathers' and mothers' access to flexible working arrangements by occupational group (Table 3.10). Non-manual occupations, often at the top end of the pay spectrum, tended to have greater access to flexible working arrangements of all types than manual occupations. Access to flexibility for fathers employed in manual and lower paid occupations was mostly at very low levels, rarely above one fifth of fathers in these occupations having access. Although a fairly mixed picture of use emerges depending on the type of flexibility, fathers in lower paid, manual occupations used part-time working, job-sharing, special shifts and 9 day fortnights to a greater degree than those in higher level occupations (Table 3.11).

Table 3.10 Employed fathers' access to flexible working arrangements, by occupation

Fathers - flexible working patterns offered	Father's occupation						All GB total %
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	
Part-time working	62.0	54.4	63.1	23.8	60.9	32.1	47.2
Job-sharing	28.9	28.6	37.4	7.0	15.9	7.2	19.7
Flexible working hours	48.5	39.4	54.0	20.8	35.4	19.9	35.2
Working at or from home occasionally	53.5	35.2	33.9	9.7	12.0	3.8	29.1
Working at or from home all the time	14.2	9.8	5.7	3.6	4.3	0.8	7.9
Special shifts (i.e. evenings)	25.0	22.1	23.7	11.4	25.1	16.0	20.0
9-day fortnights/ 4.5 day working week	8.3	8.2	11.1	5.4	4.1	3.5	6.6
School term-time contracts	9.3	7.4	12.3	1.6	6.4	2.3	6.0
None of these	18.6	28.3	19.4	59.1	25.1	54.1	35.7
Maximum sample size	2748	1227	314	1655	427	2345	8716

Sample: All MCS-1 employed fathers. Weighted by GB weight.

3.4 Summary

Paternity leave and annual leave were the most common types of leave taken by fathers at the birth of their baby. Fathers employed in manual occupations were less likely to take leave than those from managerial jobs while Bangladeshi and Pakistani fathers were the least likely to take any form of leave.

For the vast majority of fathers, the majority of the leave they took around the birth of their child was paid. Despite this being the era before statutory paid paternity leave, as many as four-fifths of fathers taking only paternity leave were paid for it all by their employers.

Fathers' access to and use of flexible working arrangements varied substantially by type of arrangement, socio-economic status and ethnicity. Fathers in non-manual occupations tended to have far higher access to all types of arrangements than those in lower socio-economic groups but fathers in lower paid, manual occupations tended

to use certain arrangements such as part-time working, job-sharing, special shifts and 9-day fortnights to a greater degree than those in higher level occupations.

Overall, fathers had less access than mothers to each type of flexible working arrangement and their use of arrangements, when they were available, was often far lower than mothers'.

Table 3.11 Employed fathers' use of flexible working arrangements, by occupation

Fathers - flexible working patterns used	Father's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	All GB total %
Part-time working	4.5	6.4	7.9	7.1	15.1	18.3	7.9
Job-sharing	1.9	1.5	5.1	5.9	1.4	11.2	3.0
Flexible working hours	56.4	51.2	70.0	59.7	47.2	47.5	55.0
Working at or from home occasionally	67.3	59.0	35.0	46.5	36.3	24.1	61.5
Working at or from home all the time	21.4	21.4	6.3	32.1	20.2	6.5	21.6
Special shifts (i.e. evenings)	12.1	21.2	15.9	30.1	30.4	35.0	20.7
9-day fortnights/ 4.5 day working week	27.4	22.7	13.7	54.9	9.4	44.5	31.4
School term-time contracts	12.5	3.6	0.0	10.5	12.1	5.0	9.2
Maximum sample size	1659	642	195	362	245	692	3795

Sample: All MCS-1 employed fathers who were offered flexible working arrangements by their employer. Weighted by GB weight.

4 COUPLES' EMPLOYMENT IN EARLY CHILDHOOD

4.1 Pregnancy

At the birth of her child, the mother's age was linked to the type of partnership she was living in and its economic circumstances. The most common age for mothers to give birth to the cohort child was 27-32 years. Over three-quarters of mothers in couples where both partners were employed were 27 or older and one in three mothers in this group and in role reversal couples (i.e. where the mother only was employed) were 33 or more. In contrast, around a third of lone parents were aged 20 or less (Table 4.1).

Table 4.1 Families' employment status at pregnancy, by age of mother at birth

Work status before birth of Cohort Baby	Mother's age at birth of cohort baby				Unweighted sample size
	up to 20 years old	21 to 26 years old	27 to 32 years old	33 plus years old	
Couple both employed	4.7	17.9	45.4	32.0	8674
Mother only employed	15.4	25.4	28.0	31.7	375
Father only employed	9.5	25.6	36.7	28.1	3734
Couple both not employed	19.8	31.0	28.4	20.7	975
Lone parent employed	32.7	28.1	23.0	16.3	1166
Lone parent not employed	33.2	31.1	23.5	12.2	1626
All GB Total %	10.5	21.8	39.5	28.3	16550

Sample: All MCS-1 families. Weighted by GB weight

The cohort baby was the first child for seven in ten employed lone parents and around half of two-earner and role reversal families (Table 4.2). In this sample there was also a link with ethnicity: the cohort baby was the first child for 43 per cent of White and Indian mothers compared with 27 per cent of Bangladeshi mothers. Having two or more additional children before the arrival of the cohort child was most common in not employed couple families and father only employed families.

4.2 When child aged 9-10 months

There was substantial economic mobility in families between pregnancy and the baby reaching age 9-10 months (Table 4.3). One quarter of the dual earner couples moved to only the father being employed. Just over one third of mother only working families still had the mother only working, whereas in a similar percentage, the father had gained employment over the period of childbirth. Over half of employed lone parents moved to be non-employed.

Table 4.2 Number of other siblings in the family, by families' employment status at pregnancy

Total number of other siblings in the household	Work status before birth of cohort baby						Per cent
	Couple both employed	Mother only employed	Father only employed	Couple both not employed	Lone parent employed	Lone parent not employed	All GB total %
Cohort Only*	50.1	50.9	17.3	22.9	69.8	33.7	42.2
One sibling	35.5	31.1	45.7	32.5	19.4	36.2	36.4
Two or more siblings	14.4	18.0	37.0	44.7	10.8	30.2	21.4
Unweighted sample size	8674	375	3734	975	1166	1626	16550

Note: Total number of children represents all children (born to the cohort mother) living in the household including the cohort baby (or babies) at the time of interview. Weighted by GB weight.

Overall, father only employed families (34 per cent), and 1.5 earner families where the father worked full-time and the mother part-time (31 per cent) were the most common household types for families when their cohort baby was 9-10 months old (Table 4.4). When mother's ethnicity was used to classify the family, Pakistani and Bangladeshi (67 per cent) and Indian (47 per cent) mothers were most likely to live in one-earner families, where the father only was employed. There were slight differences when father's ethnicity was used to classify each family, largely because lone parents were now excluded from the analysis (Table 4.5). Black African and Black Caribbean mothers (31 per cent) were most likely to be in not employed lone parent households.

Table 4.3 Couples' economic and partnership status prior to birth of cohort baby, by couples' economic and partnership status when cohort baby aged 9-10 months

Work status before birth of Cohort Baby	Work status at MCS 1 Interview, child aged 9-10 months								Per cent
	Both employed full-time	Both employed, father ft & mother pt	Both employed, father pt & mother ft	Mother only employed	Father only employed	Both not employed	Lone parent employed	Lone parent not employed	Unweighted sample size
Couple both employed	18.2	50.3	2.4	1.9	26.3	1.0	0.0	0.0	7935
Mother only employed	5.7	12.3	4.3	36.6	13.1	28.0	0.0	0.0	372
Father only employed	1.0	5.9	0.2	0.9	84.4	7.6	0.0	0.0	3683
Couple both not employed	0.1	1.1	0.0	1.8	15.5	81.5	0.0	0.0	974
Lone parent employed	0.0	0.0	0.0	0.0	0.0	0.0	47.9	52.1	1166
Lone parent not employed	0.0	0.0	0.0	0.0	0.0	0.0	4.4	95.6	1626
All GB total %	10.8	30.6	1.5	2.1	34.3	6.4	3.5	10.8	15756

Sample: All MCS-1 families. Weighted by GB weight

Table 4.4 Couples' economic and partnership status when cohort baby aged 9-10 months, by mothers' ethnicity

Work status when child aged 9 – 10 months	Mother's ethnicity							All GB total %
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	
Both employed full-time	11.0	16.6	3.2	0.7	13.6	16.6	10.7	10.8
Both employed, father ft & mother pt	33.0	21.2	4.1	2.1	11.8	6.2	15.5	30.5
Both employed, father pt & mother ft	1.5	1.8	0.7	2.0	0.0	2.4	1.6	1.5
Mother only employed	2.1	3.7	1.7	2.1	4.7	3.2	1.2	2.2
Father only employed	32.6	47.1	67.3	66.7	13.3	18.3	42.4	34.2
Both not employed	5.8	4.8	15.7	21.3	6.1	10.1	10.9	6.4
Lone parent employed	3.4	1.5	1.0	1.1	19.1	11.7	3.7	3.5
Lone parent not employed	10.6	3.4	6.3	4.1	31.3	31.5	14.0	10.9
Unweighted sample size	12960	443	865	361	246	351	541	15767

Sample: Tables 4.4 to 4.6, all MCS-1 families. Weighted by GB weight.

Table 4.5 Couples' economic and partnership status when cohort baby aged 9-10 months, by fathers' ethnicity

Work status when child aged 9 – 10 months	Father's ethnicity							All GB total %
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	
Both employed full-time	13.6	18.8	3.9	2.4	23.1	31.5	15.4	13.7
Both employed, father ft & mother pt	41.0	26.3	5.0	2.7	36.5	14.7	21.0	38.5
Both employed, father pt & mother ft	1.9	1.5	1.6	2.5	0.0	2.6	2.6	1.9
Mother only employed	2.3	3.1	1.4	2.4	9.7	5.7	2.9	2.4
Father only employed	35.1	43.9	70.2	69.0	23.3	29.4	46.5	36.7
Both not employed	6.1	6.2	17.6	20.9	7.4	16.1	11.7	6.8
Unweighted sample size	9859	362	607	261	125	184	361	11759

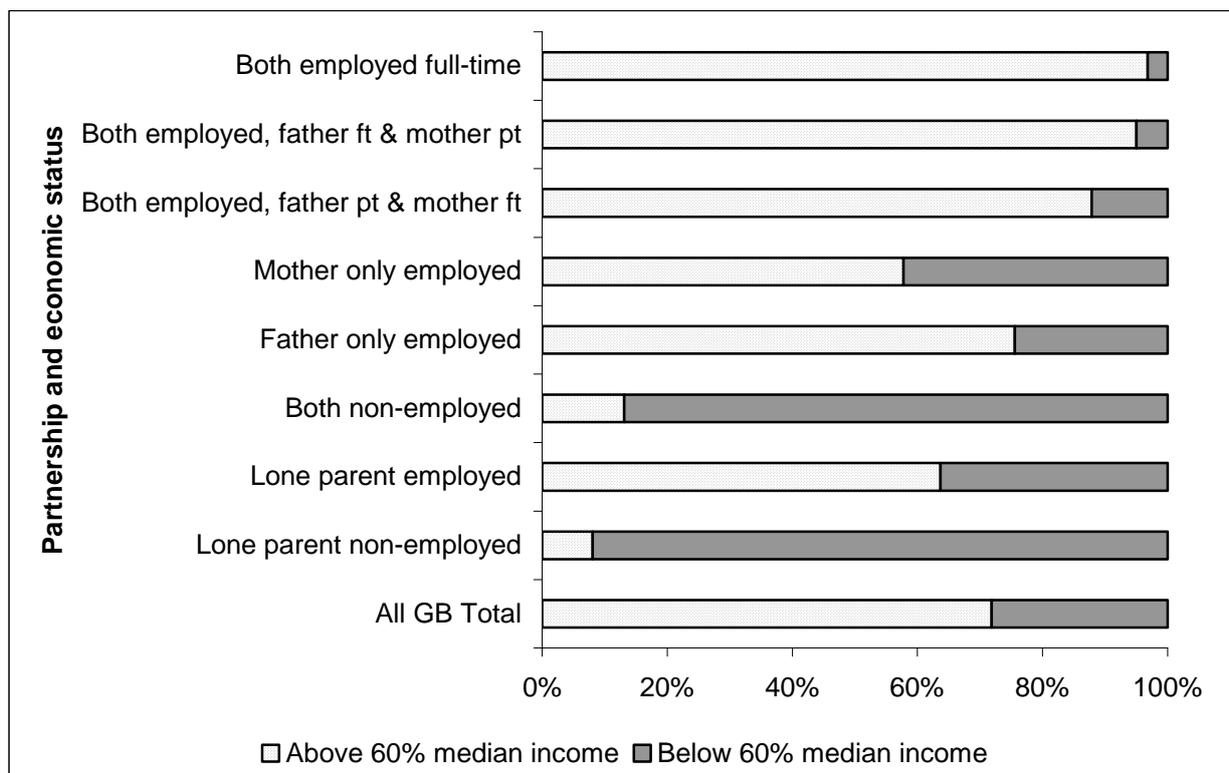
The most common type of household arrangement for mothers in manager/professional or associate professional occupations was 1.5 earner families, although they were also the most likely of all mothers to live in two full-time earner families (Table 4.6). Excluding these two groups, the father only employed was the most common living arrangement. This was particularly true of mothers who had never worked, although substantial proportions of these mothers were also in not employed couple and lone parent families (Table 4.6).

Table 4.6 Couples' economic partnership status when the cohort baby was 9-10 months old, by mothers' occupation

Work status when child aged 9 – 10 months	Mother's occupation							Per cent
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	Never worked	All GB total %
Both employed full-time	26.5	17.4	10.7	11.4	5.2	3.6	0.0	10.8
Both employed, father ft & mother pt	35.5	44.9	36.6	23.8	32.2	19.7	0.0	30.6
Both employed, father pt & mother ft	2.9	2.9	1.4	1.0	1.1	0.4	0.0	1.5
Mother only employed	3.0	2.2	1.5	1.9	2.3	2.6	0.0	2.1
Father only employed	27.0	26.0	37.6	36.1	35.3	38.0	43.3	34.2
Both not employed	1.1	1.1	2.9	8.7	6.5	11.2	24.4	6.4
Lone parent employed	1.9	3.5	3.9	3.6	5.0	4.0	0.0	3.5
Lone parent not employed	2.1	2.0	5.5	13.5	12.4	20.5	32.3	10.9
Unweighted sample size	2141	1727	2677	299	4022	3031	1832	15729

Living in poverty when the cohort baby was 9-10 months old was highest for families without any employment, either not employed lone parents (92 per cent) or not employed couples (87 per cent). Families with one earner were clearly at higher risk of living in poverty than those with two earners (Figure 4.1). Couples with two full-time jobs or 1.5 earners were very unlikely to be living in poverty, measured by being below the 60 per cent median income threshold.

Figure 4.1 Couples’ economic and partnership status when cohort baby aged 9-10 months, by income



Sample: Income poverty is based on the net equivalent household income reported by respondents at interview. Equivalent income is calculated using the McClements equivalence scale. When the cohort baby was 9-10 months old, the 60% median income level was £9,048 p.a. Weighted by GB weight.

4.3 Childcare when child aged 9-10 months

Childcare usage differed depending on whether it was used when the mother was at work or at any time.⁶ Formal childcare was used most by couples where both partners were employed full-time; half of these families used formal childcare, but over two in five also relied on grandparents, as did around half of employed lone parents and 1.5 earner families (Table 4.7). Fathers were most likely to be used for childcare when the mother took main responsibility for working, in over seven out of ten families where the mother worked full-time while the father worked part-time or was not employed. Lone parents’ access to (non resident) father’s childcare, while not totally absent, was very low with around one in eight employed lone mothers using this form of childcare.

⁶ The figures used at any time are dominated by the childcare used while the mother is at work.

Table 4.7 Mothers' partnership and economic status, by childcare arrangements

Partnership and economic status when child aged 9-10 months	Per cent (figures)					
	Type of childcare used					
	Formal	All times	Grandparents	All times	Partners	All times
	Whilst employed only*	times **	Whilst employed only	times	Whilst employed only	All times
Both employed ft	56.6	50.2	42.8	44.6	19.2	16.4
Both employed, father ft and mother pt	32.9	31.7	47.1	50.6	35.3	31.7
Both employed, father pt and mother ft	29.2	28.2	29.9	39.2	71.7	65.2
Mother employed, father not employed	20.1	20.0	20.8	32.2	72.9	65.8
Father employed, mother not employed	-	4.5	-	15.7	-	0.2
Both not employed	-	2.1	-	15.5	-	0.7
Lone parent employed	37.0	32.8	50.0	53.9	12.9	10.8
Lone parent not employed		3.0		23.0		0.3
All GB total (Unweighted sample sizes)	37.6 (2145)	19.1 (2493)	44.7 (2943)	32.3 (5161)	32.9 (2059)	14.3 (2059)

Sample: All MCS-1 mothers. *Childcare usage represents type of childcare used whilst at work only. **Childcare usage represents type of childcare used at any time. Weighted by GB weight.

There were also differences in childcare use depending on the ethnicity of the mother. Black Caribbean (39 per cent) and White employed mothers (38 per cent) were the most likely to use formal childcare, in marked contrast to employed Pakistani/Bangladeshi mothers, 14 per cent of whom used formal childcare (Table 4.8). Grandparent provision of childcare was highest amongst employed Indian and Pakistan/Bangladeshi mothers (around 57 per cent). Roughly a third of mothers from all ethnic groups used the father of their baby for childcare, except Black Caribbean mothers where the proportion was far lower at less than one in five. These were resident fathers in the vast majority of cases; only in the case of Black Caribbean mothers did non resident fathers (22 per cent) take a larger role in childcare.

Table 4.8 Type of care while mother at work, by ethnicity

Employed mothers childcare usage	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB Total %
Looks after child, self	5.8	7.3	8.4	4.5	2.6	4.9	5.8
Father looks after	32.8	30.0	33.1	18.1	30.2	34.6	32.6
Grandparent	45.2	56.9	56.6	33.8	18.0	37.7	44.9
Formal provider	37.7	26.0	14.2	38.9	35.3	32.2	37.1
Maximum unweighted sample size	6268	173	115	99	114	143	6912

Sample: All MCS-1 employed mothers. Weighted by GB weight. Multiple response allowed.

Use of childcare also varied considerably by mothers' socio-economic status (Table 4.9). Nearly 7 per cent of mothers in semi-skilled/unskilled jobs reported using formal childcare whilst at work in contrast to 65 per cent of mothers employed in managerial or professional jobs. Mothers employed in skilled jobs were the most likely to use grandparent childcare (54 per cent), compared to mothers employed in managerial/professional jobs (34 per cent). A higher proportion of fathers in lower socio-economic families were involved in childcare, as other studies have found (La Valle et al., 2002).

Table 4.9 Use of types of care, by occupation of employed mothers

Employed mothers' childcare usage	Mother's occupation						Per cent
	Managers & Prof.	Assoc. Prof.	Admin. & Clerical	Skilled manual	Personal & Sales	Semi- skilled & Unskilled	All GB total %
Looks after child, self	4.4	3.1	6.7	9.5	8.6	4.9	5.8
Father looks after	19.5	32.5	22.9	36.7	44.0	53.4	32.5
Grandparent	34.1	42.4	52.3	54.2	50.8	43.8	45.0
Formal provider	64.6	51.1	33.7	26.1	17.7	6.6	37.2
Maximum unweighted sample size	1490	1178	1460	115	1770	850	6863

Sample: All MCS-1 employed mothers. Weighted by GB weight. Multiple response allowed.

A minority of mothers paid for childcare; 38 per cent of all mothers and 45 per cent of employed mothers (Table 4.10). Paying for childcare was highest amongst employed

Black Caribbean mothers (55 per cent) who were also the most likely to be lone parents and the least likely to use fathers to help with childcare. A substantially lower proportion of employed Pakistani and Bangladeshi mothers paid for childcare (18 per cent).

Table 4.10 Mothers who use childcare and report they pay for it

Employed mothers' childcare usage*	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB total %
All Mothers							
% pay for childcare	39.7	25.5	6.9	43.4	35.4	30.7	38.4
Maximum Unweighted sample size	7930	266	468	139	146	227	9176
Employed mothers only							
% pay for childcare	45.4	32.5	17.5	55.0	40.9	42.0	44.9
Maximum unweighted sample size	5713	162	108	93	98	125	6299

Sample: All MCS-1 mothers * Childcare usage refers to mothers reports of childcare used *at any time*, including whilst mother is at work. Weighted by GB weight.

4.4 Summary

The number of earners in the family was strongly related to the age of the mother when she gave birth to the Millennium baby. Two earner couples were most likely to have a mother aged 27 or older and half gave birth to their first child. Lone parents were most likely to have been teenage mothers. Employed lone mothers were most likely (70 per cent) to be giving birth to their first child.

Father only earner families were the predominant pattern among Bangladeshi and Pakistani families (two-thirds) and to a lesser extent Indian families, as judged by the mother's ethnicity. White families were equally likely to have either 1.5 earners or a father only employed pattern when the baby was 9-10 months old, around a third of each. Black Caribbean and Black African mothers were the most likely to be lone parents, either employed or not employed.

Following childbirth many couple families moved from being 2 earner households to the father only earner model. There were also other shifts to more traditional families, where the father became the main or sole wage earner, from less traditional patterns where the mother fulfilled this role, and movement from employed lone parent to not employed lone parent.

Use of formal childcare while mothers worked was most infrequent at the low end of the occupational spectrum and greatest among higher socio-economic groups and 2 full-time earner couples. Families relied heavily on grandparent care, ranging from between one third to over one half depending on the mother's occupation. Fathers provided childcare most in couples where the mother was the main earner. These couples also used grandparent care to a lesser extent than other families.

Employed Black Caribbean and White mothers were the most likely to use formal providers and to pay for childcare, whereas Pakistani and Bangladeshi mothers were the least likely. Along with Indian mothers, South Asian mothers had the highest rate of using grandparents for childcare.

5 PARENTS' EMPLOYMENT UP TO AGE 3

5.1 Mother's employment when child aged 3

There was an increase in mothers' employment rates across all ethnic groups compared with when their child was aged 9-10 months (Figure 2.1). Overall, 55 per cent of mothers were employed and 41 per cent were looking after the family and home when the cohort child was 3 years old (Table 5.1). Pakistani and Bangladeshi mothers were the least likely to be employed, whereas Indian and Black Caribbean mothers were the most likely to be employed. Around four out of five Pakistani and Bangladeshi mothers were looking after the family and home.

Table 5.1 Mothers' economic activity when cohort child aged 3, by ethnicity

Mother's economic activity	Mother's ethnicity							Per cent
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	All GB total %
Currently employed	57.1	63.8	15.1	17.5	60.4	48.9	38.7	55.2
Looking after family and home	39.4	35.0	81.6	78.5	31.6	43.9	53.7	41.2
Not employed*	2.4	0.8	2.5	4.0	5.4	1.7	4.3	2.5
In education or government training scheme	1.0	0.4	0.9	0.0	2.6	5.5	3.3	1.1
Unweighted sample size	11148	376	677	260	181	251	397	13290

Note: All MCS-2 mothers. * Due to small sample sizes, not employed group refers to those who are out of work due to ill-health or other reasons, as well as those who are out of work but currently seeking employment. Weighted by GB.

Employment rates were higher for more highly qualified mothers while rates of looking after the family increased progressively as the level of educational qualifications fell (Table 5.2). The employment rate for mothers with degree level qualifications (NVQ 4 or 5) was 70 per cent compared with 23 per cent for mothers without qualifications. This strong relationship between employment and educational qualifications was also visible in the age 9-10 months employment rates.

Table 5.2 Mothers' economic activity when cohort child aged 3, by highest educational qualification

Mother's economic status	Mother's education					Per cent
	NVQ 4 & 5	NVQ 3	NVQ 1 & 2	Overseas Qualification	None of these	All GB total %
Currently employed	70.1	59.6	49.7	27.1	23.3	55.4
Looking after family and home	27.6	35.6	46.5	68.2	71.6	41.0
Not employed*	1.7	2.7	2.7	3.9	4.0	2.5
In education or government training scheme	0.7	2.1	1.2	0.9	1.1	1.1
Unweighted sample size	4156	1921	4920	376	1927	13300

Sample: see Table 5.1

Nearly two-thirds of employed mothers reported making use of part-time working arrangements from their current employer (Table 5.3), ranging from 72 per cent of mothers employed in personal and sales jobs to 55 per cent of those employed in managerial/professional jobs. Around three in ten employed managerial/professional and associate professional mothers said that they had the ability to change hours compared with one in ten mothers employed in semi-skilled and unskilled jobs.⁷

Mothers' use of flexible working arrangements varied by ethnicity in ways that are difficult to summarise (Table 5.4). White mothers were far more likely to use part-time employment than other ethnic groups; nearly two-thirds worked part-time compared with one third of Black Caribbean and Black African employed mothers. This could, in part, be due to the latter groups greater likelihood of being lone parents. Part-time employment is often unsuitable for lone parents since it does not bring in sufficient income to live off. Little variation was found by country.

⁷ These figures are not directly comparable with the age 9-10 month figures since those were based only on the sample of mothers who said their employer offered access to flexible working arrangements of some kind. The questions changed between MCS 1 and MCS 2 due to pressure on space in the questionnaire.

Table 5.3 Employed mothers' use of flexible working arrangements, by occupation

Mothers – flexible working patterns used	Mother's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	All GB total %
Part-time working	55.4	63.3	66.8	63.4	72.4	64.5	64.6
Job-sharing	12.5	9.5	12.1	5.5	4.7	2.8	8.8
Flexible working hours	29.5	31.5	41.4	26.4	20.3	23.6	29.6
Working at or from home occasionally	28.6	16.7	14.1	6.2	1.1	2.4	13.4
Working at or from home all the time	3.7	2.4	5.6	2.2	0.6	0.2	2.8
Special shifts (i.e. evenings, school hours)	8.2	20.6	11.4	18.7	26.0	21.6	17.1
9-day fortnights/ 4.5 day working week	2.0	2.2	0.8	1.3	0.9	0.1	1.3
School term-time contracts	13.0	4.4	4.9	8.3	8.2	6.5	7.7
Ability to change from full to part-time	28.4	30.2	24.8	26.0	18.4	10.1	23.6
None of these	13.0	8.9	9.3	10.2	8.3	13.7	10.3
Unweighted maximum sample size	1278	1069	1346	126	1619	677	6115

Sample: Tables 5.3-5.6, all MCS-2 employed mothers. Weighted by GB weight.

MCS mothers were also asked whether their employer offered them any of another set of family friendly provisions (Table 5.5). 'Time off for family emergencies' (54 per cent) and 'a telephone to use for family reasons' (45 per cent) were the most commonly provided. Access to these provisions varied by occupational group and, in every case, mothers working in semi or unskilled jobs had lower levels of access than mothers in other occupations. Over two-fifths of mothers in this occupational group had no access to any of the provisions cited.

In contrast, associate professionals, possibly because many work in the public sector, often had the highest access and was the group least likely to have no access to any of the provisions on the list, 16 per cent. They also had the highest access to childcare provisions as a whole. Eight per cent of employed mothers in associate professional jobs reported having access to a workplace crèche or nursery, compared to only 1 per cent of mothers working in semi-skilled/unskilled jobs.

Table 5.4 Employed mothers' use of flexible working arrangements, by ethnicity

Mothers - flexible working patterns used	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB Total %
Part-time working	65.7	54.4	56.7	33.6	33.8	42.6	64.3
Job-sharing	9.2	2.1	10.0	3.9	4.6	1.9	8.8
Flexible working hours	29.4	34.0	40.8	36.3	30.8	33.0	29.8
Working at or from home occasionally	13.6	15.4	10.7	15.0	11.1	12.9	13.6
Working at or from home all the time	2.8	5.1	2.0	4.1	0.0	0.8	2.8
Special shifts (i.e. evenings, school hours)	17.1	15.0	14.1	12.5	8.1	22.1	16.9
9-day fortnights/ 4.5 day working week	1.3	1.2	0.0	4.3	0.0	0.8	1.3
School term-time contracts	7.7	9.1	16.3	6.8	6.0	3.7	7.7
Ability to change from full to part-time	24.0	23.1	22.9	18.3	20.1	17.3	23.8
None of these	9.7	15.8	9.3	21.4	22.0	24.7	10.3
Unweighted maximum sample size	5623	195	106	97	84	119	6224

There were few variations by country; employed mothers living in England were more likely to be offered financial help with childcare/childcare vouchers (9 per cent) compared to mothers in Wales and Scotland (6 per cent). However, family friendly provisions did vary by ethnicity (Table 5.6). Pakistani and Bangladeshi and Black Caribbean employed mothers reported access well above the average to workplace nurseries, help to find childcare, and in the case of Pakistani and Bangladeshi mothers, of career breaks. Black African employed mothers were the most likely to report access to financial help with childcare/childcare vouchers.

Table 5.5 Employed mothers offered family friendly provisions by their employer, by occupation

Mothers - additional assistance offered	Mother's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin & clerical	Skilled manual	Personal & sales	Semi- skilled & unskilled	All GB Total %
Financial help with childcare/childcare vouchers	10.2	11.3	8.3	10.3	6.7	4.3	8.5
Workplace nursery or crèche	6.2	8.0	3.3	5.6	4.3	1.4	5.0
Other nurseries supported by employer	1.2	1.3	0.9	2.6	0.5	0.2	0.9
Help with finding childcare facilities away from the workplace	2.5	4.0	2.8	2.6	2.1	1.4	2.6
Care for children after school hours or during school holidays	7.6	7.2	5.9	6.2	4.1	3.8	5.9
Time off for family emergencies	54.3	60.5	56.6	51.6	50.0	41.6	53.6
Career breaks for personal reasons	8.6	8.5	7.5	7.6	6.2	5.0	7.4
Paternity leave (time off work for fathers)	2.9	2.7	2.4	4.8	1.4	1.6	2.3
Parental Leave	18.1	18.9	18.4	20.1	12.8	8.5	16.2
A telephone to use for family reasons	45.7	48.1	54.9	46.1	37.7	30.4	44.8
None of these	21.1	15.8	21.2	26.1	29.5	41.2	24.3
Unweighted maximum sample size	1278	1069	1346	126	1619	677	6115

Table 5.6 Employed mothers offered family-friendly provisions by their employer, by ethnicity

Mothers – additional assistance offered	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB Total %
Financial help with childcare/childcare vouchers	8.7	6.5	8.1	7.8	13.2	3.6	8.6
Workplace nursery or crèche	4.8	2.2	8.0	11.6	5.5	9.8	5.0
Other nurseries supported by employer	0.9	1.2	1.5	0.0	0.0	1.0	0.9
Help with finding childcare facilities away from the workplace	2.6	3.3	8.0	4.8	3.9	1.2	2.7
Care for children after school hours or during school holidays	5.9	5.5	6.8	7.7	4.2	9.4	6.0
Time off for family emergencies	54.1	47.2	53.6	49.2	39.8	50.1	53.7
Career breaks for personal reasons	7.2	9.3	15.7	6.0	5.8	10.1	7.4
Paternity leave (time off work for fathers)	2.2	2.5	6.3	0.0	4.4	4.9	2.3
Parental Leave	15.9	22.1	19.8	15.9	16.9	20.7	16.2
A telephone to use for family reasons	45.3	43.2	41.3	37.9	41.4	36.7	44.9
None of these	24.3	23.9	21.6	21.0	24.3	25.6	24.3
Unweighted maximum sample size	5623	195	106	97	84	119	6224

5.2 Mothers' employment trajectories since childbirth

By the time their child was aged 3, substantial proportions of mothers had changed their employment status (Table 5.7). Of those who were employed when the cohort child was aged 9-10 months, 14 per cent had left work to look after the family and home, and a further 1 per cent were not employed, doing other things. Of mothers who had been out of paid work when the cohort baby was 9-10 months but who had previous work experience, 27 per cent were employed by age 3. Of mothers who had never been in paid work when their child was 9-10 months, 9 per cent were employed by the time the child was 3. This group of never employed mothers at age 9-10 months were the least likely to change their economic activity.

Table 5.7 Mothers' economic activity status when cohort baby aged 9-10 months, by mothers' economic activity status when child aged 3
Per cent

Mothers' employment status when cohort baby aged 9-10 months	Mother's employment status when child aged 3				Unweighted sample size
	Employed	Looking after family and home	Not employed *	In education or government training	
Employed	84.2	13.8	1.4	0.6	6158
On leave from a paid job	41.7	53.4	3.8	1.1	327
Employed in the past but not currently employed	27.0	67.9	3.4	1.6	5517
Never had a paid job	8.9	84.1	5.1	2.0	1295
Per cent at age 3	55.3	41.2	2.5	1.1	13297

Sample: All MCS-1 and MCS-2 mothers. * Due to small sample sizes, not employed group refers to those who are out of work due to ill-health or other reasons, as well as those who are out of work but currently seeking employment. Weighted by GB weight.

The main trajectories are summarised and shown in Figure 5.1, building on the earlier Figure 2.3. Because there is attrition in the MCS sample between the first and second sweeps, we have used the sample sizes for those who completed the second sweep interviews to complete the trajectories up to the child being 3 years old.

There were two possible outcomes by age 3, either employed or not employed. The largest single group was a continuously employed core group of mothers who worked in pregnancy, went on maternity leave, returned by 9-10 months after childbirth and continued employment without interruptions until age 3. This group constituted 33 per cent of MCS mothers overall, 53 per cent of those who were employed at pregnancy, and 77 per cent of those who went on maternity leave. Around 6 per cent of those who went on leave went on to have intermittent employment up to the child being 3 years old, but were employed at age 3; others (18 per cent) had intermittent employment to age 3 but were not employed at age 3.

Mothers who were employed during pregnancy but stopped work by childbirth were slightly more likely not to be in employment than in employment when their child was aged 3, although a majority had been in employment at some stage during the 3 year period. Similarly, of those who were not employed during pregnancy, the majority were also not employed at age 3. However, a small proportion did have some, mainly intermittent, employment experience. Fewer than 10 per cent of those who had never been employed by age 9-10 months, had some employment experience by age 3.

These data illustrate clearly the intermittent nature of many mothers' employment history up to the point where their child is 3. To summarise, 33 per cent were continuously employed, 29 per cent had spells of intermittent employment between their child being aged 9-10 months and 3 years, and 35 per cent had not worked since pregnancy or before. Just 3 per cent were not employed in pregnancy but then went on to steady employment in their child's early years.

Table 5.8 displays some of the characteristics of the trajectories that had sufficient sample sizes to be analysed. Mothers who were in employment during pregnancy were more likely to be having their first child. Twenty-three per cent of mothers had had a subsequent child to the cohort baby by the time the cohort child was aged 3. These mothers reported the highest rates of intermittent employment and were less likely to be employed when the child was 3.

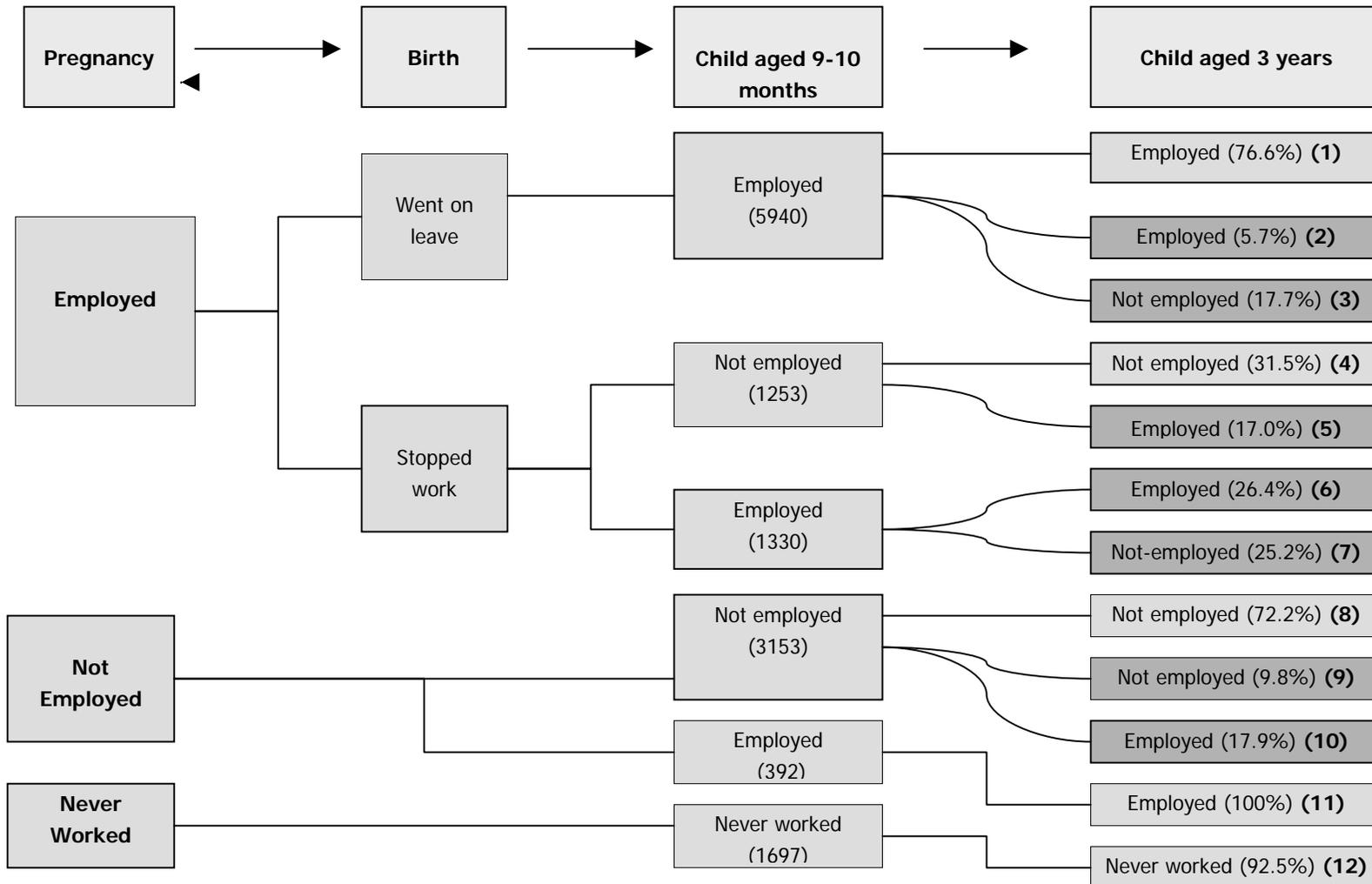
Over 70 per cent of women in the continuously employed trajectory were in the highest occupational groups. Similarly, over half the mothers who were employed during pregnancy and when their child was 9-10 months but then went on to be employed intermittently, also belonged to these occupational groups. (A fuller breakdown of employed mothers' occupations when their child was aged 3 is shown in Appendix table A5.3.)

The vast majority of mothers across all trajectories had a partner when their child was 9-10 months of age. Mothers who had never worked were least likely to report having a partner (67 per cent) whereas mothers who had worked continuously were the most likely to have one (95 per cent).

Mothers who had never worked by the time the child was 3 were the most likely to be in a household with a low income (60 per cent). Those who were not in employment when their child was 9-10 months, nor when it was 3 years old, regardless of whether or not they had worked between those ages, were also more likely to be in a low income household, ranging from one third to one half of mothers in these groups. Clearly, households where the mother was employed were far less likely to be low income households.

Use of flexible working arrangements was, not surprisingly, very high for mothers who were either continuously employed throughout (77 per cent) or had a predominantly employed trajectory and had been on maternity leave (70 per cent). There was a small group who were not employed when pregnant, but who had gone back to work by age 9-10 months and then stayed continuously employed who also had a high usage rate of flexible working arrangements (61 per cent). This is mainly because of their use of part-time working flexibility.

Figure 5.1 Mothers' employment trajectories from pregnancy to when child aged 3



Note: Being continuously in a state is indicated by a straight line. Being intermittently in that state is indicated by a curved line.

Table 5.8 Mothers' employment trajectories since the birth of the cohort baby, by family situation

Employment trajectory				Mothers' circumstances %							
Employed (E), Intermittently employed (I) or Not employed (N) when child aged:				First birth= cohort child	New birth since cohort child	SOC 1,2,3 at MCS-1	SOC 1,2,3 at MCS-2	Partner at MCS- 1	Low household income at MCS-2	Used any flexible working policies in MCS-1	Unweighted sample size
Pregnancy	9-10 months	Between 9/10 months and 3	3								
Employed, went on leave	E	E	E	49.9	20.9	71.6	71.9	95.4	5.2	77.2	4549
Employed, went on leave	E	I	E	46.3	13.8	53.1	53.7	91.6	11.2	70.0	341
Employed, went on leave	E	I	N	54.2	36.3	52.3	0.0	92.1	17.9	60.8	1050
Employed, stopped work	N	N	N	59.0	33.8	37.7	0.0	78.6	35.1	-	814
Employed, stopped work	N	I	E	45.5	13.8	39.9	39.9	85.5	13.6	-	439
Employed, stopped work	E	I	E	50.6	19.0	54.8	52.0	90.8	11.8	29.0	681
Employed, stopped work	E	I	N	63.8	38.3	56.0	0.0	89.1	22.1	12.0	649
Not employed	N	N*	N	15.9	19.7	38.4	0.0	81.9	31.4	-	2278
Not employed	N	I	N	24.5	27.3	21.0	0.0	70.6	49.2	-	311
Not employed	N	I	E	14.2	8.4	40.9	34.1	85.2	18.1	-	564
Not employed	E	E	E	25.8	18.7	25.4	24.4	85.9	22.4	61.4	415
Never worked	N	N	N	31.2	28.3	0.0	0.0	67.2	59.8	-	1697
All GB Total				42.2	23.2	50.5	35.8	87.7	23.7	39.3	13788

Note: All MCS-1 and MCS- 2 mothers. * This group contains a few individuals who had a short spell of employment between 9-10 months and age 3, before returning to not being employed at age 3, but were mostly not employed throughout. Weighted by GB weight.

For further analysis related to these trajectories it was necessary to amalgamate some groups into a smaller set of categories. Six main categories were produced by taking the two extremes of continuous employment and never employed, and combining other groups largely on the basis of whether mothers had been mainly employed or not employed. They are described below in Table 5.9.

Table 5.9 Mothers' amalgamated employment trajectories to when child aged 3

Mother's employment trajectory from pregnancy to child aged 3	%	Groups covered in Figure 5.1
Continuously employed from pregnancy to when child aged 3	33.0	(1)
Stopped work after pregnancy and no return made by child aged 3	5.9	(4)
Employed during pregnancy, intermittent spells in and out of employment following pregnancy, employed when child aged 3	5.7	(2, 5)
Employed during pregnancy, intermittent spells in and out of employment following pregnancy, not employed when child aged 3	12.6	(3, 6)
Not employed (intermittent spells of employment, but overall remained not employed)	30.6	(7, 8, 9, 10, 11)
Never worked	12.3	(12)
N	13788	

Sample: All MCS-1 and MCS-2 mothers.

Note: The very small group (n=111) of those never employed up to age 9-10 months who went on to be employed by age 3 were added into the 'Not employed' group above. There were also a small group (n=156) who were never employed up to age 9-10 months but had intermittent periods of employment between MCS1 and MCS2, but at MCS2 reported that they had never worked. This group have remained in the never worked category.

There were interesting variations in mothers' employment trajectories depending on their qualifications (Table 5.10). The two largest groups were where the majority of mothers had degrees in the case of the continuously employed (51 per cent), or the majority had no qualifications in the case of the never employed (58 per cent). In contrast, only 2 per cent of the continuously employed trajectory had no qualifications.

Similar proportions of mothers with NVQ level 1 and 2 and degree level qualifications (NVQ 4 and 5) had been employed intermittently since the birth of the cohort child. A higher proportion of mothers who reported that they stopped work after their pregnancy and made no return since, or were not employed at pregnancy and had

only short intermittent spells of employment thereafter, were educated to NVQ level 1 or 2, around 45 per cent.

Table 5.10 Mothers' employment trajectory from pregnancy to when child aged 3, by mothers' education

Mother's employment trajectory from pregnancy to child aged 3	Mothers' education					Per cent
	NVQ 4 & 5	NVQ 3	NVQ 1 & 2	None	Overseas	Sample size
Continuously employed from pregnancy to when child aged 3	51.2	16.0	30.0	2.2	0.6	4549
Stopped work after pregnancy and no return made by child aged 3	25.2	16.0	44.4	11.5	2.9	813
Employed during pregnancy, intermittent spells in and out of employment following pregnancy, employed when child aged 3	36.1	14.6	40.0	8.2	1.1	780
Employed during pregnancy, intermittent spells in and out of employment following pregnancy, not employed when child aged 3	38.2	15.8	38.6	5.3	2.1	1730
Not employed (intermittent spells of employment, but overall remained not employed)	23.6	13.5	45.6	14.8	2.6	4214
Never worked	4.8	4.0	22.9	58.0	10.3	1694
All GB total	35.2	14.2	36.8	11.5	2.3	13780

Sample: All MCS-1 and MCS-2 mothers . Weighted by GB weight.

Clearly higher educational qualifications are associated with a trajectory of continuous employment or near continuous employment. This fits with economic theories that suggest the opportunity cost of not working is greater for these highly qualified mothers.

Pakistani and Bangladeshi mothers were the least likely to report continuous employment patterns (7 per cent) and instead were more likely to have never worked (Pakistani 49 per cent and Bangladeshi 64 per cent). In contrast, nearly 2 in 5 Black Caribbean, White and Indian mothers had worked continuously.

Around a third of mothers who reported breaks from employment since the cohort child was 9-10 months old had had another birth compared with 21 per cent of the continuously employed. At the time of the interview, a further 7 per cent of mothers reported they were pregnant. Mothers who had spent more time working tended to have fewer children. By the time the cohort child was 3, 18 per cent of the

continuously employed had 3 or more children compared with 51 per cent of those who had never worked, and 40 per cent of those who had spent a lot of time out of work. Around three in ten Indian and Black Caribbean mothers had only one child, compared with two in ten Black African and Pakistani mothers. Nearly 60 per cent of Bangladeshi mothers had two or more previous children in the household as well as the cohort child, compared to 26 per cent of White mothers.

5.3 Couples' employment status when child aged 3

By the time the cohort baby reached the age of 3, 35 per cent of parents in GB were in a 1.5 earner partnership with the father employed full-time and the mother employed part-time (Table 5.11). This type of family was the most common among White (37 per cent) and Indian (33 per cent) mothers, in contrast to its low frequency among families where the mother was Pakistani or Bangladeshi.

Table 5.11 Couples' partnership and economic status when child aged 3, by ethnicity

Mother's economic activity*	Mother's ethnicity							Per cent
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	All GB Total %
Both employed full-time	10.3	25.1	1.6	2.5	19.6	17.3	12.2	10.6
Both employed, father ft and mother pt	37.3	33.0	7.0	7.2	14.5	15.6	16.5	35.4
Both employed, father pt and mother ft	2.2	3.9	2.2	3.1	2.7	5.0	2.4	2.2
Mother employed, father not employed	1.9	2.6	4.5	6.3	2.5	0.5	2.9	2.0
Father employed, mother not employed	28.4	23.9	59.8	51.4	10.6	15.6	35.7	29.0
Both not employed	4.0	5.0	13.2	17.3	2.4	8.6	8.2	4.4
Lone parent employed	5.8	3.0	1.7	1.9	20.3	7.4	4.7	5.8
Lone parent not employed	10.1	3.5	10.0	10.3	27.3	30.0	17.4	10.5
Unweighted sample size	9656	312	475	153	168	199	343	11306

Sample: All MCS-2 mothers (excluding families where an eligible father did not take part in the interview, approximately 1,764 cases). Weighted by GB weight.

Indian mothers were the most likely to live in a two-parent household where both parents were employed full-time; Pakistani mothers the least likely. The majority of Pakistani and Bangladeshi mothers were in two-parent households where the father only was employed whereas a far lower percentage of Black African and Black Caribbean mothers lived in this type of family.

The employment status of couples was broadly similar when the child was 9-10 months old and at age 3 (Table 4.5) but with some differences by ethnicity. At age 3, a larger proportion of Indian families were in the two full-time earner and 1.5 father full-time, mother part-time categories and a lower percentage in the father only employed category. There were reductions in father-only employed and non-employed couple families and a slight parallel increase in 1.5 earner family type among Pakistani and Bangladeshi families. In Black Caribbean families there was a reduction in the proportion of lone parents who were not employed and an increase in two full-time earner and 1.5 earner couple households. The actual transitions between these categories are shown for the whole sample in Table 5.13.

Table 5.12 Total number of children in the household when child aged 3, by couples' partnership and employment status

Family employment status when child aged 3	Total number of children in the family*			Per cent
	1, cohort only	2 children	3 or more children	Unweighted sample size
Both employed full-time	38.8	47.4	13.8	1154
Both employed, father ft and mother pt	24.9	54.1	21.1	3581
Both employed, father pt and mother ft	26.5	45.3	28.2	275
Mother only employed	27.6	46.8	25.6	249
Father only employed	13.4	52.7	33.9	3218
Both not employed	14.3	33.4	52.3	680
Lone parent employed	53.7	30.9	15.4	710
Lone parent not employed	34.5	36.8	28.7	1465
All GB total %	25.3	48.6	26.2	11332

Sample: All MCS-2 mothers (excluding families where an eligible father did not take part in the interview, approximately 1,764 cases). Total number of children represents all children (born to the cohort mother) living in the household including the cohort baby (or babies) at the time of interview. *Total number of children includes any subsequent births (natural child of cohort mother and sibling to cohort baby). Weighted by GB weight.

Employed lone parents (54 per cent), not employed lone parents (35 per cent) and two full-time earner (39 per cent) families were the most likely to have only one child (Table 5.12). Having a greater number of children, not surprisingly, was linked to

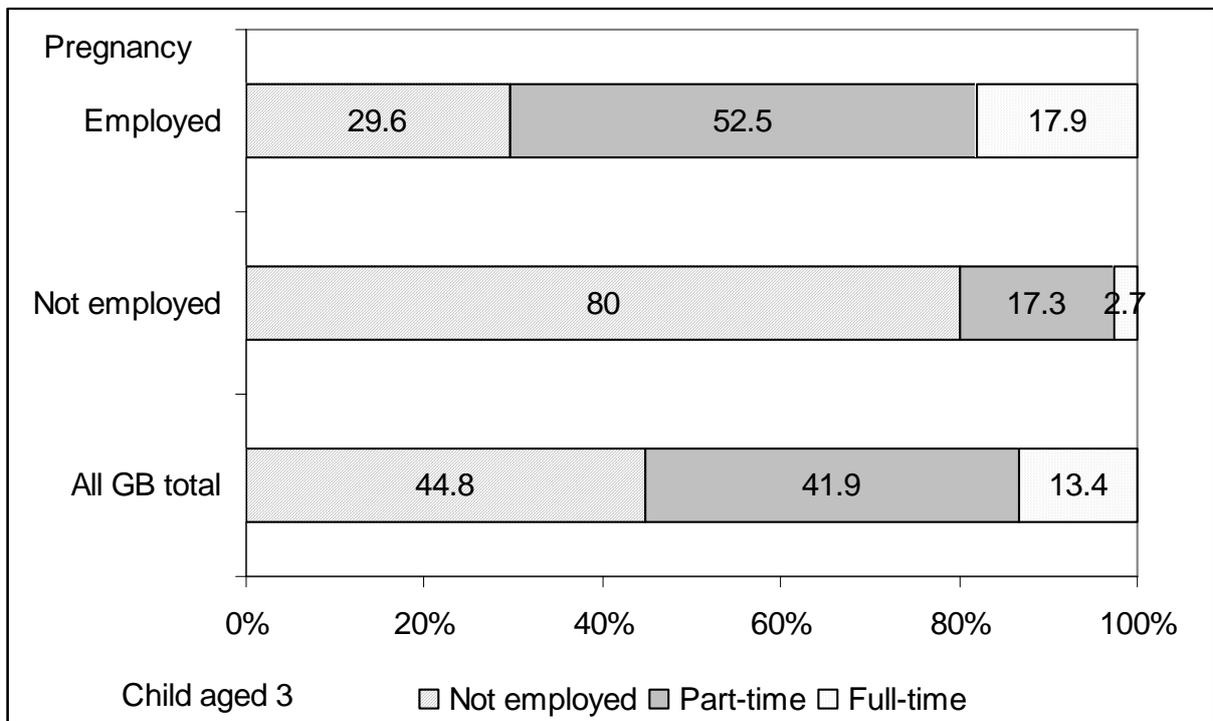
mothers working less than full-time, or not being in paid work at all at this time. Non-earner couple families and father only employed families were most likely to have 3 or more children, 52 per cent and 34 per cent respectively.

Fathers' leave taking around the birth of the child varied with the couples' employment status when the child was aged 3. Over 80 per cent of fathers who were in two full-time and 1.5 earner couples at age 3 had taken leave, 79 per cent where the father only was employed. Interestingly, fathers' levels of leave taking around the birth were lower in families where there was role reversal by age 3; 68 per cent of families with a full-time employed mother and part-time employed father, or where the mother only was employed at age 3; and in 62 per cent of cases where neither parent was employed.

5.4 Changes in family employment status and hours of work

As seen earlier in Figure 5.1, 70 per cent of mothers who were employed during their pregnancy with the cohort child were still employed when the child was 3, and 30 per cent were not employed. Of mothers who were not employed during their pregnancy, 20 per cent moved into employment by the time their child was 3 years old. Figures 5.2 and 5.3 compare mothers' employment status.

Figure 5.2 Mothers' employment status during pregnancy, by employment status when child aged 3

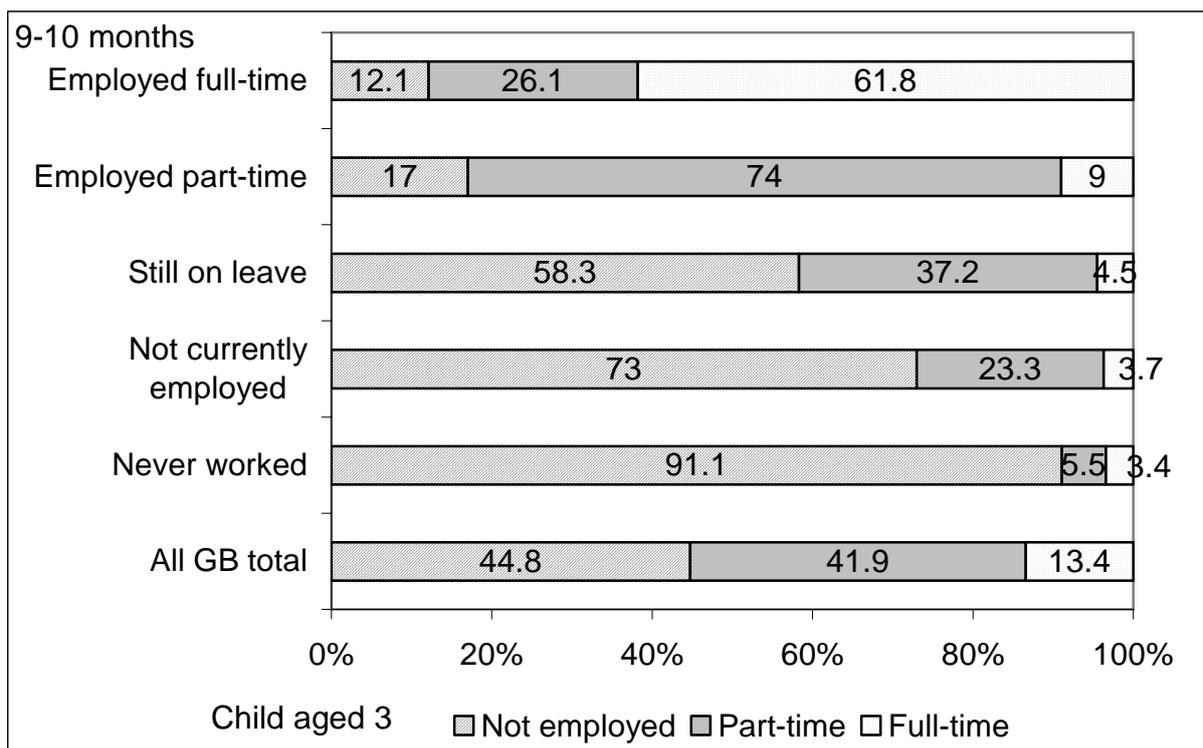


Sample: All MCS-1 and MCS-2 mothers. Weighted by GB weight.

Over half of all mothers who were living in a two full-time earner household when the cohort child was 9-10 months old, were still employed full-time when the cohort child

was aged 3 (Table 5.13); nearly 13 per cent had moved into a father only employed household. Families where the mothers worked part-time and the father full-time when the cohort baby was 9-10 months old, were most likely to have the same employment status at age 3 (69 per cent), although nearly 16 per cent of these families had moved into a father only employed category.

Figure 5.3 Mothers' employment status when cohort baby aged 9-10 months, by employment status when child aged 3



Sample: All MCS-1 and MCS-2 mothers. Weighted by GB weight.

There were some partnership changes during the period. Sizeable groups of lone parents moved into couple partnership status, almost one quarter were in couples by age 3. Partnership breakdowns were evident but mostly small in number (i.e. the percentage who were lone parents at age 3 but in a couple at age 9-10 months) (Table 5.13). They were highest in the no earner couples (22 per cent) and where the mother only was employed (11 per cent).

Table 5.13 Couples' partnership and employment status when child aged 9-10 months, by status when child aged 3

Work status when child aged 9-10 months	Work status when child aged 3								Unweighted sample size
	Both employed full-time	Both employed, father ft & mother pt	Both employed, father pt & mother ft	Mother only employed	Father only employed	Both not employed	Lone parent employed	Lone parent not employed	
Both employed full-time	54.8	24.2	1.8	2.0	12.5	0.7	3.5	0.5	1209
Both employed, father ft and mother pt	7.0	69.1	1.6	1.2	15.6	0.5	3.8	1.1	3168
Both employed, father pt and mother ft	9.4	31.1	36.4	4.2	13.4	3.0	1.6	1.0	177
Mother only employed	11.5	21.5	8.7	24.0	15.3	8.2	6.1	4.8	242
Father only employed	2.9	21.5	1.4	1.4	60.9	3.5	2.1	6.3	3516
Both not employed	0.6	3.5	1.7	3.1	25.4	44.1	2.2	19.3	804
Lone parent employed	5.2	11.6	1.7	2.0	3.5	0.4	55.8	19.7	423
Lone parent not employed	0.3	3.8	0.5	1.0	9.5	6.5	11.7	66.8	1382
Total GB	10.4	34.8	2.2	2.0	29.7	4.6	5.7	10.7	10921

Sample: All MCS-1 and MCS-2 mothers (excluding families where an eligible father did not take part in the interview, approximately 1,764 cases). Weighted by GB weight.

Fathers in two full-time earner or 1.5 earner families when the child was 3 were the most likely to have taken leave when the baby was born (Table 5.14).

Table 5.14 Whether fathers took leave following the birth of the cohort baby, by work status when child aged 3

Father took leave when cohort baby was born	Fathers' work status when child aged 3						Per cent
	Both employed full-time	Both employed father ft & mother pt	Both employed father pt & mother ft	Mother only employed	Father only employed	Both not employed	All GB total
Yes	83.0	84.5	68.4	68.2	79.1	62.2	81.2
No	17.0	15.5	31.6	31.8	20.9	37.8	18.8
Unweighted sample size	1047	3225	223	142	2663	214	7514

Sample: All employed MCS-2 fathers (excluding families where an eligible father did not take part in the interview, approximately 1,764 cases). Weighted by GB weight.

As with fathers, taking maternity leave for mothers was associated with greater employment participation when the child was aged 3 (Table 5.15). Nearly 80 per cent of mothers who were employed when the cohort baby was 3 years old had taken maternity leave. Those who were not employed at age 3 were far less likely to have taken maternity leave.

Table 5.15 Whether mothers took maternity leave following the birth of the cohort baby, by work status when child aged 3

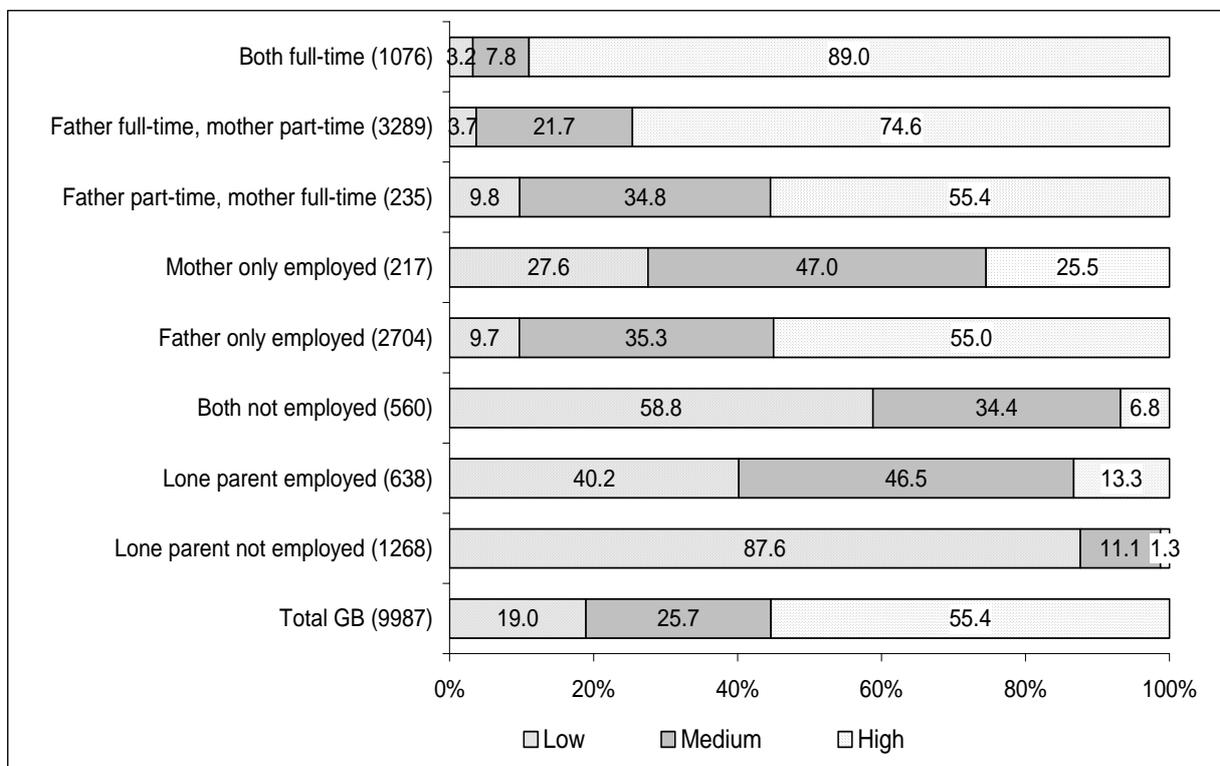
Mother took any maternity leave when cohort baby born	Mothers' work status when child aged 3				Per cent
	Currently employed	Looking after family and home	Out of work	In education	All GB total
Yes	78.9	29.4	37.4	39.7	57.0
No	21.1	70.6	62.6	60.3	43.0
Unweighted sample size	6877	5890	359	192	13318

Sample: All MCS-1 and MCS-2 mothers. Weighted by GB weight.

5.5 Family income and poverty measures at age 3

Low household income when the child was aged 3 was strongly associated with a lack of employment and with lone parent households (Figure 5.4), the same factors when the child was 9-10 months of age. Extremely high levels of low income were found for lone parents who were not employed (88 per cent) and no-earner couples (59 per cent). These two groups are likely to be wholly reliant on state benefits. Sizeable proportions of employed lone parents (40 per cent) and couple families where the mother but not the father was employed (28 per cent) also had a low income. High incomes were most common among couples with two full-time earners (89 per cent) followed by couples with 1.5 earners where the father worked full-time (75 per cent).

Figure 5.4 Economic activity status of parents, by household income



Sample: All MCS-2 families (excluding families where an eligible father did not take part in the interview, approximately 1,764 cases). Household income – Low, up to £11,000 per year; Medium, between £11,001 and £22,000 per year; High, greater than £22,001 per year. Weighted by GB weight.

Family income varied considerably by ethnicity (Table 5.16) largely because of different family employment patterns, as seen earlier. The highest frequency of low income families was among Bangladeshi (47 per cent), Pakistani and Black Caribbean families (both 40 per cent), whereas White (17 per cent) and Indian (19 per cent) families had the lowest frequency of low income households. The converse

was true for high income families, although Black Caribbean mothers were equally likely to be in a high or low income household.

Table 5.16 Household income when cohort child aged 3, by mothers' ethnicity

	Mothers' ethnicity							Per cent
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	Total
Low	17.0	18.7	40.2	47.3	40.2	31.2	29.8	18.3
Medium	26.0	24.1	42.4	36.4	19.3	22.7	28.4	26.3
High	57.1	57.2	17.4	16.4	40.5	46.1	41.8	55.4
Unweighted sample size	9948	284	446	144	153	199	312	11486

Note: Household income – Low, up to £11,000 per year; Medium, between £11,001 and £22,000 per year; High, greater than £22,001 per year. Weighted by GB weight.

Changes in income status as the child grew from 9-10 months to 3 years old are shown in Table 5.17. The most common definition of poverty is an income below 60 per cent of median income. Approximating this definition for the MCS-1 data with banded income groups, 52 per cent of families in poverty when the baby was 9 months old were still in poverty at age 3, but a sizeable percentage had moved out of poverty by this time; 38 per cent into medium income, and 11 per cent into high income. However, there was also movement into low income by nearly one in ten families that had been above the poverty line when the child was younger.

Table 5.17 Poverty status when cohort baby aged 9-10 months old, by household income when child aged 3

Family poverty status when cohort baby aged 9-10 months	Household income when cohort child aged 3			Per cent
	Low**	Medium	High	All GB total %
Above 60% median income level	8.1	22.7	69.2	7608
Below 60% median income level*	51.7	37.8	10.6	3185
TOTAL	18.0	26.1	55.9	10793

Note: Household income: Low, up to £11,000 per year; Medium, between £11,001 and £22,000 per year; High, greater than £22,001 per year. Weighted by GB weight. *When the baby was 9-10 months old, the 60% median income level was £9,048 pa. **When the child was aged 3, the 60% median income level was £10,400

5.6 Summary

Employment rates were higher for more highly qualified women, while rates of looking after the family increased progressively as the level of educational qualifications fell. Seventy per cent of mothers with a degree were in employment when their child was 3 compared with 23 per cent of mothers with no qualifications.

The majority of women who had stopped work before childbirth or who were not employed in pregnancy were not employed when their child was 3 although many had been in employment at some stage during the 3 year period. This shows the intermittent nature of many mothers' employment. Overall, 29 per cent of mothers were employed intermittently between their child being aged 9-10 months and 3 years, whereas 35 per cent had either not worked since pregnancy or before.

Even so, the largest single group (33 per cent of all MCS mothers) was a continuously employed group of mothers who worked in pregnancy, went on maternity leave, returned within 9-10 months of childbirth and continued employment without interruptions. Over 70 per cent of these mothers were in the three highest occupational groups and over half had a degree. Mothers who had spent more time working tended to have fewer children than women who were not working. Fewer than one in ten Pakistani and Bangladeshi mothers had worked continuously whereas nearly two in five White, Indian and Black Caribbean mothers had done so.

The group of mothers who had never been employed when their child was 9-10 months old were the least likely to have changed their employment status by the time the child was 3. Nearly three in five of these mothers had no qualifications.

By the time the child was 3, the most common type of family among White and Indian mothers was the 1.5 earner partnership, where the father worked full-time and the mother part-time. In contrast, the majority of Pakistani and Bangladeshi mothers were in two-parent households where only the father worked. The most common family type for Black Caribbean and Black African mothers was lone mothers who were not in employment.

Sizeable groups of lone parents had moved to couple partnership status by the time their child was 3. Partnership breakdowns were evident but very few in number.

Low family income at age 3 was firmly linked to a lack of employment, being in a lone parent household, one or more parents being out of work and ethnicity. There was substantial mobility both into and out of low income between the child being 9-10 months and 3 years old.

6 PARENTS' INVOLVEMENT WITH THEIR CHILD

6.1 Resident parents' feelings about time they spend with child

Overall, 16 per cent of mothers and 57 per cent of fathers felt that they did not spend enough time with their baby when it was 9-10 months old. Mothers who were not employed were the most likely to report that they spent plenty of time with the cohort child (89 per cent) compared with mothers who were employed full-time (21 per cent) or part-time (61 per cent) (Table 6.1). This picture was similar for fathers, where 80 per cent of those who were not employed reported spending plenty of time with the child, compared to 14 per cent of fathers who were employed full-time and 56 per cent of those employed part-time.

In general, fathers were more likely than mothers to think there was insufficient time to spend with the baby. But this fitted with their tendency to work longer hours than mothers and was closely related to employment status. Thus, around 6 out of 10 fathers **and** mothers who worked full-time felt they did not spend enough time with their 9-10 month old baby. In contrast, 8 out of 10 mothers and fathers who worked part-time felt they did spend enough time with their child.

Table 6.1 Mothers' and fathers' views of time spent with 9-10 month old baby, by employment status

Time spent with cohort baby	Employment status			Per cent
	Employed FT	Employed PT	Not employed	All GB total %
Mothers				
Plenty of time	20.7	61.3	89.0	70.4
Just enough time	20.4	21.8	7.3	14.2
Not quite enough time	38.6	14.6	3.1	11.8
Nowhere near enough time	20.3	2.3	0.5	3.7
Unweighted sample size	2042	5217	9289	16541
Fathers				
Plenty of time	13.8	55.7	79.9	21.6
Just enough time	22.9	24.2	11.9	22.0
Not quite enough time	39.9	16.4	6.7	35.9
Nowhere near enough time	23.4	3.7	1.5	20.6
Unweighted sample size	9714	612	1448	11774

Sample: All MCS-1 mothers and fathers. Weighted by GB weight.

When examined by partnership status as well as employment status, parents' views mirrored the responses above. Not employed lone parents were far more likely than employed lone parents to feel they had plenty of time with their baby (91 and 55 per cent respectively) and less likely to feel that they did not have enough time (3 per cent compared with 25 per cent of employed lone parents).

Over seven in ten Pakistani and Bangladeshi, Indian and White mothers felt they had enough time with their child aged 9-10 months compared with around six in ten Black African and Black Caribbean mothers. By the time the child was aged 3 the gap between the two groups had narrowed slightly (Table 6.2).

Table 6.2 Employed parents' reports of time spent with the baby at age 9-10 months and age 3, by ethnicity.

Time spent* with the baby, aged 9-10 months and aged 3 years	Ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB total %
Mothers - child aged 9-10 months							
Enough time	72.2	73.9	76.3	58.2	60.8	72.6	72.0
Not enough time	27.8	26.2	23.7	41.8	39.2	27.4	28.0
Unweighted sample size	6579	185	126	111	115	156	7272
Mothers - child age 3							
Enough time*	70.5	67.6	72.1	61.7	65.3	67.8	70.2
Not enough time	29.5	32.4	27.9	38.3	34.7	32.2	29.8
Unweighted sample size	6198	210	119	102	93	134	6856
Fathers – child aged 9-10 months							
Enough time*	37.0	49.5	70.9	40.2	43.3	49.6	38.8
Not enough time	63.0	50.6	29.1	59.8	56.7	50.4	61.2
Unweighted sample size	8899	327	678	101	130	299	10434
Fathers – child aged 3							
Enough time*	42.4	48.0	61.7	47.2	55.2	44.2	43.2
Not enough time	57.6	52.0	38.3	52.8	44.8	55.8	56.8
Unweighted sample size	6480	230	342	62	71	188	7373

Sample: All MCS-1 and MCS-2 mothers and fathers. *enough means the combination of 'plenty of time' and 'just enough' time and not enough means the combination of 'not quite enough' and 'nowhere near enough', time with baby. Weighted by GB weight.

Seven in ten Pakistani and Bangladeshi fathers also felt they spent enough time with their 9-10 month old child, in contrast to all other ethnic groups where the majority felt they did not spend enough time. As with mothers, the gap had narrowed somewhat between most of the ethnic groups by the time the child was 3. It is undoubtedly the case that satisfaction with the time available to spend with children is related to hours of work for both mothers and fathers as Table 6.1 demonstrates. Sample sizes were too small to enable the examination of hours of work by ethnic group, by satisfaction with time spent with their child. That said, differences in satisfaction rates could be due to the greater likelihood of men in certain ethnic groups to work part-time or to have different cultural expectations of how much time to spend with their children.

6.2 Extent resident parents look after an ill 3 year old child

When mothers were asked who looked after the cohort child when he/she was ill, most reported they did (Table 6.3). Relatively few said that the father looked after the child, but there were sizeable groups, varying by ethnicity, who said parents shared this responsibility.

Mothers and fathers were in general agreement about who took the main responsibility of looking after their child when ill; they both agreed it was mainly the mother in the majority of cases in each ethnic group, with the exception of Black African parents. White parents were the least likely and Black African parents the most likely to report sharing this responsibility (Table 6.3).

Table 6.3 Who mainly looks after 3 year old child when ill, by ethnicity, mother reports

Who mainly looks after cohort child if ill	Mother's ethnicity							Per cent
	White	Indian	Pakistani	Bangla-deshi	Black Caribbean	Black African	Other	Total
I do most of it	70.3	60.6	61.3	59.3	65.7	44.6	57.6	69.6
My (partner)	1.1	1.5	4.3	2.8	0.0	2.6	3.4	1.2
We share	28.6	37.9	34.4	37.9	34.3	52.8	39.0	29.2
Unweighted sample size	8757	223	313	80	81	93	178	9725

Sample: All MCS-2 mothers and fathers who completed self-completion questionnaire. Weighted by GB weight.

The extent to which care of a sick 3-year old was shared between parents was related to their economic partnership (Table 6.4). Sharing the care of an ill child was highest in families where the mother was the main breadwinner or the mother only was employed, followed by where both parents were employed full-time or neither

parent was employed. Families where the father only was employed or where the father was employed full-time and the mother was employed part-time were most likely to report that the mother had the main responsibility for this particular type of care.

Table 6.4 Who mainly looks after 3 year old when ill, by family economic partnership, mother reports

Who mainly looks after cohort child if ill	Work status when child aged 3						Per cent
	Both employed full-time	Both employed, father ft & mother pt	Both employed, father pt & mother ft	Mother only employed	Father only employed	Both not employed	All GB total
I do most of it	55.6	70.7	43.3	42.2	77.3	52.7	68.7
My (partner)	1.2	0.6	7.8	10.4	0.5	5.1	1.3
We share	43.2	28.7	48.9	47.4	22.2	42.2	30.0
Unweighted sample size	1076	3375	242	215	2690	508	8106

Sample: All MCS-2 mothers. Weighted by GB weight.

The proportion of parents sharing the care of an ill child was quite similar across mothers' occupations, ranging from 29 per cent of those in administrative and clerical jobs to 38 per cent of those in semi-skilled and unskilled work (Table 6.5).

Table 6.5 Who mainly looks after 3 year old child when ill, by mother's occupation, mother reports

Who mainly looks after cohort child if ill	Mother's occupation						Per cent
	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	Total
I do most of it	62.2	66.9	70.5	67.4	66.7	60.4	69.7
My (partner)	2.3	0.7	1.0	1.6	1.0	1.9	1.2
We share	35.5	32.4	28.6	31.0	32.3	37.8	29.1
Unweighted sample size	1320	1004	1199	131	1471	511	5636

Sample: All MCS-2 mothers who were in employment. Weighted by GB weight.

Who cared for the child when he/she was ill was not related to whether the father took paternity leave, annual leave or no leave at all around the birth of the child. However, the parent who did most of the care appeared to change over time (Table

6.6), more so in less traditional families. Where parents had shared the task at age 9-10 months old, approximately one half of families still did so and the other half had moved mainly to the mother doing all of it by the time the child was 3. Of mothers who did most of the care for their sick 9-10 month old child, 15 per cent were sharing this task when the child was 3.

Table 6.6 Who mainly looks after the child when ill, at different ages of the child, mother reports

Who mainly looks after cohort child (aged 9-10 months) when ill	Who mainly looks after cohort child (aged 3) when ill			Per cent
	I do most of it	My husband	We share	Unweighted sample size
I do most of it	84.0	0.6	15.4	5051
My (partner)	46.2	18.8	35.0	77
We share	48.5	1.8	49.7	3679
All GB Total %	69.7	1.2	29.1	8807

Sample: All MCS-1 and MCS-2 mothers. Weighted by GB weight.

6.3 Parents' feelings about their relationship with their 3 year old child

Both parents were asked whether they felt they had a warm relationship with the child; 95 per cent of mothers and 91 per cent of resident fathers said they did. There was slight variation by employment status in that mothers and fathers who were employed full time were slightly more likely to feel they had a warm relationship with their child (97 and 91 per cent respectively) than mothers and fathers who were not employed (94 and 85 per cent).

In the case of mothers, there was also some variation according to their employment trajectory. Only 3 per cent of mothers who had been continuously employed felt they did not have a warm relationship with their 3-year old child, compared with 15 per cent of mothers who never worked, 6 per cent of those who were mostly not working and between 4 and 7 per cent of those with intermittent employment. Having a warm relationship was also related to family income with a larger proportion of high income families (97 per cent) feeling they had a warm relationship compared with families with low incomes (92 per cent). There was no link between having a warm relationship and whether the mother took maternity leave over the birth, or how long the period of leave lasted.

For fathers, there was no link between having a warm relationship at age 3 and whether they took paternity leave, annual leave or no leave around the birth of the baby, or whether they shared the care of an ill 3 year old or left it mostly to the mother.

6.4 Fathers' involvement in certain activities with their child

The MCS looked at fathers' participation with their child in three different activities: reading; playing; and putting them to bed. Fathers' reading with their child was highly correlated with their level of educational qualification (Table 6.7). Fathers with degree level qualifications (NVQ 4 or 5) were the most likely to read to their child daily (64 per cent) and this proportion declined as the level of educational qualifications decreased, to 31 per cent of fathers who did not have any qualifications. This was still a high figure for unqualified fathers, who were probably less likely to be readers themselves. Playing with the child and putting him or her to bed were not significantly related to fathers' levels of educational qualifications.

Table 6.7 How often fathers read to 3 year old cohort child, by their education level

How often fathers report reading to the cohort child (age 3)	Father's education					Per cent
	NVQ 4 & 5	NVQ 3	NVQ 1 & 2	Overseas qualifications	None	All GB total %
Daily	63.5	52.0	41.2	38.0	30.9	51.3
Weekly	27.0	33.4	35.6	28.8	30.4	31.1
Less often/never	9.5	14.6	23.2	33.2	38.8	17.6
Unweighted sample size	3053	1294	2656	243	845	8091

Sample: All MCS-2 fathers. Weighted by GB weight.

There were also small variations in the extent of fathers' involvement with their 3 year old child by his employment status and hours of work (Table 6.8). Fathers who were employed full-time were the most likely (51 per cent) and fathers who were not working (44 per cent) were the least likely to read daily with their 3 year old, although the difference between the two groups is relatively small. The ranking was reversed for the extent of fathers playing with their child so that those who were not employed were most likely to play daily, followed by those who were employed part-time, then full-time. Hardly any fathers said they played with their child less often than once a week.

The frequency of putting the 3-year old to bed also varied by employment status, but in a way that differed slightly from the other activities. Fathers employed full-time put their 3-year old to bed daily in 23 per cent of cases; compared with fathers who were not employed (31 per cent) and fathers who were employed part-time (19 per cent). In the case of the latter, their lower involvement in this activity may be a product of working part-time in the evenings.

Table 6.8 Extent of fathers' activities with the child, by his employment status

				Per cent
Fathers extent of activities with child				
Fathers' employment status	Daily	Weekly	Less often/ Never	Unweighted sample size
Father reads to 3 year old child				
Employed full-time	50.6	32.0	17.4	7680
Employed part-time	47.2	29.0	23.8	589
Not employed	43.5	28.5	28.0	938
All GB total %	49.9	31.5	18.6	9207
Father plays with 3 year old child				
Employed full-time	77.1	22.2	0.7	7680
Employed part-time	83.3	16.0	0.7	589
Not employed	87.1	12.1	0.8	938
All GB total %	78.2	21.1	0.7	9207
Father prepares and/or puts 3 year old child to bed				
Employed full-time	23.3	66.1	10.6	7680
Employed part-time	18.5	64.6	16.9	589
Not employed	31.4	53.1	15.5	938
All GB total %	23.7	65.0	11.3	9207

Sample: All MCS-2 fathers. Weighted by GB weight.

The extent of fathers' involvement with the child varied by fathers' ethnicity. Daily reading with the child was highest among White fathers followed by Indian, then Black Caribbean and African fathers (Table 6.9). Pakistani and Bangladeshi fathers were the least likely to read to their children, and it is likely that lower educational qualifications and language differences, perhaps a lack of children's literature in their own language, would have made reading harder for these fathers.

There was less variation in the extent of fathers playing with their children. It was very unusual for fathers not to play with their child at least once a week and the vast majority of fathers, three-quarters or more, played with their child every day, with the exception of Bangladeshi (65 per cent) and Black Caribbean and African fathers (71 per cent). Putting the child to bed was a less common activity for fathers however. White fathers were the most likely to be involved in this activity at least once a week (around 90 per cent), whereas Bangladeshi and Pakistani fathers were the least likely to be involved, around four in ten reporting that they prepared and/or put their 3-year old child to bed less often than once a week or not at all. In the case of all these activities, Bangladeshi and Pakistani fathers were generally less likely than

fathers from other groups to carry them out, suggesting that different working patterns or cultural differences may be playing a part in their involvement with their young children.

Table 6.9 Extent of fathers' activities with the child, by his ethnicity

Fathers' activity with child	Fathers' ethnicity						Per cent
	White	Indian	Pakistani	Bangladeshi	Black	Other	All GB total %
Father reads to 3 year old child							
Daily	52.4	41.7	30.7	32.0	39.2	50.0	51.3
Weekly	30.9	36.3	33.5	34.3	30.9	33.5	31.1
Less often/Never	16.7	22.0	35.8	33.7	29.9	16.5	17.6
Unweighted sample size	7010	252	334	106	165	220	8087
Father plays with 3 year old child							
Daily	78.4	79.7	76.3	65.1	71.1	75.5	78.2
Weekly	21.0	19.3	21.9	29.0	26.1	24.2	21.2
Less often/Never	0.6	1.0	1.8	6.0	2.8	0.4	0.7
Unweighted sample size	7010	252	334	106	165	220	8087
Father prepares and/or puts 3 year old child to bed							
Daily	24.3	24.9	14.2	19.9	23.3	25.5	24.1
Weekly	66.1	54.0	48.6	39.1	59.4	59.7	65.1
Less often/Never	9.5	21.1	37.2	41.0	17.3	14.8	10.8
Unweighted sample size	7010	252	334	106	165	220	8087

Sample: All MCS-2. Weighted by GB weight. 'Black' is Black African plus Black Caribbean.

Fathers who had taken some form of leave around the birth of their child read to their child with a greater frequency than those who had not taken leave (Table 6.10) whereas the extent of fathers playing with the child hardly varied at all according to the type of leave they had taken. However, there was a small but significant variation in the proportion of fathers who put their child to bed daily, 25 per cent of those who had taken leave compared with 22 per cent of cases where the father had not. The differences apparent in fathers' reading to their child according to their leave taking, may be largely explained by their qualifications, occupation and ethnicity.

Table 6.10 Extent of fathers' reading with the child, by type of leave taken around the birth

Fathers' leave	Fathers' extent of reading activities with 3 year old child			Per cent	Unweighted sample size
	Daily	Weekly	Less often/ Never		
Paternity/parental leave only	52.8	31.2	16.0		1763
Annual or sick leave only	51.3	31.3	17.4		1847
Paternity and annual/sick leave	60.0	29.1	10.9		1707
Taken some leave	53.9	30.9	15.3		5909
No leave taken	42.9	33.4	23.7		1676

Sample: All MCS-2 fathers. Weighted by GB weight.

6.5 Absent fathers' involvement with their child

Sixty-four per cent of absent fathers were still in contact with their 9-10 month old child, although mothers reported a range of levels of interest in the child for those who were still in contact, which varied slightly by her ethnicity (Table 6.11). Overall, 67 per cent of these in-contact absent fathers were felt by mothers to be very interested in their child, 80 per cent where the mother was Black Caribbean. However, due to the small sample sizes, results should be taken as indicative only.

Table 6.11 In-contact absent fathers' relationships with the 9-10 month child, by ethnicity, mother reports

Absent father's relationship with cohort baby	Mothers' ethnicity				Per cent
	White	Indian, Pakistani & Bangladeshi	Black Caribbean	Black African	All GB total %
Very interested	66.8	63.6	80.1	59.7	67.0
Little or no interest	33.2	36.4	19.9	40.3	33.0
Unweighted sample size	1685	70	104	91	1950

Sample: All MCS-1 lone mothers where absent father still in contact with mother. Weighted by GB weight.

The in-contact absent father's interest in the child was closely linked to the mother's report about her own relationship with that father (Table 6.12). Interest in the child was felt, by the mother, to be substantially higher where she had a very friendly relationship with the father as opposed to one which was either just friendly or unfriendly.

Table 6.12 In-contact absent fathers' interests in 9-10 month child, by friendliness of his relationship with mother, mother reports

Absent father's interest in 9-10 month old baby	Absent father's relationship with baby's mother			Per cent
	Very friendly	Friendly	Unfriendly	All GB total %
Very interested	94.3	65.0	25.6	63.3
Little or no interest	5.7	35.0	74.4	36.7
Unweighted sample size	554	718	453	1725

Sample: All MCS-1 lone mothers where absent father still in contact with mother. Weighted by GB weight.

The extent of in-contact absent fathers' frequency of seeing the 9-10 month old child also varied considerably, and by the mother's ethnicity (Table 6.13). Whereas just over one third of such absent fathers saw the child daily, this fell to less than one quarter of fathers where the mother was South Asian and one in eight where she was Black African. Daily contact was much higher where the father was reported to be very interested in the child (49 per cent) compared with having little interest (10 per cent), and where he was felt to have a friendly relationship with the mother (53 per cent) as opposed to one which was unfriendly (8 per cent).

Table 6.13 In-contact absent fathers' frequencies of contact with 9-10 month child, mother reports

Amount of contact absent fathers have with child	Mothers' ethnicity				Per cent
	White	Indian, Pakistani & Bangladeshi	Black Caribbean	Black African	All GB total %
Daily contact	37.3	22.4	39.9	12.0	36.2
Weekly contact	43.4	34.4	38.6	54.5	43.4
Little or no contact	19.4	43.2	21.5	33.6	20.4
Unweighted sample size	1682	71	105	91	1949

Sample: All MCS-1 lone mothers where absent father still in contact with mother. Weighted by GB weight.

Overall, approximately 36 per cent of absent fathers paid maintenance for their 9-10 month old child. This varied substantially by the ethnicity of the mother. White mothers were at the average; 31 per cent of Indian,⁸ 21 per cent of Pakistani and Bangladeshi, 44 per cent of Black Caribbean and 29 per cent of Black African mothers reported that the absent fathers paid maintenance for the 9-10 month old child.

⁸ These figures were based on a very small sample of 23 absent fathers

Where fathers were still in contact, rates of paying maintenance were much higher for absent fathers who had an interest in the 9-10 month old child; according to the mother, 59 per cent of those who were interested paid, compared to 33 per cent of in-contact absent fathers who were reported to have little interest. Rates of payment were also higher where the father had a friendly relationship with the mother (60 per cent of those who were very friendly paid compared with 48 per cent of those who were just friendly, and 33 per cent of those who were unfriendly). Paying maintenance also went along with a higher frequency of contact between the in-contact absent father and the child; 63 per cent who saw their child daily paid maintenance compared with 32 per cent who saw the child less than weekly.

In-contact absent fathers' interests in their child changed between the ages of 9-10 months and 3 years. Some lost interest; 29 per cent of the fathers who had been absent but in contact and involved with the child when the baby was 9-10 months were described by the mothers as having little or no interest in the child by age 3. Perhaps, less expectedly, some of those fathers who were described as having little or no interest when the child was aged 9-10 months (36 per cent), were said to be interested or very interested in their 3 year old child.

There were similar changes in the frequency of their contact (Table 6.14). Of those fathers who had daily contact with the child at 9-10 months, 46 per cent still had daily contact at age 3, and 17 per cent had changed to have very little contact. Fathers who had weekly contact at age 9-10 months and those who had less than weekly contact were more likely to have maintained the same levels of contact, 55 per cent of those who had weekly contact and 61 per cent of those who had less than weekly contact at age 9-10 months had the same level at age 3. Some of the fathers in both of these groups moved to having more contact at age 3, even daily contact, 21 and 11 per cent respectively.

Table 6.14 In-contact absent fathers' frequencies of contact with the child between 9-10 months and age 3, mother reports

In-contact absent fathers' involvement with cohort child age 9-10 months	Age 3			Per cent
	Daily contact	Weekly contact	Little or no contact	Unweighted sample size
Daily contact	46.0	37.5	16.6	273
Weekly contact	20.7	55.0	24.3	366
Little or no contact	11.3	28.2	60.6	159
All GB total %	27.0	44.0	29.0	798

Sample: Single MCS mothers who report that the biological father to cohort child was absent but in contact from the household at MCS-1 interview and gave an interview at MCS-2. Weighted by GB weight.

6.6 Summary

Overall, 16 per cent of mothers and 57 per cent of fathers did not feel that they spent enough time with their 9-10 month old child. This was highly correlated to employment status: 59 per cent of mothers employed full-time felt this way compared with 4 per cent who were not employed while for fathers, the proportions were 63 and 8 per cent respectively.

It was mainly the mother who looked after an ill child but the extent to which this task was shared was related to the parents' economic partnership. Sharing was highest in families where the mother was the main breadwinner or only she was employed, followed by where both parents were employed full-time or neither parent was employed. There was a greater movement from less traditional to more traditional patterns of care i.e. the mother doing most of the care, between the ages of 9-10 months and 3 years, than vice versa. This movement may, in part, be due to families having another child in that period.

The vast majority of parents felt that they had a warm relationship with their child. Mothers were slightly more likely than resident fathers to feel this (95 per cent compared with 91 per cent) as were mothers who had been continuously employed compared with those who had never worked (3 per cent of the former and 15 per cent of the latter felt they did not have a warm relationship with their child).

Fathers appeared to be heavily involved with their 3 year old children in terms of reading to and playing with them, although less so in putting them to bed. The extent to which fathers read to their child was strongly correlated with his educational qualifications (more frequent the more highly educated) and was most frequent amongst those working full-time. In contrast, playing with children and putting them to bed tended to be done on a daily basis by fathers who were not employed.

Bangladeshi and Pakistani fathers were generally less likely than fathers from other ethnic groups to be involved in these activities with their young children. In the case of reading, this may be due to having lower qualifications and less confident language ability. But the findings also suggest that different working patterns or cultural differences may be playing a part in fathers' involvement.

Mothers reported that absent fathers still in contact varied in the extent of their interest in and contact with their 9-10 month old child, and this was related to how friendly the absent father was with the mother. Where the father had more interest and more contact, he was also far more likely to pay maintenance for the child. By age 3, just under one third of in-contact absent fathers at age 9-10 months had drifted away from their earlier involvement, but just over one third of those still in contact but less involved at 9-10 months had greater involvement at age 3.

7 CHILD'S HEALTH AND DEVELOPMENT UP TO AGE 3

7.1 Literature on child outcomes

Investigation of child outcomes is a growing area of research and a brief summary of existing literature is provided here to set the MCS findings in context. Earlier studies of the effects of parents' employment on children found that children's education and ability; later employment and earnings; their emotional development; and to a lesser extent, their use of illegal substances and other criminal activity are all affected by the nature of parental employment (Gregg, et al., 2005; Currie and Thomas, 1999; Haveman and Wolfe, 1995). It is not always clear from the earlier studies, however, whether parental employment caused certain outcomes for children, or the child's outcome caused the parents to behave in a certain way. As a result, they were not all entirely satisfactory for policy purposes because they did not identify the causal sequence.

Over time, more studies have used longitudinal data to try to find out which causal factors explain outcomes (see review in Gregg et al., 2005). This raises statistical challenges as there are a wide range of possible outcomes to investigate. The range includes cognitive outcomes at varying ages, and behavioural or socio-emotional outcomes. Parenting, as we all know, is a tricky process and parents differ widely in their parenting styles and practices. Surveys cannot hope to ask questions about and record all of the differences between parents. The history of attempts to explain children's educational achievements illustrates some of the problems. But perhaps it does not matter. Perhaps there are some fairly major elements to parenting, parental behaviour and parental circumstances that really matter where outcomes for children are concerned.

There is a long-standing debate across a range of disciplines about the effect of parental employment on children's educational performance. An early review of these studies found that the methods used to evaluate these effects were very varied (Haveman and Wolf, 1995) and, not surprisingly, the conclusions also varied by type of data and approach. Some earlier British evidence, based on longitudinal data, found a positive relationship between the employment of mothers and children's educational achievement (Ermisch and Francesconi, 1997; Kiernan, 1996). However, these studies did not control for all the unmeasured elements that go into parenting.

The advent of longitudinal survey data about siblings brought up in the same household provided a rare and valuable opportunity for researchers to consider these issues further. The data enabled them to analyse the outcomes for children of their parents' employment, after controlling for many of the unobservable things that go into parenting. One study by Ermisch and Francesconi (2001) found some negative

effects on children's educational achievement from mothers having worked, especially full-time, when the child was of pre-school age. But they were not able to examine, due to lack of data, what happened to the children in their pre-school years. Other studies have produced similar findings, although they have not been able to use such sophisticated and robust techniques. Fathers' employment was not found to vary sufficiently over the course of the children's lives, to have any explanatory significance on their educational and other outcomes.

Gregg and Washbrook (2003) analysed five child outcomes measures, four of which were cognitive development measures. One of these outcome measures, the Strengths and Difficulties measure (SDQ), was the same as the measure used in our analysis reported below, but at age 4 in the Gregg and Washbrook study, and at age 3 in this study. Gregg and Washbrook found that there were no systematic significant effects of maternal employment on the child's behavioural SDQ outcome. The exception was when groups were examined separately. Then mothers' full-time employment was associated with significantly more behavioural problems for 4 year old children of single mothers, compared with couples. Also, the higher the household income the less likely the child was to have behavioural problems.

There are also psychological studies of child development, which use a set of milestones the child is expected to pass at different ages and examines their relationships within the family (Carnegie Task Force, 1994). The most frequently studied early indicators of child development include biological factors such as illness at birth, low birth weight, and physical disability. Other indicators are measured by gross-motor and fine motor development, and the development of communicative gestures (Gesell, 1973).

In early life, there is also evidence to suggest that characteristics of the child, parents and wider family, as well as environmental influences shape developmental outcomes (Bronfenbrenner, 1979). To focus on only one of these influencing factors would be limiting. To understand better early developmental functioning it is necessary to appreciate a comprehensive range of factors, and the interrelationships between them. This mix of factors was examined when the MCS children were 9-10 months old (Schoon et al., 2005). The findings of Schoon et al. confirmed the relative importance of biological risk factors for explaining young children's motor development, but such factors were less important for the development of communicative gestures. However, differences between ethnic groups suggested that there were either cultural differences or possible response biases.

From among the indicators of socio-emotional family environment two factors were identified which influenced developmental delay across all three developmental

functions studied, namely mother's age and psychological distress. The finding of an independent association between maternal psychological distress and delays in motor functioning confirmed earlier studies (e.g. Hay et al., 2001; Murray et al., 2003). The child's development outcomes at age 9-10 months were also found to be correlated with the value of parents-child interactions. These correlations were in addition to correlations with other biological risk factors (for example, smoking during and after pregnancy, dietary problems and issues relating to damp in the home).

This is obviously an important area for policy to pursue although one where it is difficult to disentangle all of the factors involved in influencing children's development. In this report some of the correlates of the MCS child's health and development up to age 3 are examined.

7.2 Child health and development at 9-10 months

Approximately 80 per cent of cohort babies in Great Britain did not have any health problems when aged 9-10 months old and 20 per cent had at least one problem.⁹ Having at least one health problem varied by the ethnicity of the mother (Table 7.1). Babies of Pakistani mothers had the highest incidence of a health problem (21 per cent) whereas babies of Bangladeshi mothers had the lowest incidence (10 per cent).

Table 7.1 Baby's health aged 9-10 months, by mothers' ethnicity

Baby's health*	Mother's ethnicity							Per cent
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	All GB total %
No problems	79.4	80.4	78.8	89.9	84.9	85.3	84.7	79.8
At least one problem	20.6	19.6	21.2	10.1	15.2	14.7	15.4	20.2
Unweighted sample size	13625	479	892	371	264	379	564	16574

Sample: All cohort babies in MCS-1. *For definition of baby's health, see footnote 8 below. Weighted by GB weight.

The extent of babies' health problems varied slightly according to the mother's occupational group. Mothers who worked in higher occupational groups were slightly more likely to have a baby with a health problem (22 per cent of managers and professional, 21 per cent of associate professionals and personal and sales occupations) than those in skilled manual jobs (14 per cent), semi-skilled and routine

⁹ The measure of a baby's health problem is based on having at least one of the following: a problem with hearing; more than 3 recorded minor health problems; two or more accidents; or two or more visits to hospital by the time the baby is 9-10 months old.

occupations (18 per cent) and those who never worked (17 per cent). The same small range of variation in the extent of health problems was also visible across mothers' employment trajectories. Continuously employed mothers and employed lone parents had the highest incidence of babies with a problem.

7.3 Measures of child health at age 3

Of the 20 per cent of babies who had at least one health problem at 9-10 months, only a minority (23 per cent) of these ill children were reported to have a longstanding illness at age 3. There were also a few new health problems recorded at age 3; 14 per cent of those without any health problems at age 9-10 months were classified as having a longstanding health problem by age 3. Thus, approximately 16 per cent of all MCS children when aged 3 had a longstanding illness lasting at least 3 months, as reported by their mother.

Mothers who were employed full-time or who were in education were less likely to have a child with a longstanding illness than those employed part-time or not at all. There were no significant differences by mothers' occupation (Tables 7.2 and 7.3).

Table 7.2 Whether child has any longstanding illness when aged 3, by mothers' employment status

Mother's employment status when child aged 3							Per cent
Child has any longstanding illness	Employed full-time	Employed part-time	Looking after family and home	Out of work	In education	All GB total %	
Yes	13.4	16.3	16.2	17.5	12.5	15.9	
No	86.6	83.8	83.8	82.5	87.5	84.1	
Unweighted sample size	1764	5111	5890	359	192	13317	

Sample: Table 7.2 and 7.3, all MCS-2 mothers. Weighted by GB weight.

Table 7.3 Whether child has any longstanding illness when aged 3, by mothers' occupation

Mothers' occupation at age 3								
Child has any longstanding illnesses	Managers & prof.	Assoc. prof.	Admin. & clerical	Skilled manual	Personal & sales	Semi-skilled & unskilled	Never worked	All GB total %
Yes	15.2	15.1	17.4	13.6	15.6	13.7	16.2	15.9
No	84.8	84.9	82.6	86.4	84.4	86.3	83.8	84.2
Unweighted sample size	1482	1180	1386	163	1846	710	5890	12657

7.4 Correlates of child's strengths and difficulties questions at age 3

Mothers were asked a set of questions about the cohort child at age 3, using a recognised scale, the Strengths and Difficulties scale (SDQ) devised by Robert Goodman (1997), sometimes called a behavioural outcome measure. The questions covered a number of issues including, for example, the child's emotional state, any behavioural problems and how well they got on with their peers. It is worth noting that the main limitation of this scale is that it is based on mothers' perceptions rather than more objective measures, and may not truly reflect the child's development.¹⁰

The findings showed that a range of variables were significantly correlated ($p < 0.05$) with the child having SDQ problems at age 3, after controlling for potential predictors as set out below. It is beyond the scope of this study to explore these findings in detail, but they indicate many issues that deserve further investigation.

Child characteristics

- Children with health problems at age 9-10 months (as measured above in section 7.2) were far more likely to have SDQ problems at age 3.
- Boys were more likely than girls to have SDQ problems at age 3.
- Children who attended formal childcare while their mother worked when they were 9-10 months old had less likelihood of SDQ problems.
- Children who were cared for by their grandparent or father at age 3 did not have a significantly different likelihood of SDQ problems than the reference group of 'other' types of care while mother was employed.

Mothers' characteristics

- After controlling for many other variables, babies with mothers who were of mixed, Indian, Pakistani or Bangladeshi ethnicity were all more likely to have SDQ problems than babies of White mothers. The highest likelihood of problems was for Pakistani followed by Bangladeshi children. However, after adding household income measures, only children of Pakistani origin had higher SDQ problems and Black African babies then had significantly fewer SDQ problems.
- Babies whose mothers were aged between 27 and 32 or 33 or more years when they were born had a lower incidence of SDQ problems.
- Mother's highest educational qualification was associated with the child's SDQ. Higher NVQ levels were associated with successively reduced probabilities of a child having SDQ problems. Having an overseas qualification was not significantly associated with SDQ problems. (Mothers' occupational

¹⁰ See Appendix B for further information about the SDQ, the questions used in MCS-2 and how the scale is calculated.

group was highly correlated with level of education, so only education was included in the model.)

- Compared with having never worked, mothers with any of the other employment trajectories were all less likely to have a child with SDQ problems. However, the inclusion of household income which is highly correlated with mothers' employment trajectories, made the trajectories insignificant as predictors,¹¹ showing the importance of family income.
- Working part-time hours at the second MCS interview (age 3) was associated with children having a higher likelihood of SDQ problems than mothers working full-time (31-40 hours per week) However, this result was on the margin of being significant ($p < 0.08$).
- Having a mother who had used other types of flexible working arrangements before the child was aged 9-10 months old was not a significant influence on the child's SDQ score.¹²
- The probability of having a child with SDQ problems tended to be higher amongst mothers who felt that families were happier if the mother went out to work.
- A depressed mother when the child was 9-10 months old raised the likelihood of the child having SDQ problems at age 3. This was a very important association.

Family characteristics

- Children from families with high or medium income were less likely than those on a low income to have SDQ problems. The probability of having SDQ problems reduced as income increased.
- Whether the child was an only child or had older and/or younger siblings by the age of 3 were all insignificant after entering mother's age at birth.
- Children of lone parents had a higher probability of having SDQ problems than children of couple parents. However, after entering the employment trajectory variables, the lone parent variable became insignificant since it was highly correlated with having less or no employment, with mothers' age at birth and with family income.

¹¹ In some models, depending on the other covariates entered, the continuously employed had a slightly lower chance of SDQ problems than mothers' with other employment trajectories. However, in other models the various trajectories all lowered the probability of SDQ problems to approximately the same extent compared with having never worked. Taking maternity leave at the birth of the cohort child was highly correlated with several of the trajectories and so could not be included as a separate explanatory variable. Entering maternity leave, or a set of maternity leave duration measures did not add to the explanation of the model once employment trajectories were entered.

¹² This includes use of part-time work before the child was 9-10 months old.

Fathers' characteristics

A separate multivariate logistic model was run to examine the correlations between child outcomes and fathers' characteristics. Fathers' characteristics were the same as those used for mothers, that is: ethnicity; age at the birth of the child; highest educational qualifications; leave around the time of birth; Malaise depression score when the child was 9-10 months old; his role in childcare; and a summary measure of his employment history. There were many overlaps with the mothers' results in the significance and direction of the associations found.

The likelihood of the child having SDQ problems was significantly increased by the following characteristics:

- Father being of Indian, Pakistani or Bangladeshi ethnicity compared with White fathers.
- The lower the father's highest educational qualifications.
- The lower the age of the father at the birth of the child.
- Having a higher Malaise depression score for the father when the baby was aged 9-10 months.
- Taking only annual or sick leave around the time of the birth compared with a mixture of paternity and annual leave.
- Taking no leave around the time of the birth.
- Having less employment or no employment in the father's employment history compared with more employment.
- Failing to use the employer's flexible working options compared with using them.
- Allowing the mother to do all the home based childcare instead of sharing.

7.5 Summary

The extent of child health problems at age 9-10 months was found to vary by the ethnicity of the mother; children of White, Indian and Pakistani mothers had the highest rates of health-related problems and children with Bangladeshi mothers the lowest.

Mothers who were employed full-time or in education were less likely to have a child aged 3 with a longstanding illness than mothers employed part-time or not at all.

The probability of a child having behavioural or emotional problems at the age of 3 as measured by the SDQ Strengths and Difficulties scale was associated with both the mothers' **and** fathers' characteristics. The likelihood of a child having developmental problems was significantly increased: the lower the mothers' or father's highest educational qualification; the younger they were at the birth of the child; by either

parent having a higher Malaise depression score when the child was 9-10 months old; by either parent having very little employment in their employment history, or by being in a low income household.

There was no evidence that mothers' employment influenced the extent of developmental problems in 3 year old children, except to the extent that it not working, especially never working, that was associated with difficulties. The analysis also found a lower likelihood of developmental problems among children who experienced formal childcare at age 9-10 months old. It should be noted from earlier studies (Dex and Joshi, 2005) that never working was associated with a range of other characteristics, namely: being a teenage mother; having few or no educational qualifications; and living in low income families. These factors were controlled in the analysis and shown to be significantly related to worse child outcomes.

In the case of fathers, child development problems were associated with: failing to use the employer's flexible working options compared with using them; allowing the mother to do all the home based childcare instead of sharing; taking only annual or sick leave around the time of the birth compared with a mixture of paternity and annual leave; or taking no leave around the time of the birth.

Earlier studies of child outcomes have tended to focus on mothers' behaviour. These results suggest it is important to give greater consideration to and to examine further, than has previously been the case, fathers' roles in bringing up children.

8 MOTHERS' HEALTH AND WELL-BEING

8.1 During pregnancy

Some mothers reported health problems during their pregnancy; 14 per cent of all MCS mothers had at least one of a number of pregnancy-related problems. The frequency of these problems varied by ethnic group and by employment status (Table 8.1). A slightly higher proportion of mothers who were employed during pregnancy in all ethnic groups reported health problems. The difference was greatest between not employed (4 per cent) and employed (15 per cent) Indian mothers although employed Black Caribbean mothers were the most likely to report some health difficulties (21 per cent). Similarly, employed lone parents reported a slightly higher rate of problems than those who were not employed (16 per cent compared with 13 per cent).

Table 8.1 Mothers' problems during pregnancy, by ethnicity

Mother's problems during pregnancy*	Mother's ethnicity						Per cent
	White	Indian	Pakistani & Bangladeshi	Black Caribbean	Black African	Other	All GB total %
MCS mothers NOT employed during pregnancy							
No health problems during pregnancy	86.9	95.9	92.5	90.9	91.7	89.9	87.9
At least one problem during pregnancy	13.1	4.1	7.5	9.1	8.3	10.1	12.1
Unweighted sample size	4418	211	1060	99	211	331	6330
MCS mothers employed during pregnancy							
No health problems during pregnancy	85.6	85.3	88.6	79.3	87.7	85.8	85.6
At least one problem during pregnancy	14.4	14.7	11.4	20.7	12.3	14.2	14.5
Unweighted sample size	9173	264	200	164	166	232	10199

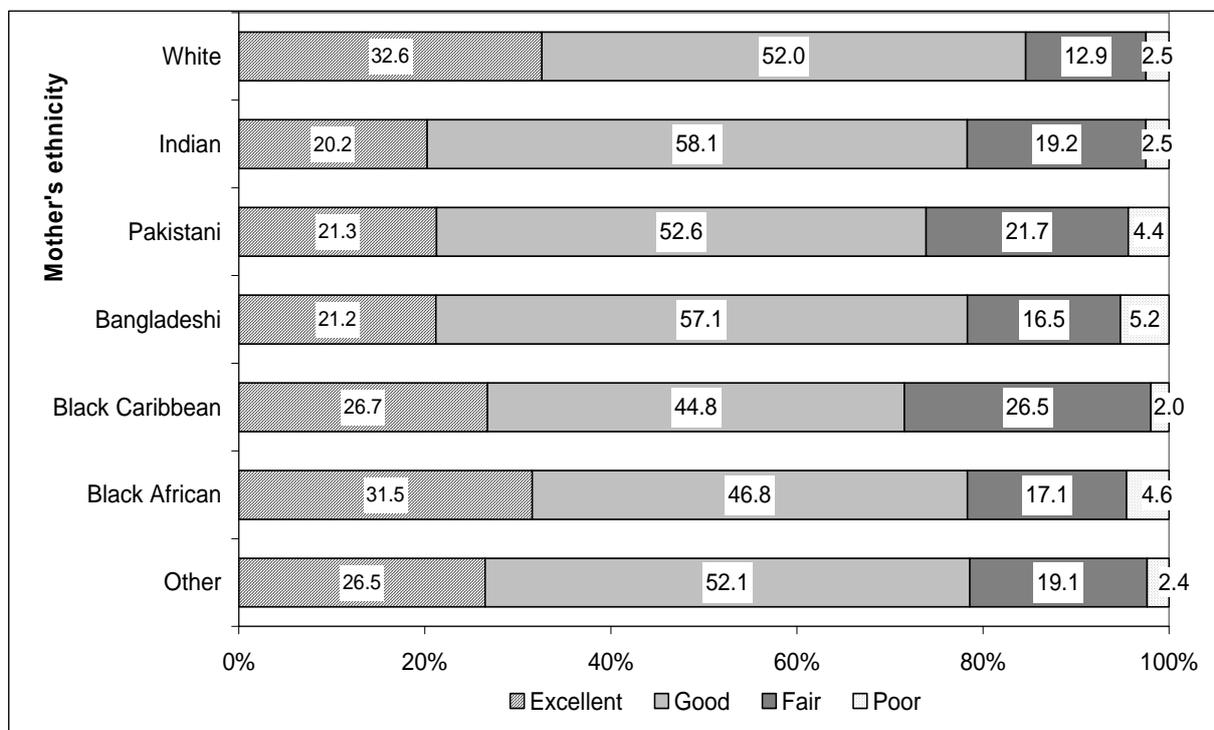
Sample: All MCS-1 mothers. *Health problems during pregnancy refer to any reports of bleeding in later pregnancy, raised blood pressure, eclampsia /pre-eclampsia, diabetes, suspected slow growth of baby or other/gestational diabetes. Weighted by GB weight.

There was little variation by mother's occupational group; 12 per cent of mothers employed in skilled manual occupations reported problems, 13 per cent in manager/professional occupations and 14 per cent in all other occupations.

8.2 When child aged 9-10 months

Mothers' self-assessed general health when the cohort baby was 9-10 months old is shown by ethnic group in Figure 8.1.

Figure 8.1 Mother's general health when cohort baby aged 9-10 months, by ethnicity



Sample: All MCS-1 mothers. Weighted by GB weight.

Approximately one third of White and Black African mothers said their general health was excellent when the baby was 9-10 months, the highest proportion to do so, compared with just over one in five Indian, Pakistani and Bangladeshi mothers. Of course, health measures are very subjective and combining the categories of excellent with good health gives a slightly different picture, although White mothers were still the most likely to report good health. The proportions with poor health were very low in all ethnic groups but slightly more prevalent among Pakistani and Bangladeshi mothers as well as Black African mothers.

There was a direct link between self-reported excellent health and occupational group when the baby was 9-10 months old. The rate was highest for managers and professionals (42 per cent), and declined for lower level occupations; 40 per cent of associate professional mothers, 34 per cent of administrative and clerical, 31 per cent of skilled manual, 27 per cent of personal and sales and 23 per cent of both semi-skilled and elementary (unskilled) mothers reported excellent health. The rates

of poor health, while very low, were ranked in the reverse direction from 4 per cent of unskilled to 2 per cent of managers and professional mothers.

Mothers were also asked if they had any limiting longstanding illness when the baby was 9-10 months old. Overall, 21 per cent of mothers said they had such an illness with White mothers being close to the average level. There were some differences by ethnic group: 14 per cent of Pakistani, 18 per cent of both Bangladeshi and Indian, 19 per cent of Black African, and 23 per cent of Black Caribbean mothers reported such an illness. These figures suggest that general self assessed health and limiting longstanding illness rates paint a mixed picture of mothers' health, particularly ethnic minority women. This could be related to different concepts of what constitutes illness and its relative severity, plus communication and understanding issues linked to the English language, for example, in answering survey questions.

Depression

It is also possible to focus on one particular aspect of mothers' health; that of depression. Depression affects a large proportion of the population and can be associated with motherhood. It has also been shown to be correlated with negative health and other outcomes for children.

One measure of depression in the first sweep of the Millennium Cohort Study was the Malaise score, based on 9 questions that were summed to provide a score from 0 (not depressed) to 9 (severely depressed) (Rutter et al., 1970). The questions are shown in Appendix Table B2. Individuals were considered to be depressed if they scored 4 or above and, using this definition, 13 per cent of mothers were depressed when their baby was 9-10 months old.

There were a number of factors that could be related to mothers' depression scores. Employment status was one such factor, and a slightly higher proportion of mothers appeared to be depressed if they were not working when the baby was 9-10 months old (15 per cent) compared to working full-time (12 per cent) or part-time (11 per cent).

The extent of depression among mothers also varied by ethnicity (Table 8.2). The highest rates were for Pakistani and Indian mothers (around 20 per cent) and much lower rates were found among mothers in the other ethnic groups. Furthermore, rates of depression varied by family type with lone mothers having the highest rate (20 per cent), followed by cohabiting mothers (15 per cent). Married mothers had the lowest rate (11 per cent). Recent studies of satisfaction and happiness in general have identified marriage as being associated with happiness (Oswald and Gardner, 2004).

However, given that the vast majority of Indian and Pakistani mothers were married, this does not explain their higher than average rates of depression.

Table 8.2 Mothers' depression scores when baby 9-10 months old, by ethnicity

Mother's malaise score	Mother's ethnicity							Per cent
	White	Indian	Pakistani	Bangladeshi	Black Caribbean	Black African	Other	All GB total %
3 and under	87.2	80.2	79.8	86.8	84.6	89.3	87.1	86.8
4 + (depressed)	12.8	19.8	20.2	13.2	15.5	10.7	12.9	13.2
Unweighted sample size	13627	479	892	371	264	377	564	16574

Sample: All MCS-1 Mothers. Weighted by GB weight.

8.3 When child aged 3

Mothers' rates of limiting longstanding illness were similar when the child was age 3 as at age 9-10 months. Mothers were also asked, at the child's age 3, whether their health had changed over the past year. The majority (68 per cent) said their health was the same; 23 per cent said their health was better; and 9 per cent thought their health was worse. Mothers employed in skilled jobs were the most likely to report worse health than one year ago (14 per cent) (Figure 8.2).

Depression

The measure of depression used with mothers when their child was 3 was the Kessler Psychological Distress Score.¹³ The findings show that after controlling for a range of explanatory variables, including mothers' and family characteristics, a number of variables were found to be significant.

Mothers' characteristics

Teenage mothers were more likely to have a higher depression score than mothers aged 21 and over. The lowest depression score was for mothers aged between 27 and 32 when their child was born.

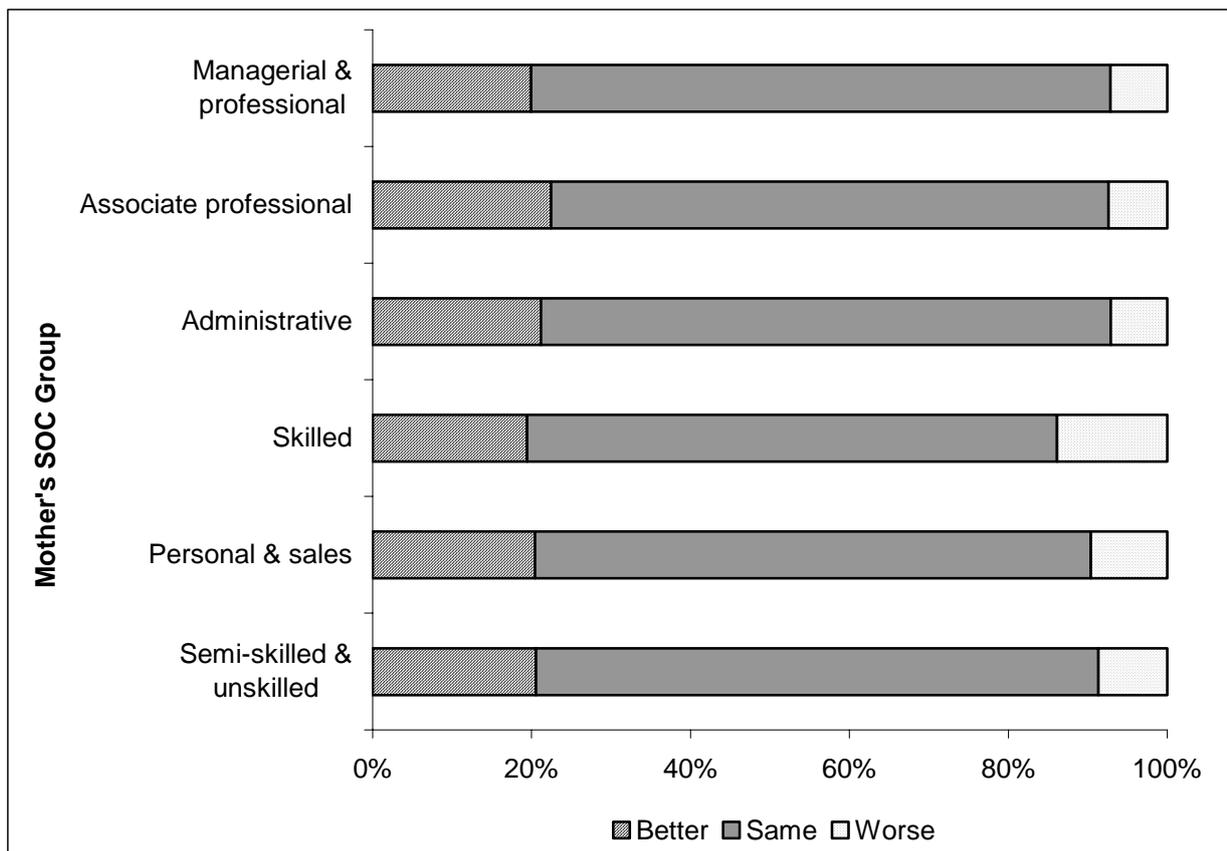
Ethnic origin was associated with depression scores; Indian, Bangladeshi or Pakistani, Black African or Black Caribbean and other ethnic minority mothers all had lower depression scores than White mothers.¹⁴ Bangladeshi mothers had the lowest

¹³ See Appendix B for further details of this measure and how it was calculated.

¹⁴ Pakistani and Bangladeshi mothers were combined in the analysis due to smaller sample sizes as were Black Caribbean and Black African mothers.

chance of being depressed of all the groups. These results varied in some ways from the Malaise results for mothers' depression when the baby was 9-10 months old (Table 8.2), but they were based on a different scale and smaller sample sizes. This deserves further investigation.

Figure 8.2 Mothers' health compared with a year ago, when child aged 3, by occupation



Sample: All MCS-2 mothers in employment. Weighted by GB weight.

Having been depressed when the baby was 9-10 months old was associated with a very large increase in mothers' depression scores at age 3. This was a very strong effect. Similarly, mothers with a limiting longstanding illness when the cohort child was aged 9-10 months had a higher depression score when their child was 3.

Compared with mothers who were not working, those in managerial or professional occupations, associate professional jobs, administrative or clerical jobs, or in semi-skilled or routine occupations were all less likely to be depressed. However, when mothers' employment trajectories were added as explanatory variables, many of the occupational variables became insignificant showing that occupation and employment trajectories were highly correlated with each other. Indeed, being

continuously employed since pregnancy was associated with a lower depression score, and having never been employed was associated with a higher one.

There was no significant association between depression scores when the child was aged 3 and a mother having taken maternity leave or the duration of that leave.

Family characteristics

The position of the cohort child in the family, and whether there had been another child since, were associated with mothers' depression scores. Mothers who had had another baby since the cohort child had a lower depression score than mothers with only the cohort child or where the cohort child was the youngest.

When the child was 9-10 months old, having a partner, regardless of whether they were employed, was associated with a significant drop in the depression score compared with those having no partner. Having an employed partner was associated with the lowest depression score.

There were no significant differences in mothers' depression scores according to whether their partner took leave around the birth of the child.

Interestingly, having a husband or partner who shared the cooking and general childcare when the child was 3 years old, was associated with a higher depression score; similarly, where the husband or partner had taken up the employer's flexible working arrangements, albeit on the margin of significance ($p < 0.08$). It is possible that sharing these tasks to a greater extent than other couples, and taking up flexible working arrangements, was a response to the mother's depression. This cannot be ruled out in this analysis.

Having high, but not medium levels of household income compared with low income significantly reduced the depression score. However, this was correlated with mothers who were 40 or over at the birth. Income is also closely linked with a variety of other variables as has been noted throughout this report, including employment and marital status, educational qualifications and ethnicity.

8.4 Summary

Around 14 per cent of mothers reported health problems during pregnancy. These were more prevalent among women who were employed in pregnancy than those who were not, in all ethnic groups. Those most likely to experience difficulties were Black Caribbean mothers who worked, of whom over one in five reported problems.

Mothers' self-reported excellent health and their occupational group were directly linked when the child was 9-10 months old. The rate was highest for managers and professionals (42 per cent) and declined for lower level occupations to 23 per cent for both semi-skilled and unskilled mothers.

Over one in eight mothers (13 per cent) were depressed when their baby was 9-10 months old. This proportion varied according to a number of different factors. One in five Indian and Pakistani women were depressed, a similar proportion of lone mothers, and 15 per cent of mothers who were not working. In contrast, around one in ten (11 per cent) married women or mothers working part-time were depressed.

Teenage mothers were more likely to be depressed than older mothers when their child was 3 years old, with the lowest depression scores recorded for mothers aged between 27 and 32 when their child was born. Mothers who were depressed or who had a long-term limiting illness when their child was younger also had higher depression scores when they were 3. A higher depression score was also associated with never having been employed.

Having an employed partner appeared to protect mothers against depression and even a partner who was not employed was better than no partner. However, partners who shared the domestic division of labour or who took up their employer's flexible working arrangements were associated with higher depression scores among mothers, possibly as a response to this depression rather than as a cause of it.

High levels of household income were associated with a lower risk of maternal depression. Income levels are closely linked with a number of other variables, including age and education, marital and employment status.

9 CONCLUSIONS

In this report we have examined the progression of a large sample of mothers and fathers starting at pregnancy and ending when the child reached 3 year's old. The focus has been on employment and how mothers and fathers managed their family and their employment over a birth. This cohort of parents were all involved in having a new baby in Great Britain around the turn of the Millennium. It is important to note that the timing of this new birth took place before the latest 2003 changes had taken place to maternity leave and rights for mothers, and before statutory paid paternity leave for fathers came into force in Britain.

9.1 Maternity leave

The MCS parents show that taking maternity leave was already a very widespread experience by 2000-2001, and for women employed across almost the whole range of jobs. Durations out of work over childbirth had been falling across successive generations up to the Millennium both before and after the introduction of statutory maternity leave entitlements in 1973. The experiences of this cohort of Millennium mothers might be at the cusp of further changes. Among the MCS mothers who took maternity leave, 24 per cent took more than 6 months off work. Studies that were undertaken after the introduction of the 2003 enhancements to maternity leave found that this proportion had risen to 38 per cent among one study of mothers with a young baby in 2005 (Yaxley et al., 2005) and 41 per cent in another 2005 study (Smeaton and Marsh, 2006). These later studies also showed that a greater percentage of mothers took more than 6 months off work for childbirth the higher their household earnings. This finding is paralleled by the MCS mothers taking longer periods of leave where their husband or partner had a higher paying occupation. However, the analyses have also shown that there are important variations in a mother's' duration of leave according to her own occupation.

Being able to generate a continuous employment trajectory from pregnancy up to age 3 was largely dependent on being able to take maternity leave. However, not all those who took maternity leave managed to maintain continuous employment participation. Although we know why some mothers dropped off from their continuous trajectory, for example, to have another birth, we are not entirely clear why others failed to survive in employment up to age 3. Pakistani and Bangladeshi mothers had much lower rates of continuous employment which may, in part, be due to cultural factors.

Future policy on maternity leave can be fairly confident that mothers' behaviour is influenced by their entitlements to leave and pay. The current announcements about allowing further extensions, up to one year off work, for mothers with a new baby are

likely to be well received. Certainly there is mounting evidence that this is good for children. However, without addressing the loss of household income, such entitlements will have little to offer the many mothers who need the addition to household income their employment offers.

9.2 Paternity leave

Our analysis of the MCS fathers also showed that large proportions of fathers were taking time off work around the time of the Millennium births, at a time before statutory paid paternity leave. Only a minority of fathers (20 per cent) did not take any leave at this birth.¹⁵ Millennium fathers were showing considerable interest, therefore, in their new baby. This was less the case among the self employed, although a sizeable group of self employed fathers did take some leave around the birth.

Given that a popular option, in this period before statutory paid paternity leave for fathers, was to take paternity leave plus annual leave, it is reasonable to suggest that there would be support from Millennium fathers to have longer periods of leave and a greater period of paid paternity leave than was commonly the case in 2000-2001. The 2003 introduction of paid paternity leave would have been predicted, from these findings, to receive a warm welcome and be considered a step in the right direction by fathers and their families.

There is also evidence in this study that fathers who had taken leave tended to spend more time in parenting their 3 year old children. Taking some sort of paternity leave was associated, therefore, with more engagement in parenting later. The issue of whether fathers' involvement with children grows through taking paternity leave, or whether fathers who want to be involved are more likely to take paternity leave in the first place cannot be resolved in this analysis. However, from the policy perspective, this study has shown that allowing fathers to take paternity leave is associated with good relationships and involvement with 3 year old children.

Men working in skilled manual jobs were less likely to take leave. This may be because in 2000-2001, employers of skilled manual employees were less likely to offer paternity leave to their employees, or because the workplace culture in such jobs was a barrier to fathers taking leave. One conclusion from this link of fathers' leave taking with their job, also found in other studies (Smeaton, 2006), is that more effort needs to be put into persuading employers to encourage men to take their statutory entitlement to paternity leave and of ensuring that obstacles to this entitlement are not placed in fathers' way.

¹⁵ This figure is lower than subsequent studies of fathers (Smeaton, 2006) where 32 per cent took no leave, which may be due to the smaller sample size or the difference in the questions asked.

A similar issue is raised with respect to the self employed. Self-employed fathers were less likely than employee fathers to take leave and some ethnic minority groups were more likely to be self employed than White fathers. It is not so easy to legislate or offer entitlements to the self employed. They have often been ignored in the work-life agenda. But it is not impossible for policies to be generated which address the self employed, and self-employed fathers taking paternity leave in particular. Clearly resources would need to be offered to the self employed to replace their input into a business, while taking leave.

9.3 Flexible working arrangements

Fathers' employment and hours of work were found to be affecting their ability to engage with and parent their children, although cultural differences were also likely to be playing a part in the case of some minority ethnic groups. The opportunities for flexibility at work were still less up to 2003 for fathers than for mothers. In addition, this study found that there were benefits from fathers taking up flexibility at work, for example, to child outcomes. This is another area, therefore, where policy needs to reinforce the message that flexible working can be good for children and for society and further encouragement given to sectors and employers where there is resistance to offering such provisions.

9.4 Poverty and employment

The government's strategy to address poverty in families and child poverty has been primarily aimed at getting more employment and earnings into the family. This study and others support the link between living in poverty and the absence of employment, which is particularly acute in the case of lone parent families and no earner couples.

The syndrome of never working is one that would be good to tackle, and tackle sooner rather than later. It is associated with a series of poor outcomes for mothers and their children.

If we want to see greater employment participation from Pakistani or Bangladeshi mothers, one key is for these groups of women to gain higher qualifications. The policy implication is for there to be targeted educational opportunities for mature women from ethnic minority groups, which bears in mind their existing low average family income. But as the EOC's investigation into Black and Asian women's employment has shown, better educational qualifications are not the only key, and a

range of initiatives could be introduced to assist ethnic minority women into the workplace, improve workplace culture and to progress in employment.¹⁶

A couple family with one male earner at this point in the life course is not a characteristic that is shared by the majority of families in the new Millennium. However, this type of family model is a choice and reality for some groups, particularly where the mother has low or no qualifications, Pakistani and Bangladeshi families, and a small minority of other ethnic groups. A higher proportion of one earner couple families are in poverty than two earner couples, and this risk of poverty is greatest where it is the mother who is working. In recent years considerable emphasis has been placed on encouraging both parents in a couple family into employment, and the needs and circumstances of lone earner couple families have been relatively neglected. These findings suggest that policy needs to consider the welfare and race equality issues for this type of family, especially in relation to low income families.

The ethnic differences mentioned above are examples of a number of differences, some of which probably have at least part of their explanation located in cultural traditions and preferences. This raises the question of whether there is a need for policy interventions which take account of cultural preferences, as well as those which tackle discrimination and prejudice, and other obstacles to greater equality.

9.5 Health and well-being

Although mothers who worked during pregnancy tended to report more health difficulties than those who were not employed, by the time their child was aged 3, mothers who had been continuously employed since pregnancy were less likely to be depressed than those who had not been employed. Tackling mothers' and fathers' depression as soon as possible after childbirth would also help child outcomes, as a child having developmental problems at age 3 was strongly associated with higher rates of parental depression when their child was 9 to 10 months of age. The medical world has been aware for some time about the bad effects on children of mothers' depression. These results point to the need to take fathers' depression more seriously also. Poorer child outcomes were also strongly associated with low family income, and the attendant characteristics of young parents with lower educational qualifications, and a lack of employment.

¹⁶ See the web pages of the EOC's investigation 'Moving on up?' at <http://www.eoc.org.uk/Default.aspx?page=17693>

BIBLIOGRAPHY

Akerlof, G. (1999) 'Men without children'. *Economic Journal*, 108: 257-309.

Baines, S., Wheelock, J. and Gelder, U. (2003) *Riding the rollercoaster: family life and self employment*. Bristol: The Policy Press.

Bell, A. and LaValle, I. (2003) *Combining self employment and family life*. Bristol: The Policy Press.

Bronfenbrenner, U. (1979) *The ecology of human development: experiments by nature and design*. Cambridge MA: Harvard University Press.

Burghes, L., Clarke, L. and Cronin, N. (1997) *Fathers and fatherhood in Britain*. Occasional Paper 23. London: Family Policy Studies Centre.

Callendar, C., Millward, N., Lissenburgh, S. and Forth, J. (1997) *Maternity rights and benefits in Britain 1996*. Department of Social Security Research Report 67, London: TSO.

Carnegie Task Force (1994) *Starting points: meeting the needs of our youngest children: report of the Carnegie Task Force on meeting the needs of young children*. New York: Carnegie Corporation.

Currie, J. and Thomas, D. (1999) 'Early test scores, socio-economic states and future outcomes'. NBER Working Paper, No. w6943.

Dench, J. (1996) *The place of men in changing family cultures*. London: Institute of Community Studies.

Dex, S. (2003) *Families and work in the 21st century*. York: Joseph Rowntree Foundation.

Dex, S. (ed.) (1999) *Families and the labour market trends, pressures and policies*. Family Policy Studies Centre/Joseph Rowntree Foundation.

Dex, S. and Joshi, H. (eds.) (2004) *Millennium cohort study first survey: a user's guide to initial findings*. London: Institute of Education, University of London.

Dex, S. and Joshi, H. (2005) *Children of the 21st century: from birth to nine months*. Bristol: The Policy Press.

Dex, S., Joshi, H., Macran, S. and McCulloch, A. (1998) *Women's employment transitions around childbearing*. Oxford Bulletin of Economics and Statistics 60 (1): 79–98.

Department for Education and Employment (DfEE) (1997) *Mothers, families and employment: parents and the labour market in Britain 1984-1994*. Research Report No. 10. London: Department for Education and Employment

Ermisch, J. and Francesconi, M. (1997) 'Family matters', ESRC research centre on micro-social change. Working Paper 97-1, University of Essex.

Ermisch, J. and Francesconi, M. (2001) *The effects of parents' employment on children's lives*. London: Family Policy Studies Centre/Joseph Rowntree Foundation.

Farrington, D. (2000) 'Psychosocial predictors of adult antisocial personality and adult convictions'. *Behavioural Sciences and the Law*, 18: 605-622.

Ferri, E. and Smith, K. (2003) 'Family life' in Ferri, E., Bynner, J. and Wadsworth, M. (eds.) *Changing Britain, changing lives*. London: Institute of Education.

Furedi, F. (2001) *Paranoid parenting: abandon your anxieties and be a good parent*. London: Allen Lane.

Gesell, A. (1973) *The first five years of life: a guide to the study of the preschool child*. New York: Harper & Row.

Goodman, R. (1997) 'The Strengths and Difficulties Questionnaire: a research note', *Journal of Child Psychology and Psychiatry*, 38: 581-586.

Gregg, P., Propper, C., Washbrook, E. and Burgess, S. (2005) 'The effects of a mother's return to work decision on child development in the UK'. *Economic Journal* (Feature), 115 (February): F48-80.

Gregg, P. and Washbrook, L. (2003) *The effects of early maternal employment on child development in the UK*. Working Paper No: 03/070, University of Bristol. Available at: www.bris.ac.uk

Hansen, K. (ed) (2006) *Millennium Cohort Study: first and second surveys, a guide to the datasets*. First Edition. London: Institute of Education, University of London.

- Hatter, W., Vinter, L. and Williams, R. (2002) *Dads on Dads needs and expectations at home and at work*: Manchester: Equal Opportunities Commission.
- Haveman, R. and Wolfe, B. (1995) 'The determinants of children's attainment: a review of methods and findings'. *Journal of Economic Literature*, 33: 1829-1878.
- Hay, D.F., Pawlby, S., Shark, D., Asten, P., Mills, A. and Kumar, R. (2001) 'Intellectual problems shown by 11-yr old children whose mother had postnatal depression'. *Journal of Child Psychology and Psychiatry*, 42: 871-889.
- Hudson, M., Lissenburgh, S. and Sahin-Dikmen, M. (2004) *Maternity and paternity rights in Britain 2002: Survey of Parents*, DWP In-house Report 131. London: Department for Work and Pensions.
- Joshi, H. and Paci, P. (1997) 'Life in the labour market' in Bynner, J., Ferrie, E. and Shepherd, P. (eds.) *Twenty-something in the nineteen nineties: getting on, getting by, getting nowhere*. Aldershot: Dartmouth Press.
- Kiernan, K. (1996) 'Lone motherhood, employment and outcomes for children', *International Journal of Law, Policy and the Family*, 10.
- La Valle, I., Arthur, S., Millward, C., Scott, J. and Clayden, M. (2002) *Happy families: atypical work and its influence on family life*. Bristol: The Policy Press.
- Martin, J. and Roberts, C. (1984) *Women and employment: a lifetime perspective*. London: Department of Employment and OPCS.
- Maunther, N., McKee, L. and Strell, M. (2001) *Work and family life in rural communities*. York Publishing Services/Joseph Rowntree Foundation.
- McRae, S. (1991) *Maternity rights in Britain*. London: Policy Studies Institute.
- McRae, S. (1996) *Maternity rights in Britain*. London: Policy Studies Institute.
- Murray, L., Cooper, P.J., Wilson, A. and Romaniuk, H. (2003) 'Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression. Impact on the mother-child relationship and child outcome.' *British Journal of Psychiatry*, 182: 420-4.
- O'Brien, M. and Shemilt, I. (2003) *Working fathers: earning and caring*. Manchester: Equal Opportunities Commission.

Oswald, A. and Gardner, J. (2004) 'How is mortality affected by money, marriage, and stress?' *Journal of Health Economics*, 23: 1181-1207.

Plewis, I. and Ketende, S. (eds) (2006) *Millennium Cohort Study: technical report on response*. First Edition. London: Institute of Education, University of London.

Reynolds, T., Callendar, C. and Edwards, R. (2003) *Caring and counting: the impact of mothers' employment on family relationships*. Bristol: Policy Press.

Rutter, M., Tizard, J. and Whitmore, K. (1970) *Education, health and behaviour*, London: Longmans.

Schoon, I., Sacker, A., Hope, S., Colishaw, S. and Maughan, B. (2005) 'Children's development in the family environment' in Dex, S. and Joshi, H. (2005) *Children of the 21st century: from birth to nine months*. Bristol: The Policy Press.

Shepherd, P., Smith, K., Joshi, H. and Dex, S. (2003) *The Millennium Cohort Study first survey: guide to the SPSS data set*. London: Centre for Longitudinal Studies, Institute of Education, University of London.

Smeaton, D. (2006) *Dads and their babies: a household analysis*. Manchester: Equal Opportunities Commission.

Smeaton, D. and Marsh, A. (2006) *Maternity and paternity rights and benefits: survey of parents 2005*. Employment relations research series. London: Department of Trade and Industry.

Thompson, M., Vinter, L. and Young, V. (2005) *Dads and their babies: leave arrangements in the first year*. Manchester: Equal Opportunities Commission.

Utting, D. (1995) *Families and parenthood. Supporting families, preventing breakdown. A guide to the debate*. York: Joseph Rowntree Foundation.

Van der Kaa, D. J. (1987) 'Europe's second demographic transition'. *Population Bulletin*. 42 (1).

Warin, J., Solomon, Y., Lewis, C. and Langford, W. (1999) *Fathers, work and family life*. London and York: Family Policy Studies Centre and Joseph Rowntree Foundation.

Yaxley, D., Vinter, L. and Young, V. (2005) *Dads and their babies: the mother's perspective*. Manchester: Equal Opportunities Commission.

APPENDIX A ADDITIONAL TABLES BY COUNTRY

Table A2.1 Mothers' employment when pregnant

Worked during pregnancy	Country %			All GB Total %
	England	Wales	Scotland	
Yes, worked during pregnancy	67.4	67.0	70.8	67.6
No, did not work during pregnancy	32.6	33.0	29.2	32.4
Unweighted Sample size	11485	2751	2322	16557

Sample: All MCS-1 mothers. All results are weighted by GB weight for GB totals and a within country weight.

Table A2.2 Mothers' duration of maternity leave

Worked during pregnancy	Country %			All GB total %
	England	Wales	Scotland	
Up to 3 months	34.5	36.3	33.8	34.6
4 to 6 months	41.9	43.2	41.4	41.9
7-10 months	13.3	11.1	14.4	13.3
Still on leave	10.3	9.4	10.4	10.3
Unweighted sample size	4694	1233	1223	7150

Sample: All MCS-1 mothers who were employed during pregnancy, reported that they went on leave and gave details of when they returned to work following the birth of the cohort child, or reported that they were still on leave at interview. Mothers who had worked during pregnancy but indicated that their job had finished prior to the birth of the cohort child are excluded. All results are weighted by GB weight for GB totals and a within country weight.

Table A2.3 Mothers' maternity pay

Mother's maternity pay	Country %			All GB total %
	England	Wales	Scotland	
Statutory pay only	41.7	39.2	42.6	41.6
Statutory pay plus	51.6	55.6	52.2	51.9
No pay at all	6.7	5.3	5.3	6.5
Unweighted sample size	5402	1362	1361	8125

Sample: All MCS 1 mothers who were employed during pregnancy and went on maternity leave. Weighted by weight1 country weight and GB weight for total

Table A2.4 Employed mothers' access to flexible working arrangements

Flexible working arrangements offered	Country %			All GB total %
	England	Wales	Scotland	
Part-time working	86.4	83.1	83.5	85.9
Job-sharing	35.3	33.6	39.6	35.7#
Flexible working hours	42.8	41.5	36.2	42.0
Working at or from home, occasionally	21.9	16.1	16.0	20.9
Working at or from home, all the time	5.9	3.6	4.6	5.7
Special shifts (i.e. evenings)	29.9	27.4	23.3	29.0
9-day fortnights /4½ day working week	5.6	3.6	3.5	5.2#
School term-time contracts	15.7	12.4	13.2	15.2
None of these	7.2	8.9	8.3	7.4
Maximum (N) unweighted	4680	1234	1209	7123

Sample: All MCS-1 main respondent mothers (natural, foster, adoptive, step) who are in paid work. A one-way anova for each flexible working arrangement offered by country, the majority of values are less than or equal to $p=0.01$ suggesting systematic differences in the extent of working arrangements offered to employee mothers by country. # These values are not significant at $p=0.05$ suggesting that there are no significant differences in the extent of working arrangements offered to employee mothers by country.

Table A2.5 Employed mothers' use of flexible working arrangements

Flexible working arrangements used	Country %			All GB total % (sample=)
	England	Wales	Scotland	
Part-time working	77.4	75.5	71.4	76.7
Job-sharing	21.5	19.3	23.8	21.7
Flexible working hours	55.8)	59.9	57.2	56.1#
Working at or from home, occasionally	52.1	45.6	51.0	51.7#
Working at or from home, all the time	40.4	35.4	28.6	39.0#
Special shifts (i.e. evenings)	37.0	38.6	37.3	37.1#
9-Day fortnights /4½ day working week	8.3	26.8	19.0	9.4#
School term-time contracts	21.3	25.0	20.0	21.4#

Sample: All MCS-2 main respondent mothers (natural, foster, adoptive, step) who are in paid work or on leave and were offered flexible working arrangement in question.

In a one-way anova # these values are not significant at $p=0.05$ and therefore suggest that there are no significant differences in the extent of working arrangements offered to employee mothers by country.

Table A3.1 Type of leave taken

Type of leave	Country %			All GB total %
	England	Wales	Scotland	
Paternity leave only	17.4	20.2	18.0	17.6
Paternity leave plus annual or sick leave	22.7	21.0	20.7	22.4
Annual or sick leave only	26.1	22.8	23.8	25.7
Parental leave only	4.7	5.2	4.8	4.7
Other	8.3	6.0	8.4	8.2
No leave	20.7	24.7	24.2	21.3
Unweighted sample size	7672	1721	1570	10963

Sample: All employed fathers. All results are weighted by GB weight for GB totals and a within country weight.

Table A3.2 Employed fathers' access to flexible working arrangements

Flexible working arrangements offered	Country %			All GB total%
	England	Wales	Scotland	
Part-time working	47.8	42.2	44.6	47.3
Job-Sharing	19.6	19.6	21.9	19.8#
Flexible Working Hours	36.0	30.6	31.8	35.2
Working at or from home, occasionally	30.2	20.3	25.6	29.2
Working at or from home, all the time	8.1	6.1	7.3	7.9
Special Shifts (i.e. evenings)	20.3	18.1	18.3	20.8
9-Day fortnights /4½ day working week	6.7	6.4	5.9	6.6#
School term-time contracts	6.2	6.4	5.0	6.1#
None of these	35.0	41.8	38.8	35.7
Maximum (N) unweighted	6054	1421	1285	8760

Sample: All employed MCS fathers (natural, foster, adoptive, step) who are in paid work. A one-way anova for each flexible working arrangement offered by country, the majority of values are less than or equal to $p=0.01$ suggesting systematic differences in the extent of working arrangements offered to employee dads by country. # These values are not significant at $p=0.05$ suggesting that there are no significant differences in the extent of working arrangements offered to employee fathers by country.

Table A3.3 Employed fathers' use of flexible working arrangements

Flexible working arrangements used	Country %			All GB total %
	England	Wales	Scotland	
Part-time working	8.0	7.4	8.0	7.9#
Job-sharing	3.1	3.1	1.7	3.0#
Flexible working hours	54.4	54.1	60.7	54.9#
Working at or from home, occasionally	62.1	62.4	56.0	61.5#
Working at or from home, all the time	20.3	37.0	25.0	21.6
Special shifts (i.e. evenings)	20.0	26.4	24.5	20.6#
9-day fortnights /4½ day working week	31.3	26.8	29.5	31.4#
School term-time contracts	8.8	9.2	11.8	9.1

Sample: All MCS fathers (natural, foster, adoptive, step) who are in paid work and were offered flexible working arrangement in question.

In a one-way anova # these values are not significant at $p=0.05$ and therefore suggests that there are no significant differences in the extent of working arrangements offered to employee dads by country.

Table A5.1 Employed mothers' use of flexible working arrangements

Flexible working arrangements used	Country %			All GB total %
	England	Wales	Scotland	
Part-time working	64.8	64.3	60.0	64.3
Job-Sharing	8.5	7.8	11.2	8.8
Flexible Working Hours	30.0	30.4	27.4	29.8
Working at or from home, occasionally	14.2	10.9	11.2	13.6
Working at or from home, all the time	3.0	2.3	1.5	2.8
Special Shifts (i.e. evenings)	17.1	17.4	15.3	16.9
9-Day fortnights /4½ day working week	1.4	1.3	1.1	1.3
School term-time contracts	7.7	9.8	5.7	7.7
Ability to change from full to part-time	24.2	22.4	20.5	23.8
None of these	10.1	11.9	11.4	10.3
Maximum (N) unweighted	4103	1109	1024	6236

Sample: All MCS-2 employed mothers. All results are weighted by GB weight for GB totals and a within country weight.

Table A5.2 Employed mothers' offered family friendly provisions

Family friendly provisions offered	Country %			All GB total %
	England	Wales	Scotland	
Financial help with childcare/childcare vouchers	9.2	5.5	5.7	8.6
Workplace nursery or crèche	5.2	5.2	2.9	5.0
Other nurseries supported by employer	0.9	1.1	0.6	0.9
Help with finding childcare facilities away from the workplace	2.7	1.7	3.0	2.7
Care for children after school hours or during school holidays	5.9	6.1	6.2	5.9
Time off for family emergencies	53.4	58.0	53.4	53.6
Career breaks for personal reasons	7.0	8.7	9.7	7.4
Paternity leave (time off work for fathers)	2.2	2.3	2.5	2.3
Parental Leave	16.0	15.8	18.7	16.2
A telephone to use for family reasons	44.3	50.0	46.5	45.0
None of these	24.5	20.4	24.4	24.3
Maximum (N) unweighted	4103	1109	1024	6236

Sample: All MCS-2 employed mothers. All results are weighted by GB weight for GB totals and a within country weight.

Table A5.3 Mothers' employment trajectory from pregnancy to when cohort child aged 3, by mothers' occupation

Mother's employment trajectory from pregnancy to child aged 3	Mothers' occupation							All GB total %
	Managers/ professional	Associate professional	Administrative	Skilled	Personal	Semi-skilled & unskilled	Never worked	
Continuously employed from pregnancy to when child aged 3	57.1	59.0	41.7	30.7	30.9	15.5	0.0	36.5
Stopped work after pregnancy and no return made by child aged 3	3.6	4.0	5.8	6.8	8.1	11.1	0.0	6.1
Employed during pregnancy, intermittent spells in and out of employment following pregnancy, employed when child aged 3	5.2	5.2	6.4	8.0	7.6	8.7	0.0	6.2
Employed during pregnancy, intermittent spells in and out of employment following pregnancy, not employed when child aged 3	14.9	14.7	14.5	14.8	16.3	14.9	0.0	13.9
Not employed (intermittent spells of employment, but overall remained not employed)	19.3	17.2	31.6	39.8	37.1	49.9	6.1	29.7
Never worked	0.0	0.0	0.0	0.0	0.0	0.0	93.9	7.6
Unweighted sample size	2014	1622	2347	243	3323	2398	1808	13755

Sample: All mothers in MCS-1 and MCS-2. Weighted by GB weight

APPENDIX B HEALTH AND DEVELOPMENT QUESTIONNAIRES

The strengths and difficulties questionnaire comprised 25 questions, asked of the mother. Each question had 4 possible replies scored from 1 to 4: 'Not true', 'somewhat true', 'certainly true' and 'can't say'. The questions covered the child's development in 5 areas; namely:

- emotional symptoms;
- conduct problems;
- hyperactivity ;
- peer problems; and
- prosocial.¹⁷

These 5 areas can be analysed separately or aggregated, and the range of responses scored differently from 0 to 2 (not true, somewhat true, certainly true). For this analysis the strengths and difficulties (child outcome) score was created by summing the scores from 4 of these areas, excluding the prosocial. The resultant score ranged from 0 to 40. This scale was then converted into 3 categories, chosen to identify likely cases with mental health disorders. The groupings were: 0 to 13 = normal, 14 to 16 = borderline, and 17 to 40 = abnormal. To simplify things further, a variable was created with a score of either 0 (SDQ range 0 to 13) or 1 (SDQ range from 14 to 40, that is border line and upwards). The value '1', therefore, indicates the child had development problems at age 3.

This variable was examined in a multivariate logistic regression model where a range of possible explanatory variables were entered into the model representing the child's characteristics, the parents' characteristics, and other details about the family.

¹⁷ The prosocial behaviour score is a measure of the 'strengths' of a child's development, (for example, helpfulness, kindness and how considerate a child is to other people's feelings). This measure is not included in the components of the SDQ scale we used in our analysis.

Table B1 Strengths and difficulties questionnaire (SDQ) at MCS-2

Mothers perception of child's behaviour in following questions:	Not true	Somewhat true	Certainly true	Can't say
(1) Considerate of other people's feelings	1	2	3	4
(2) Restless, overactive, cannot stay still for long	1	2	3	4
(3) Often complains of headaches, stomach-aches or sickness	1	2	3	4
(4) Shares readily with other children (treats, toys, pencils etc.)	1	2	3	4
(5) Often has temper tantrums or hot tempers	1	2	3	4
(6) Rather solitary, tends to play alone	1	2	3	4
(7) Generally obedient, usually does what adults request	1	2	3	4
(8) Many worries, often seems worried	1	2	3	4
(9) Helpful if someone is hurt, upset or feeling ill	1	2	3	4
(10) Constantly fidgeting or squirming	1	2	3	4
(11) Has at least one good friend	1	2	3	4
(12) Often fights with other children or bullies them	1	2	3	4
(13) Often unhappy, down-hearted or tearful	1	2	3	4
(14) Generally liked by other children	1	2	3	4
(15) Easily distracted, concentration wanders	1	2	3	4
(16) Nervous or clingy in new situations, easily loses confidence	1	2	3	4
(17) Kind to younger children	1	2	3	4
(18) Often argumentative with adults	1	2	3	4
(19) Picked on or bullied by other children	1	2	3	4
(20) Often volunteers to help others (parents, teachers, other children)	1	2	3	4
(21) Can stop and think things out before acting	1	2	3	4
(22) Can be spiteful to others	1	2	3	4
(23) Gets on better with adults than with other children	1	2	3	4
(24) Many fears, easily scared	1	2	3	4
(25) Sees tasks through to the end, good attention span	1	2	3	4

Table B2 Malaise questionnaire at MCS-1

The next questions are about how you are feeling generally:	Yes	No
First, do you feel tired most of the time?	01	02
Do you often feel miserable or depressed?	01	02
Do you often get worried about things?	01	02
Do you often get into a violent rage?	01	02
Do you often suddenly become scared for no good reason?	01	02
Are you easily upset or irritated?	01	02
Are you constantly keyed up and jittery?	01	02
Does every little thing get on your nerves and wear you out?	01	02
Does your heart often race like mad?	01	02

Kessler Psychological Distress Score

This is based on either Kessler 10 or Kessler 6 questions; the MCS used the Kessler 6 version of this scale (see Appendix Table B3). The questions were:

During the last 30 days:

- About how often did you feel so depressed that nothing could cheer you up?
- About how often did you feel hopeless?
- About how often did you feel restless or fidgety
- About how often did you feel that everything was an effort?
- About how often did you feel worthless?
- About how often did you feel nervous?

Each question was asked to mothers under the self-completion section of the interview. Individuals gave one of 5 possible responses ranging from 0 (none of the time) to 4 (all of the time) These answers were summed to give a range from 0 to 24. Mothers who scored 13 or more were deemed to have a high risk of depression; a medium risk and low risk could also be defined from this scale.

In this analysis, the 24 point scale was collapsed into a 12 point scale. Multivariate analysis, an ordered logit model, was then carried out on this dependent variable. A range of explanatory variables were included in the model covering measures of mothers' characteristics and family characteristics such as: the amount of leave mothers took; whether they had flexible working arrangements from their employer; the type of childcare they used; as well as some of their other characteristics and experiences.

Table B3 Kessler questionnaire at MCS-2

The next few questions are about how you have felt over the last 30 days:	All of the time	Most of the time	Some of the time	A little of the time	None of the time	Can't say
About how often did you feel so depressed that nothing could cheer you up?	01	02	03	04	05	06
About how often did you feel hopeless?	01	02	03	04	05	06
About how often did you feel restless or fidgety?	01	02	03	04	05	06
About how often did you feel that everything was an effort?	01	02	03	04	05	06
About how often did you feel worthless?	01	02	03	04	05	06
About how often did you feel nervous?	01	02	03	04	05	06