# Millennium Cohort Study Fourth Survey: A User's Guide to Initial Findings 

Edited by Kirstine Hansen, Elizabeth Jones, Heather Joshi and David Budge

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The views expressed in this work are those of the authors and do not necessarily reflect the views of the Economic and Social Research Council or the government departments contributing to the Study's funding. All errors and omissions remain those of the authors.

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Heather Joshi

## LIST OF CONTRIBUTORS

| NAME | TITLE | INSTITUTION |
| :---: | :---: | :---: |
| Matt Brown | Survey Manager | Centre for Longitudinal Studies |
| Lisa Calderwood | Millennium Cohort Study Senior Survey Manager | Centre for Longitudinal Studies |
| Aleks Collingwood | Researcher | National Centre for Social Research |
| Kirstine Hansen | Research Director: <br> Millennium Cohort Study | Centre for Longitudinal Studies |
| Elizabeth Jones | Research Officer | Centre for Longitudinal Studies |
| Heather Joshi | Director: Millennium Cohort Study | Centre for Longitudinal Studies |
| Sosthenes Ketende | Research Officer | Centre for Longitudinal Studies |
| Dylan Kneale | Research Officer | Centre for Longitudinal Studies |
| John W. McDonald | Professor of Longitudinal Social Statistics and Director of Methodology | Centre for Longitudinal Studies |
| Robert Michael | Visiting World Scholar | Centre for Longitudinal Studies and University of Chicago |
| Nadine Simmonds | Researcher | National Centre for Social Research |
| Ingrid Schoon | Professor of Human Development and Social Policy | Institute of Education |
| Kate Smith | Millennium Cohort Study Survey Manager | Centre for Longitudinal Studies |

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## The Millennium Cohort Study Team (CLS)

The following team contributed to the fourth survey of the MCS:
Prof. Heather Joshi, Study Director
Dr Kirstine Hansen, Research Director
Denise Brown, Cohort Relations
Robert Browne, Database Manager
David Budge, Communications Manager
Lisa Calderwood, Senior Survey Manager
Christine Chettle, Tracing Team
Peter Deane, Tracing Team
Kevin Dodwell, Tracing Team
Fiona Freel, Communications
Alexandra Frosch, Administrator
Maggie Hancock, Data Officer
Jon Johnson, Senior Database Manager
Dr Elizabeth Jones, Research Officer
Sosthenes Ketende, Research Officer
Dr Dylan Kneale, Research Officer
Prof. John W. McDonald, Director of Methodology
Rachel Rosenberg, Data Officer
Peter Shepherd, Senior Director of the Cohort Studies Resource
Kate Smith, Survey Manager
Mina Thompson, Administrator

```
The National Centre for Social Research (NatCen) Research Team
Carli Lessof
Reg Gatenby
Nadine Simmonds
Yachien Huang
Joanna Chaplin Gray
```


## EXECUTIVE SUMMARY

The Millennium Cohort Study (MCS) is the fourth national birth cohort study in Britain. It has so far followed up the 'Children of the New Century' four times, and is set to track them through their teenage years and into adulthood. The fourth survey (MCS4) collected information from some 14,000 children born in 2000-02 across the UK. The latest survey was conducted when most of the children were aged 7 , in 2008, following previous sweeps at 9 months, age 3 and age 5. This report is a first look at the MCS4 data. It offers mainly simple snapshots of the nation's 7 -year-olds and their families but paves the way for more complex analysis of the longitudinal data accumulated so far.

Chapters 1 and 2 introduce the content of the MCS4 survey and numbers participating in MCS4. Patterns of response are reviewed by UK country and by ethnicity. A total of 13,857 families took part in MCS4: 8,839 in England, 2,018 in Wales, 1,628 in Scotland and 1,372 in Northern Ireland. Altogether this is 1,389 fewer than at MCS3. The percentage of families who have participated in all MCS sweeps ranges from 59 per cent in Scotland to 64 per cent in Wales. Pakistani, Bangladeshi and black families have been more likely to drop out of the study than other ethnic groups.

As in previous MCS surveys, data were collected from both parent figures living with the cohort child. The main respondents were still mostly natural mothers but information was gathered on partners in 10,940 cases. Information, in the form of cognitive assessments and physical measurements, was also collected directly from the vast majority of the children (nearly $99 \%$ of those involved in MCS4). Most of the children (94\%) also completed their own MCS questionnaire for the first time answering questions about their schools, friends and enjoyment of life. This, like the rest of the fourth sweep of the study, has shed some fascinating light on the lives of the Millennium children and their families.

## Family demographics

As Chapter 3 reports, around 30 per cent of 7 -year-old children were living apart from their natural fathers. Although the majority of children were still living with both of their natural parents ( $69 \%$ ), over one in five children were now living with a lone natural mother (22\%) and over one in 20 with a stepfather ( $7 \%$ ).

One child in five had either gained or lost a parent in their household over the first seven years of life. Children were more likely to have lost their natural father from their home if, at the nine month survey, their parents were cohabiting rather than married. Sixty-nine per cent of the natural parents cohabiting at the first survey were still together at the age 7 sweep, including 20 per cent who had got married, compared with 87 per cent of those who had been married in the first place. Lone mothers at the first survey were more likely to have been joined by the child's natural father than a stepfather.

Younger mothers were more likely to have formed stepfamilies over the seven-year period, and older mothers to have become lone parents; but families headed by two natural parents were still more common among older mothers. Black (and Mixed) ethnic groups continued to show high rates of lone parenthood (nearly 50\% among black Caribbean families). Contrasts between UK countries were minor.

Over four in ten (44\%) children experienced the arrival of a younger full brother and sister in their first seven years of life and almost half of all 7 -year-olds living with a stepfather had a younger half sibling. Pakistani and Bangladeshi cohort children had the largest number of siblings.

The majority of non-resident natural fathers maintain contact with their children, but a much lower proportion of them are reported to be making regular maintenance payments for the cohort child.

The complexity and diversity of family structures can be expected to continue increasing as the cohort gets older.

## Parenting

Chapter 4 analyses the responses to questions about parenting posed by the MCS4 survey. Overall, mothers were more likely to be happy with the amount of time they had to spend with their child (43\%). Conversely, over half of fathers (56\%) did not feel they had quite enough, or anywhere near enough, time with them. Predictably, employed mothers were much less happy in this respect than mothers who were not working.

Parents were asked about a range of parent-child activities such as storytelling, painting and going to the park. Mothers engaged in all the activities more often than fathers, with the exception of playing sports or physically active games. Mothers reported reading to their children more frequently than any other activity, with 42 per cent doing so every day compared to 16 per cent of fathers. Perhaps significantly, parents with lower qualifications engaged in some home learning activities, such as reading, less frequently than better-educated parents.

One in four fathers (26\%) was involved in putting their child to bed every day, and around 85 per cent did so at least once a week. Fathers in Wales did bedtimes most frequently and fathers in Northern Ireland least often. Around 70 per cent of fathers looked after their child on their own at least once a week.

Mothers said they used a variety of discipline methods when their child was naughty. This included ignoring them, smacking, shouting, sending them to their room or the naughty chair, taking treats away and bribing them (e.g. with sweets). Overall, 96 per cent of mothers reported that their child went to bed at a regular time on weekdays (8pm on average). Further analysis should offer interesting insights into the parenting styles in MCS families.

## Child self-report

The age 7 survey included a new element: the child self-completion questionnaire, the results of which are described in Chapter 5. This module was introduced not only to gather the cohort children's own views, but to increase their sense of belonging to the survey in the future. The questionnaire asked about their hobbies, their friends, their feelings and their attitudes to school. The children proved old enough to let their own 'voices' be heard. The chapter relates their answers to some key sociodemographic characteristics.

Boys were more likely than girls to enjoy watching television, videos and DVDs. They were also more likely to enjoy participating in sports and playing computer games or with a PlayStation. Girls were more likely to enjoy listening to music, drawing or making things. Children from more disadvantaged families and black ethnic groups were more likely than other children to play computer games. Girls were more likely to say that they had a lot of friends. Having friends who were a mixture of girls and boys was generally most common, but Asian children were more likely only to have friends of their own gender. Children from disadvantaged homes were more likely to worry, feel sad, be tired and like to be alone, but their feelings were also more polarised towards positive extremes. Although children from homes on low incomes were the most likely to say that they liked school a lot, children from higher income families agreed most often that they 'always tried to do their best at school'. Being bullied affected only a minority of children, but was more likely than average for boys, Pakistanis and Bangladeshis, the children of lone parents or poor families. Evidence of this kind should deepen our understanding of the circumstances that encourage children to flourish in school.

## Education, schooling and childcare

Chapter 6 reports on a wide range of data about children's experiences of schooling and out-of-school childcare at age 7. The children were mainly in Year 2 in England and Wales, and Primary 3 in Scotland and Northern Ireland. Nine out of ten were still in the same school as at age 5 . Special educational needs had been identified for 9 per cent.

This chapter finds general similarities, but some differences, across the UK countries to which education policy is devolved. Children in England were the most likely to attend fee-paying schools, though even here the proportion was under one in twenty. In Scotland, mothers were particularly likely to want their children to continue in school past leaving age, and children were especially likely to get to school on foot. Mothers in Northern Ireland were the most likely to be very satisfied with their schools and their children were the least likely to have changed schools since age 5. Mothers in Wales were second most likely to report being very satisfied with their children's schools and their children were more likely to attend a breakfast or afterschool club.

Children in Northern Ireland were reported to do the most homework, nearly two hours per week, compared to about one-and-a-half hours in the other countries. Parental support with homework was high across all social backgrounds, as was attendance at parents' evenings. The most educated parents were slightly less likely to help with homework, but their children were more likely to be among the minority (5\%) getting help from outside tutors. Aspirations for children to continue their education past school-leaving age were very high across the board. The proportion of mothers wanting their children to attend university was as high as 96 per cent even where parents had no qualifications themselves.

## Cognitive development

Chapter 7 looks at the cognitive development of the MCS children at age 7. It examines their scores on a maths test as well as on two subscales from the British Ability Scales: Word Reading for verbal skills and Pattern Construction for non-verbal skills. It shows how these vary across a range of demographic and family characteristics. The children's future educational attainments are likely to be strongly associated with these skills.

Children in Wales and Northern Ireland scored higher than those in England on Pattern Construction, but children in England and Scotland scored higher than the other two countries on Word Reading. On the maths assessment, there were no differences by country.

Girls scored higher than boys on both verbal and non-verbal skills, but the difference was larger for Word Reading. There was no significant difference for the maths test.

Remarkably, the findings also suggest that children from ethnic minority groups showed higher (or at least as high) verbal skills at age 7 as white children. Indian children had overtaken whites by a clear margin, having been considerably behind on vocabulary at age 3 , and still at age 5 . Children growing up with single or cohabiting parents showed lower levels of reading ability, though the association is not necessarily one of cause and effect.

These results suggest that the socioeconomic resources available to the family are more consistently related to children's cognitive outcomes than are gender, ethnicity or country of residence. Children growing up with parents who are well-educated, have a professional job, or are living above the poverty line are performing better than their less privileged peers. The associations between children's scores and parents' relationships, work status, qualifications, occupations and poverty status were very similar for the three different assessments, though the magnitude of the gaps was greatest for verbal skills. This suggests that language and literacy skills are more sensitive to the home environment than non-verbal and numeracy skills. The relative gap in composite cognitive scores between children in advantaged and disadvantaged homes did not widen between ages 5 and 7 .

## Child behaviour

Chapter 8 describes child behavioural adjustment at age 7 as assessed via the Strengths and Difficulties Questionnaire. This 25 -item questionnaire, which was completed by the main respondent (normally the child's mother), was also used at the age 3 and age 5 surveys.

Four of its five sub-scales - emotional symptoms, conduct problems, hyperactivity and peer problems - are summarised in the Total Difficulties score. Eight per cent of 7 -year-olds were classified as having serious behaviour problems with a further 6 per cent having borderline behavioural problems.

As was observed at ages 3 and 5, there were some striking differences between children from advantaged and disadvantaged backgrounds. Significantly fewer behavioural problems were reported for children of more educated parents or with two working parents. There was also still a significant difference between boys and girls. Boys were twice as likely as girls to display serious behaviour problems. Children in England had a higher rate of borderline problems than children growing up in Scotland, Northern Ireland or Wales. There were also differences between ethnic groups, with mothers of black African children reporting the lowest rates of problematic behaviour and black Caribbeans the highest. Children living in twoparent families showed fewer behaviour problems than those in other family arrangements. Children in stepfamilies were most likely to display serious behaviour problems.

Behavioural problems at age 7 were also found to be strongly associated with earlier problems (at age 3 and age 5), indicating that these problems are fairly consistent over time, although reversal of behaviour trends might also be possible. The association of social skills with the acquisition of cognitive skills at school remains to be explored, as does the account of behaviour given by the child's teacher. The results of the teacher survey will be reported later this year.

## Child health

Chapter 9 reports on the children's general health, longstanding conditions and diseases, by gender, ethnicity, country and socio-demographic circumstances. It also covers obesity and lifestyle factors which may contribute to these.

Although the majority of 7-year-olds were said to be in good health, children from disadvantaged backgrounds were more likely to be amongst the minority in poor health. This applies to most health indicators, and across a range of circumstances including parents' qualifications, family type and family poverty status. Advantaged children were more likely to suffer from hay fever and eczema. Bangladeshi and Pakistani children were least likely to be classed as in excellent or very good health. However, they were also among the least likely to be suffering from a longstanding condition. There was a big contrast in child health between black African and black

Caribbean groups. Black African children were the least likely to have a longstanding condition while black Caribbean children were the most, particularly respiratory conditions. However, there were some positive indicators for black Caribbean children in terms of boys' physical activity.

Just over one in five of the children (21\%) were overweight, including 6 per cent who were obese. Girls were more likely than boys to be overweight and obese.
Disadvantaged children were only slightly more likely to be overweight than others. They were however also less likely to engage in physical or sporting activities, to consume fruit and were more likely to go to bed late. Sleep and exercise may become important predictors of excess weight and other aspects of development at later ages. Children who had been skipping breakfast at age 5 were among those more likely to be obese at age 7 . The age 7 results, in turn, may be precursors of future health problems and reflect outcomes of other early-childhood factors which have not yet been fully explored.

## Parental health

MCS provides an unparalleled snapshot of adult health in the UK. It focuses on parents from disadvantaged and ethnic minority groups, and enables the connections to be made between parents' physical and mental health and their children's. Parental health is key to understanding and maintaining child health. The generations are linked, through environmental, lifestyle and genetic factors.

As Chapter 10 points out, across almost all socioeconomic indicators, mothers and fathers in less advantaged circumstances were less healthy, physically and mentally, than more advantaged parents. For example, 22 per cent of mothers in income poverty rated their health as fair/poor compared to 10 per cent of those above the poverty line. These gaps are more evident than for child health ( $5 \%$ of children in families below the poverty line had fair/poor health compared to $2 \%$ of those who were not in poverty).

There are interesting patterns by ethnicity. Black African parents had good health compared to all other ethnic groups, especially black Caribbean parents.
Bangladeshi mothers were more likely to rate their own health as poor, although also more likely not to report illness. Younger parents, and particularly those who were teenagers at the birth of the cohort child, were most likely to report poorer health, reflecting their relative social disadvantages. Among countries, Northern Ireland stood out as having the best self-rated parental health, highest life satisfaction and lowest symptoms of emotional stress.

Analysis of the lifestyle factors considered showed that greater alcohol consumption was associated with the more advantaged parents. However, smoking and obesity posed a particular threat to the health of disadvantaged parents, and could presage problems for the whole family in the future.

## Parents' employment and education

Chapter 11 examines the employment (and continuing education) of mothers and fathers when the cohort child was aged 7. Among mothers employed at MCS4 we report the type of occupation and the use of flexible employment arrangements, which may make it easier or possible to balance work and family responsibilities. Reasons for not being employed are also reported. Changes in families' combined employment status from earlier sweeps are described, and these also show up changes in partnership status. This chapter underlines how strongly related mothers' educational qualifications are to labour-force participation. It also reports that one in six mothers and one in seven fathers had acquired new educational or vocational qualifications since MCS3.

As cohort children passed through the first two years of primary school we saw a continued high level of employment amongst fathers and a net increase in mothers with paid work. Nearly two-thirds of mothers were employed when the cohort child was aged 7 and around three-quarters of them worked part-time. Mothers' overall employment was highest in Scotland, but the proportion in full-time jobs was highest in Northern Ireland (20\%) and lowest in England (16\%). Employment was still more common among mothers in two-parent families while some groups of mothers had little involvement in the labour force: those with low or no qualifications, or partners with lower-level occupations, Pakistanis and Bangladeshis, and lone mothers (although the latter group's employment rate has been increasing). Sweep 4 also confirmed that rotation in and out of employment was continuing. The outflows may become more substantial in the period after 2008. Employer provisions to help combine motherhood and work continue to be more favourable for mothers with managerial/professional or intermediate jobs. These mothers are, in turn, more likely to have partners in similar jobs than other mothers.

In summary, cohort children are being brought up by parents in very different situations. In some households both parents are workless, while in others each parent has a high-flying, full-time career. Such contrasts will clearly be reflected in the inequality of family income - examined in the next chapter - and are likely to have longer-term consequences for the family and the cohort child.

## Income and poverty

Chapter 12 reports family income in a way that is as close as possible to other data sources used to gauge poverty, and describes the characteristics of families at both ends of the income spectrum. Income is measured net of taxes and benefits, adjusted for family size and before housing costs. Families in poverty are those that have a net income below 60 per cent of the national median. This approximates the criterion used in official measures of child poverty and in monitoring progress towards its elimination. Income data collected in a multi-purpose survey such as this has some limitations - for example, the levels of child poverty recorded in MCS are not wholly comparable with official estimates. However, the pattern across MCS surveys,
as the children pass from infancy to age 7, looks very similar to the one that has emerged from the official series of statistics covering children of all ages. The key message is that poverty reduction appears to have stalled.

At MCS4, as at previous sweeps, about 30 per cent of families had income below the poverty line. Those in the bottom 20 per cent had incomes no more than 48 per cent of the national median. They had similar demographic characteristics to those classified in the broader band of poverty below 60 per cent of the national median: lone parents and couples without work, or where only the mother has a job, Pakistani, Bangladeshi and black families, residents in areas of minority ethnic concentration, social tenants, young mothers and those with poor education and poor health.

Gaining or losing employment often accompanies movements in and out of poverty. Despite their lower risk of poverty, working families are not immune from low income. Those in which at least one parent is earning constitute half of those classified below the poverty line. The level of income in the bottom fifth is one-sixth of the average level in the top fifth, which has an opposite demographic profile, characterised by dual earners, tertiary qualifications and home ownership, older mothers, and residence in 'advantaged' areas of England and Scotland. As in the official estimates for child poverty, Scotland had the lowest rate of income poverty (26\%), while Northern Ireland and Wales had the highest ( 32 and $33 \%$ respectively). There were, however, regions of England with poverty rates well above these levels (North East $40 \%$, other northern regions $35 \%$ and London $36 \%$ ).

## Housing, neighbourhood and residential mobility

Chapter 13 presents some evidence of poorer housing quality and neighbourhood amenities for the MCS4 families with incomes below the poverty line. However, only a minority of the 'poor' are affected by damp ( $15 \%$ with some or great problems), lack of access for the child to parks or play areas (13\%) or describe their home as 'disorganised' (20\%). As for social capital, 7 per cent of the poor respondents said they had neither friends nor family in the local area compared with 4 per cent of those with income above the poverty line.

Most of this chapter is devoted to residential mobility between MCS3 and MCS4. Fewer MCS families moved home between sweeps 3 and 4 than between sweeps 2 and 3 ( $20 \%$ versus $24 \%$ ). The most popular reasons for moving given by interviewed movers at sweep 4 were: wanting a larger home (37\%), a better home ( $21 \%$ ) and a better area (20\%). Fifteen per cent of movers mentioned children's schooling as a reason for moving.

This chapter describes some social correlates of mobility. Residential mobility between MCS3 and MCS4 varied according to ethnicity. The rates of changing address ranged from 12 per cent among Indian families to 21 per cent among white families. Homeowners were less likely to move between sweeps 3 and 4 than tenants. Just over half of those renting privately (53\%) moved, but only 20 per cent of
social tenants (local authority or housing association) moved. Workless families were more likely to move than those where at least one parent was employed at sweep 4; so were those who had considered their area at the previous sweep to be unsafe and/or a poor area for bringing up children.

## Conclusion

What does this survey tell us about the topics on which the study was particularly designed to throw light? These are the differences between the four countries of the UK, and between ethnic groups, and the emergence or closing of gaps in the development of children from advantaged and disadvantaged homes.

The study shows that families throughout the UK are rather similar. Nevertheless, Chapter 14 highlights some important and interesting inter-country differences. Scotland had the lowest child poverty rate and Wales the highest. Children in England were the most likely to say they enjoyed school while children in Wales were the most likely to be reported in excellent health. However, this study's major finding is that the variations in family circumstances and children's outcomes are far greater within countries, than between them.

Regardless of where they lived, ethnic minority families, apart from Indians, were considerably poorer than whites. This is a similar pattern to previous sweeps, although Indian families have drawn closer to whites. Verbal cognitive assessments revealed more dramatic gains for Indian children. By age 7, they had surpassed white children by a wide margin, and other minority children had also caught up with them. There is, however, much evidence of diversity between and within ethnic groups. This should caution against crude white/non-white comparisons.

There is also abundant evidence of the transmission of social and economic advantage. The key gap in cognitive ability between children from advantaged and disadvantaged backgrounds remained roughly constant between ages 5 and 7. The parental interviews suggest, however, that families across the social spectrum are taking an interest in their children's schooling and have high aspirations. Trouble may yet cloud the cohort members' future; but the conclusion from the age 7 survey must be that they are generally thriving, healthy and doing their best to learn.

## Chapter 1

## INTRODUCTION

Kirstine Hansen and Elizabeth M. Jones

## Chapter overview

This chapter looks puts the Millennium Cohort Study's fourth survey in context of the study as a whole and provides a guide to the succeeding chapters. It describes the design of the Millennium Cohort Study and then describes the following elements of the fourth survey:

- The response rate
- The content
- The fieldwork and the timetable
- The weighting

The Millennium Cohort Study (MCS) is the fourth national birth cohort study in Britain. It has so far followed up the 'Children of the New Century' four times, and is set to follow them through their teenage years and into adulthood. The fourth survey (MCS4) collected information from 13,857 families of children born in 2000-02 across the United Kingdom. This was done when the children were aged 7, in 2008. This addition to the datasets offers a chance to look at the situation of the Millennium Cohort children after two years of primary school. The children were previously surveyed at 9 months old (MCS1), 3 years old (MCS2) and 5 years old (MCS3). All four sweeps are intended to be used longitudinally to explore the lives and situations of the cohort children as they grow from birth to age 7 and beyond. The analyses presented in this report are only a building block towards this end.

This report offers a first look at the MCS4 data. This will be of interest to a wide range of readers, but its scope is limited to preliminary description. It is primarily intended to provide an introduction to potential users of the survey and to stimulate further analysis. Potential analysts should read it along with the documentation on the MCS sampling and response rates (Plewis, 2007; Ketende, 2010), the Millennium Cohort Study First, Second Third and Fourth Surveys: Guide to the Datasets (Hansen, 2010) and the technical report on fieldwork published by National Centre for Social Research (Chaplin-Gray et al., 2010), all of which are available from the CLS website (www.cls.ioe.ac.uk) and from the Data Archive at Essex University. A similar crosssectional account of the first three surveys can be found in the reports edited by Dex and Joshi (2004) and Hansen and Joshi (2007, 2008). A collection of analyses of the first three surveys, taking a more in-depth, multi-dimensional and longitudinal approach across the data to age 5, was published in 2010 (Hansen et al.). This should also give an idea of the possibilities for further analysis when these data from age 7 can be better integrated.

## The study design

It may help the reader of this report to bear in mind that this cohort study, unlike the previous British national birth cohort studies, is based on a sample of births across a whole year, with a disproportionately stratified and clustered sample design. ${ }^{1}$ The sample for the first sweep was taken from babies born between $1^{\text {st }}$ September 2000 and $31^{\text {st }}$ August 2001 in England and Wales, who would form an academic-year cohort. In Scotland and Northern Ireland, birth dates run from $23^{\text {rd }}$ November 2000 to $11^{\text {th }}$ January 2002. The start was delayed to birth dates from $23^{\text {rd }}$ November 2000 to avoid an overlap with an infant feeding survey. The sampled cohort was extended to 59 weeks of births to make up for a shortfall in numbers that became apparent during fieldwork. Children with sample birth dates were eligible for the survey if they lived in one of 398 selected electoral wards across the UK when aged 9 months. All children in these wards were eligible and the wards were selected according to a disproportionately stratified design.

The objective of this design was to ensure adequate representation of:

- All four UK countries;
- Areas in England with higher minority ethnic populations (identified as more than 30 per cent black or Asian in the ward at the 1991 Census);
- Disadvantaged areas (electoral wards whose value on the Child Poverty Index in1998-9 was above 38.4 per cent). This represents the cut-off threshold for the top 25 per cent of disadvantaged wards in England and Wales, and encompasses a slightly greater fraction in Scotland and Northern Ireland.

Further details can be found in The Millennium Cohort Study: Technical Report on Sampling (Plewis, 2007).

The selection of wards labelled 'disadvantaged' was made after the choosing of wards with concentrations of minority ethnic populations. All the wards selected in the 'ethnic' stratum had Child Poverty Index values above or close to the cut-off threshold, so they too can be thought of as 'disadvantaged' by this definition. The third, under-represented, stratum is the rest - non-disadvantaged; although, in this report, it is often called 'advantaged' as shorthand. The sampling weights associated with these strata will never change as they are fixed on entry to the cohort.

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## Response at MCS4

There were 19,244 families potentially eligible for inclusion in the issued sample for the fourth survey. They were families who had provided information at either of the first or second surveys, at ages 9 months and 3 years. The third survey at age 5 also attempted to follow up these families.

As shown in Table 1.1, the fourth sample achieved a response from 13,857 families or 72 per cent of the potentially eligible sample. As explained in Chapter 2, 'productive' families were those with some data from one of five data collection instruments. The non-productive cases are also shown in Table 1.1 by category of non-response. Some of these, such as emigrant families, would not have been eligible for the study. They were, on the whole, already known and were not issued to the field. Some refusals at sweeps 2 and 3 were not deemed 'permanent'. These families were therefore included among those the survey attempted to contact at sweep 4. The response rate out of cases issued to fieldwork was 82 per cent. There were 14,043 cohort children in the 13,857 productive families. The response rates to the individual survey elements within productive families were around 99 per cent for the main interview, cognitive assessments and physical measurements; 94 per cent for the child self-completion questionnaire; and 86 per cent for the partner interview in households where anyone was eligible (Chaplin-Gray et al., 2010).

Table 1.1: MCS4 Overall Response

|  |  | n |
| :--- | ---: | ---: |
| Productive | 13,857 | 72.0 |
| Ineligible | 488 | 2.5 |
| Uncertain Eligibility (including untraced movers) | 848 | 4.4 |
|  | Refusals | 3,516 |
|  | Non-Contact | 149 |
|  | Other | 386 |
| Total |  | 19,244 |

## Content of the MCS4 Survey

The structure of the data collection is set out in Table 1.2. Each main informant gave a computer-assisted personal interview (CAPI), during which they also completed a confidential questionnaire in computer-assisted self-interview mode (CASI). The topics covered in each part of the instrument are also shown in Table 1.2. In addition to the information collected from adults, there was direct contact with the cohort children for cognitive assessments, anthropometric measurements and a selfcompletion questionnaire.

| Respondent | Mode | Summary of content |
| :---: | :---: | :---: |
| Mother/Father | Interview | Module HD: Household demographics |
| *Mother/main |  | Module FC: Family context |
|  |  | Module ES: Early education, schooling and childcare |
|  |  | Module AB: Child and family activities and child behaviour |
|  |  | Module PA: Parenting activities |
|  |  | Module CH: Child health |
|  |  | Module PH: Parental health |
|  |  | Module EI: Employment, education and income |
|  |  | Module HA: Housing and local area |
|  |  | Module OM: Other matters |
|  | Self-completion | Module SC: Self-completion |
|  |  | - Child's temperament and behaviour |
|  |  | - Child's relationship with siblings |
|  |  | - Parenting and parent-child relationship |
|  |  | - Mental health |
|  |  | - Relationship with partner |
|  |  | - Previous relationships, children living elsewhere, non-- <br> - Resident parents |
|  |  | - Attitudes, ethnic identity, racial harassment and discrimination |
|  |  | - Personality (OCEAN) |
|  |  | - Life satisfaction |
|  | Interview | Module Z: Consents and contact information |
| *Father/Partner | Interview | Module FC: Family context |
|  |  | Module ES: Early education, schooling and childcare (some) |
|  |  | Module PA: Parenting activities |
|  |  | Module PH: Parental health |
|  |  | Module El: Employment, education and income |
|  |  | Module OM: Other Matters |
|  | Self-completion | Module SC: Self-completion |
|  |  | - Parenting and parent-child relationship |
|  |  | - Mental health |
|  |  | - Relationship with partner |
|  |  | - Previous relationships, children living elsewhere |
|  |  | - Attitude, ethnic identity and racial harassment and discrimination |
|  |  | - Personality (OCEAN) |
|  |  | - Life satisfaction |
|  | Interview | Module Z: Consents and contact information |
| Interviewer | Observations | Cognitive assessment |
| Child | Assessments | Story of Sally and Anne** |
|  |  | British Ability Scales: Word Reading |


| Table 1.2: Summary of MCS4 Survey Elements |  |  |
| :--- | :--- | :--- |
| Respondent | Mode | Summary of content |
| Continued |  | British Ability Scales: Pattern Construction |
|  |  | Progress in Maths (Millennium Cohort Study edition) |
|  | Measurements | Height, weight, body-fat and waist circumference and <br> physical activity monitoring |
|  | Self-completion | Hobbies, friends and family, feelings, school |
|  | Self-completion | Child's abilities and behaviour |
| Teacher |  | Suspensions and exclusions |
|  |  | Language of schooling and language needs |
|  |  | Special Educational Needs/Additional support needs |
|  |  | Parental interest in education |
|  |  | Setting and streaming |
|  |  | Teacher demographics |
|  |  | Study child's class |

*In the majority of cases the Main interview was undertaken by the mother/mother figure and the Partner interview was undertaken by the father/father figure. See Table 2.9.
**The Child Theory of Mind Assessment 'The Story of Sally and Anne’ was also administered at age 5. The results are not covered in this report, as they require detailed evaluation. The results of the MCS4 Teacher survey are also outside the scope of this report, as they came in later than the main fieldwork.

## Fieldwork for MCS4

Following a competitive tender process, the National Centre for Social Research (NatCen) was appointed to carry out the fieldwork for both MCS3 and MCS4. The fieldwork in Northern Ireland was sub-contracted by NatCen to the Central Survey Unit of the Northern Ireland Statistics and Research Agency. The first wave of the main stage fieldwork started in England and Wales in January 2008 and in Scotland and Northern Ireland in April 2008. The survey also included a follow-on survey of teachers extending into 2009. Interviewer briefings included specific training in the administration of child cognitive assessments and physical measurements.

## Fieldwork timetable

The fieldwork timetable for MCS4 was driven by the requirement to interview the family during the child's third year of compulsory schooling (Year 2 in England and Wales and Primary 3 in Scotland and Northern Ireland). As at MCS3, fieldwork was compressed into school years. In England and Wales, the cohort's birth dates span a single school year. However, in Scotland and Northern Ireland the birth dates are spread over more than one school year. In England, Wales and Northern Ireland, school year is normally determined by date of birth. In Scotland, school year is determined by parental preference in addition to date of birth. Table 1.3 sets out the
timetable for fieldwork with the families, while Table 1.4 shows the timing for the follow-on postal survey of the teachers of cohort children identified in the interviews.

| Wave | Country | Dates of birth | Fieldwork |
| :---: | :---: | :---: | :---: |
| E1 | England | $1^{\text {st }}$ September $2000-28^{\text {th }}$ February 2001 | January - May 2008 |
| E2 | England | $1^{\text {st }}$ March 2001 - $11^{\text {th }}$ January 2002 | April - August 2008 |
| W1 | Wales | $1^{\text {st }}$ September $2000-28^{\text {th }}$ February 2001 | January - May 2008 |
| W2 | Wales | $1^{\text {st }}$ March 2001 - $11^{\text {th }}$ January 2002 | April - August 2008 |
| S1 | Scotland | $1^{\text {st }}$ September $2000-28^{\text {th }}$ February 2001 (started school in August 2005) | April - August 2008 |
| S2 | Scotland | $1^{\text {st }}$ September $2000-28^{\text {in }}$ February 2001 (started school in August 2006) and <br> $1^{\text {st }}$ March $2001-11^{\text {th }}$ January 2002 | August - December 2008 |
| N1 | Northern Ireland | $24^{\text {th }}$ November $2000-1^{\text {st }}$ July 2001 | April - August 2008 |
| N2 | Northern Ireland | $2^{\text {nd }}$ July 2001-11 ${ }^{\text {th }}$ January 2002 | $\begin{aligned} & \text { September - December } \\ & 2008 \end{aligned}$ |


| Table 1.4: Fieldwork timetable for MCS4 - Teacher Survey |  |  |  |
| :--- | :--- | :--- | :--- |
| Teacher Wave | Country | Main Fieldwork Wave | Teacher Fieldwork |
| Wave 1 | England and Wales | Interviews in E1, E2, W1, W2 up <br> to end April 2008 | June - November 2008 |
| Wave 2a | Scotland and <br> Northern Ireland | Interviews in S1 and N1 up to end <br> April 2008 | July - December 2008 |
| Wave 2b | England and Wales | Interviews in E1, E2, W1, W2 up <br> to end May 2008 | July - December 2008 |
| Wave 3 | England, Wales, <br> Scotland, Northern <br> Ireland | Interviews in E1, E2, W1, W2, S1, <br> N1 up to end August 2008 | October 2008 - February <br> 2009 |
| Wave 4 | Scotland and <br> Northern Ireland | Interviews in S2 and N2 up to end <br> December 2008 | February - July 2009 |

The result was that the bulk of interviews (two-thirds) took place in the first six months following and including the children's $7^{\text {th }}$ birthdays. Average age at interview was 7 years 2 months. One-sixth of the interviews occurred while the children were not yet seven, and one sixth when they were just over seven-and-a-half (Ketende, 2010).

Table 1.5 shows the numbers of interviews achieved during each month of fieldwork during 2008, and the small 'overspill' into the first few week of 2009 for a few cases in Scotland, and even fewer interviewed in England, though these children may have originally been sampled in Scotland or Northern Ireland with later birth dates than those sampled in England.

| Unweighted observations (weighted column percentages) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Month (2008) | England | Wales | Scotland | Northern Ireland | UK |
| Jan | $\begin{array}{r} 10 \\ (0.1) \end{array}$ |  |  |  | $\begin{array}{r} 10 \\ (0.1) \end{array}$ |
| Feb | $\begin{array}{r} 593 \\ (6.8) \end{array}$ | $\begin{array}{r} 104 \\ (5.2) \end{array}$ |  |  | $\begin{array}{r} 697 \\ (5.8) \end{array}$ |
| March | $\begin{gathered} 1234 \\ (13.5) \end{gathered}$ | $\begin{array}{r} 195 \\ (9.2) \end{array}$ |  |  | $\begin{gathered} 1429 \\ (11.5) \end{gathered}$ |
| April | $\begin{aligned} & 1831 \\ & (20.8) \end{aligned}$ | $\begin{array}{r} 331 \\ (17.0) \end{array}$ | $\begin{array}{r} 167 \\ (8.8) \end{array}$ | $\begin{array}{r} 171 \\ (12.1) \end{array}$ | $\begin{array}{r} 2500 \\ (19.2) \end{array}$ |
| May | $\begin{array}{r} 1693 \\ (19.1) \end{array}$ | $\begin{array}{r} 345 \\ 18.5) \end{array}$ | $\begin{array}{r} 135 \\ (6.9) \end{array}$ | $\begin{array}{r} 194 \\ (14.5) \end{array}$ | $\begin{array}{r} 2367 \\ (17.9) \end{array}$ |
| June | $\begin{gathered} 1308 \\ (14.5) \end{gathered}$ | $\begin{array}{r} 241 \\ (12.6) \end{array}$ | $\begin{array}{r} 31 \\ (1.8) \end{array}$ | $\begin{array}{r} 260 \\ (20.7) \end{array}$ | $\begin{array}{r} 1840 \\ (13.5) \end{array}$ |
| July | $\begin{array}{r} 968 \\ (10.9) \end{array}$ | $\begin{array}{r} 260 \\ (13.2) \end{array}$ | $\begin{array}{r} 16 \\ (0.8) \end{array}$ | $\begin{array}{r} 50 \\ (2.7) \end{array}$ | $\begin{aligned} & 1294 \\ & (9.8) \end{aligned}$ |
| Aug | $\begin{array}{r} \hline 757 \\ (8.6) \end{array}$ | $\begin{array}{r} 275 \\ (13.9) \end{array}$ | $\begin{array}{r} 78 \\ (4.9) \end{array}$ | $\begin{array}{r} 28 \\ (1.9) \end{array}$ | $\begin{aligned} & \hline 1138 \\ & (8.3) \end{aligned}$ |
| Sept | $\begin{array}{r} 375 \\ (4.3) \end{array}$ | $\begin{array}{r} 159 \\ (7.7) \end{array}$ | $\begin{array}{r} 389 \\ (24.2) \end{array}$ | $\begin{array}{r} 171 \\ (13.7) \end{array}$ | $\begin{aligned} & \hline 1094 \\ & (6.7) \end{aligned}$ |
| Oct | $\begin{array}{r} 92 \\ (1.1) \end{array}$ | $\begin{array}{r} 54 \\ (2.4) \end{array}$ | $\begin{array}{r} 374 \\ (23.9) \end{array}$ | $\begin{array}{r} 206 \\ (14.7) \end{array}$ | $\begin{array}{r} 726 \\ (3.8) \end{array}$ |
| Nov | $\begin{array}{r} 7 \\ (0.1) \end{array}$ | $\begin{array}{r} 8 \\ (0.4) \end{array}$ | $\begin{array}{r} 248 \\ (16.5) \end{array}$ | $\begin{array}{r} 254 \\ (16.6) \end{array}$ | $\begin{array}{r} 517 \\ (2.3) \end{array}$ |
| Dec | $\begin{array}{r} 8 \\ (0.1) \\ \hline \end{array}$ |  | $\begin{array}{r} 130 \\ (8.5) \\ \hline \end{array}$ | $\begin{array}{r} 42 \\ (3.1) \\ \hline \end{array}$ | $\begin{array}{r} 180 \\ (1.0) \\ \hline \end{array}$ |
| 2009 Jan/Feb | $\begin{array}{r} 11 \\ (0.1) \end{array}$ |  | $\begin{array}{r} 54 \\ (3.7) \end{array}$ |  | $\begin{array}{r} 65 \\ (0.4) \end{array}$ |
|  | (100.0) | (100.0) | (100.0) | (100.0) | (100.0) |
| Unweighted sample nos | 8887 | 1972 | 1622 | 1376 | 13857 |
| Weight used | dovwt1 |  |  |  | dovwt2 |

Overall the bulk of the data collection took place between March and June 2008. In England it tailed off over the summer and autumn, with a similar but somewhat delayed profile in Wales, as shown in Figure 1.1. In Scotland and Northern Ireland, where fieldwork did not start until April 2008, a clear lull in activity is visible between the two waves in the school holiday months. The relatively small size of the first wave in Scotland is also visible.

Figure 1.1: Timing of MCS4 interviews within country


It so happens that one-sixth of all interviews took place before April 2008 just as onesixth of the interviews took place before the child' $7^{\text {th }}$ birthday, but these are not necessarily the same children. Those interviewed before April could have had $7^{\text {th }}$ birthdays any time between September 2007 and August 2008, and therefore have been aged anywhere between $61 / 2$ and $71 / 2$ at interview.

## Weighting

## Sample weights and corrections for clustered design

The disproportionate feature of the sampling design means that weighting is necessary to infer nationally representative estimates. Although the sample contains a disproportionate number of ethnic minority and disadvantaged children, when the sampling weights are applied, the weighted percentages of children in these groups will be close to their proportions in the UK population. Users are advised that where analysis is confined to data relating to a single country the sampling weight is weight 1 . Where analysis covers all countries of the UK, the sampling weight is weight 2. Both weights are included in the deposited datasets. All analyses in this report allow for these weights using Stata 10's 'survey' commands. ${ }^{2}$ The 'survey' commands also allow for the data being clustered by ward of initial residence. If individuals living in specific areas are more similar than individuals living elsewhere, the data will be correlated; a straightforward estimate of standard errors will be incorrect rendering the significance tests invalid. The correlation needs to be taken into account. There are several ways to do this, as described in Section 11, Part 7, of the Guide to the Datasets (Hansen, 2010) or Ketende (2010). Most of the tabulations presented here have used Stata 10's 'survey' commands.

[^1]
## Non-response weighting at MCS4

As well as restoring representative estimates of the population which would otherwise be distorted by disproportionate sampling, we also use weighting to correct for bias which may be introduced though disproportionate losses to the sample, through non-response at the first survey and attrition at subsequent waves.

These non-response weights compound the sampling weights with a factor reflecting each productive family's chance of having been lost to the survey. Thus families with characteristics resembling those of many drop-outs are given a bigger attrition weight than those who do not. Details of how these weights were calculated, using multiple imputation, are given in the Millennium Cohort Study Technical Report on Response (Ketende, 2010) and also in Part 11, Section 7 of the MCS Guide to the Datasets (Hansen, 2010), along with the range of their resulting values, which are also plotted in Figures 2.1 and 2.2 of this report.

Some chapters in this report use 'overall' weights to adjust for attrition as well as sample design. Others, where attrition bias is less of a problem, use sampling weights. The weights used are clearly defined in each chapter.

## Guide to this report

This report provides a quick tour of the different substantive areas in the fourth sweep of the MCS. It is not intended to explore any topic in depth, nor does it do justice to the possibilities for longitudinal or cross-domain analysis, let alone comparison with other datasets. However, where appropriate, chapters draw on evidence from these other sources. The report merely aims to point the way to those who would wish to do such work, and for whom the dataset has been constructed.

In each chapter the variables of interest are tabulated against a set of factors including the UK country, gender of child, a small collection of social and demographic indicators of the family context, ethnic group, family structure, age and educational attainment of parents, family income and parental employment. Chapter authors have made their own choices of exactly how these variables are defined, and have sometimes chosen to look at other variables relevant to their particular topic as well. Some have used the indicator of family poverty derived in Chapter 12 to approximate the official definition of net family income below 60 per cent of the national median. Readers should be aware that the income measures in the survey are not sufficiently detailed to make this an exact measure of the official child poverty threshold. This report only uses some of the variables gathered at sweep 4. Users should not assume that information is limited to those variables presented here.

The reader will find that authors have also chosen to confine many tabulations to cases where the main informant is the child's mother. This is for the sake of simplicity. Detailed attention to unusual cases is possible but is outside the scope of this report. Likewise, those where the partner interview was not with a father figure are generally excluded. This makes it clearer that we are talking about responses from mothers and fathers respectively. The evidence from other cases is not rejected
for all time, but it needs to be used with greater care. For some analyses that required the fathers to provide data, we do not include those two-parent families where the resident father did not complete an interview.

Similarly, in most chapters (except Chapter 5) the analysis of data about children sets aside the approximately 200 children who are the second and third of twins or triplets. Focused analysis of multiple birth families was beyond the scope of this descriptive report. The twin and triplet data provide the opportunity for future research on within- and between-family differences.

Chapter 2 examines the MCS4 response and location by country in more detail. Chapters 3 and 4 look at family demographics and parenting. Chapter 5 considers the children's own account of themselves - from a self-reported paper questionnaire - the first time such data have been collected. Chapter 6 focuses on different aspects of schools and out-of-school childcare; Chapter 7 on cognitive development; and Chapter 8 on behavioural development. Child health and parental health are surveyed in Chapters 9 and 10. Chapters 11 to 13 look at the parents and the contexts in which the cohort is being brought up: parental employment and education in Chapter 11; their income in Chapter 12; and their neighbourhood and housing in Chapter 13. A concluding chapter, 14, draws together a few themes that have already emerged.

## References

Chaplin Gray, J., Gatenby, R. and Huang, Y. (2010) Millennium Cohort Study Sweep 4: Technical Report. London: National Centre for Social Research. http://www.cls.ioe.ac.uk/studies.asp?section=00010002000100160003

Dex, S. and Joshi, H. (eds) (2004) Millennium Cohort Study First Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.
http://www.cls.ioe.ac.uk/studies.asp?section=0001000200010012
Hansen, K. (ed.) (2010) Millennium Cohort Study First, Second, Third and Fourth Surveys: A Guide to the Datasets, Fifth Edition. London: Centre for Longitudinal Studies, Institute of Education, University of London. http://www.cls.ioe.ac.uk/studies.asp?section=00010002000100160005

Hansen, K., Joshi, H. and Dex, S. (eds) (2010) Children of the $21^{\text {st }}$ Century, Volume 2: The first five years. Bristol: Policy Press.

Hansen, K. and Joshi, H. (2007) Millennium Cohort Study Second Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London. http://www.cls.ioe.ac.uk/studies.asp?section=0001000200010012

Hansen, K. and Joshi, H. (eds) (2008) Millennium Cohort Study Third Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.
http://www.cls.ioe.ac.uk/studies.asp?section $=0001000200010012$
Ketende, S. (2010) Millennium Cohort Study Technical Report on Response, Third Edition. London: Centre for Longitudinal Studies, Institute of Education, University of London.
http://www.cls.ioe.ac.uk/studies.asp?section=0001000200010010
Plewis, I. (ed.) (2007) The Millennium Cohort Study Technical Report on Sampling, 4th edition. London: Centre for Longitudinal Studies, Institute of Education, University of London.
http://www.cls.ioe.ac.uk/library.asp?section=00010001000600060018\&page=2

## Chapter 2

## MCS4 DATA

Sosthenes C. Ketende

## Chapter overview

This chapter looks at the response rate to sweep 4 of the Millennium Cohort Study (MCS) and summarises the patterns of response. It examines:

- Number of respondents (productive families)
- Response by UK country and ward type
- Response by ethnicity
- Number of cohort children in productive sample
- Residential mobility between UK countries
- Partner response rates
- Gender of main respondents
- Attrition and unit non-response survey weighting adjustment


## Introduction

This chapter sets the scene for what follows by reviewing the numbers of families for whom sweep 4 data is available. It summarises patterns of response by the reasons for survey losses, by UK country and by ethnicity.

The issued sample for sweep 4 was 17,031 out of 19,244 or 88.5 per cent of the Millennium Cohort Study (MCS) families. The exclusion criteria included, but were not limited to, cohort child deaths, international emigrants, families judged to have refused permanently to take part in the survey and some cases of sensitive family circumstances (see Plewis (2007) and Ketende (2008) for more details).

The following definitions are used in tables and text throughout this chapter:

## Productive

The families with some data from at least one of the data collection instruments other than data carried forward from previous sweeps.

## Ineligible

Emigrations and child deaths.

## Uncertain eligibility

Families who were away temporarily and those whose eligibility was uncertain, including untraced movers.

## Unproductive

- Refusals (whether or not 'permanent' which may have been made at sweep 4 or cumulated from a previous survey).
- Non-contacts (i.e. address known but interviewer unable to make an appointment).
- Untraced, (current address not established).
- Other non-responses include: language problems, ill/incapacitated, deleted/lost data (files lost in fieldwork).


## MCS4 response

There were 13,857 productive families at sweep 4, as shown in Table 2.1. The response rate was therefore 72 per cent $(13,857 / 19,244)$ of the MCS sample or 81 per cent $(13,857 / 17,031)$ of families issued to the field for sweep 4 . This is 1,389 families fewer than at sweep 3 . Sample loss between sweep 3 and 4 is nearly identical to the 1,444 families regained at sweep 3 having not participated at sweep 2 (see Ketende (2008) and Hansen and Joshi (2008) for more details). Over 71 per cent of these 1,444 families participated at sweep 4, see Table 2.3.

Response rates by UK country vary from nearly 70 per cent in Scotland to 73 per cent in Wales. Table 2.1 shows the numbers of productive cases and various types of unproductive cases by country. The biggest difference between UK countries is the refusal. Northern Ireland has the highest refusal rate (22\%) and England the lowest (17\%). Percentages in other response types are comparable across countries, although Scotland's lowest productive rate is mirrored by highest rates of ineligible and untraced.

Table 2.1: MCS4 response: families

|  | England | Wales | Scotland | Northern Ireland | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Productive | 72.3 | 73.1 | 69.7 | 71.3 | 72.0 |
|  | $(8839)$ | $(2018)$ | $(1628)$ | $(1372)$ | $(13857)$ |
| Refusal | 17.4 | 19.1 | 18.6 | 22.1 | 18.3 |
|  | $(2131)$ | $(526)$ | $(434)$ | $(425)$ | $(3516)$ |
| Other unproductive | 2.0 | 2.5 | 2.2 | 0.9 | 2.0 |
|  | $(248)$ | $(69)$ | $(52)$ | $(17)$ | $(386)$ |
| Ineligible | 2.7 | 1.4 | 3.9 | 1.6 | 2.5 |
|  | $(327)$ | $(40)$ | $(91)$ | $(30)$ | $(488)$ |
| Untraced | 4.7 | 3.2 | 5.1 | 3.3 | 4.4 |
|  | $(579)$ | $(87)$ | $(118)$ | $(64)$ | $(848)$ |
| No contact | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 |
|  | $(101)$ | $(20)$ | $(13)$ | $(15)$ | $(149)$ |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|  | $(12225)$ | $(2760)$ | $(2336)$ | $(1923)$ | $(19244)$ |

Notes: Unweighted per cent. Unweighted sample in parentheses.

## MCS4 response by UK country and ward type at entry to the sample

Table 2.2 shows that 78 per cent of non-disadvantaged families and about 65 per cent of families in areas of high minority ethnic populations in England were productive, providing the highest and lowest stratum-specific response at MCS4, just as it was at MCS3. The response rate for families sampled in the non-disadvantaged strata achieved 72 per cent in each UK country. Refusal rates varied from about 14 per cent in the 'England non-disadvantaged' to 22 per cent in disadvantaged wards in Northern Ireland.

Table 2.2: MCS4 Response by UK country and ward type at MCS1

|  |  | Productive | Refusal | Other unproductive | Ineligible | Untraced | $\begin{gathered} \text { No } \\ \text { contact } \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England | Advantaged <br> Disadvantaged <br> Ethnic | 78.5 $(3788)$ 70.3 $(3377)$ 64.6 $(1674)$ | $\begin{aligned} & 13.7 \\ & (663) \\ & 19.0 \\ & (912) \\ & 21.5 \\ & (556) \\ & \hline \end{aligned}$ | 1.2 $(60)$ 2.2 $(105)$ 3.2 $(83)$ | $\begin{gathered} 3.7 \\ (180) \\ 2.0 \\ (95) \\ 2.0 \\ (52) \\ \hline \end{gathered}$ | $\begin{gathered} 2.5 \\ (119) \\ 5.6 \\ (267) \\ 7.4 \\ (193) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.4 \\ (18) \\ 1.0 \\ (50) \\ 1.3 \\ (33) \end{gathered}$ | $\begin{gathered} 100.0 \\ (4828) \\ 100.0 \\ (4806) \\ 100.0 \\ (2591) \\ \hline \end{gathered}$ |
| Wales | Advantaged <br> Disadvantaged | $\begin{gathered} 74.8 \\ (622) \\ 72.4 \\ (1396) \\ \hline \end{gathered}$ | $\begin{array}{r} 18.4 \\ (153) \\ 19.3 \\ (373) \\ \hline \end{array}$ | $\begin{gathered} 3.0 \\ (25) \\ 2.3 \\ (44) \\ \hline \end{gathered}$ | $\begin{gathered} 1.7 \\ (14) \\ 1.3 \\ (26) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2.0 \\ (17) \\ 3.6 \\ (70) \\ \hline \end{gathered}$ | $\begin{gathered} 0.1 \\ (1) \\ 1.0 \\ (19) \\ \hline \end{gathered}$ | $\begin{aligned} & 100.0 \\ & (832) \\ & 100.0 \\ & (1928) \\ & \hline \end{aligned}$ |
| Scotland | Advantaged <br> Disadvantaged | $\begin{aligned} & 72.4 \\ & (829) \\ & 67.1 \\ & (799) \end{aligned}$ | $\begin{aligned} & 16.5 \\ & (189) \\ & 20.6 \\ & (245) \end{aligned}$ | $\begin{gathered} 2.6 \\ (30) \\ 1.8 \\ (22) \\ \hline \end{gathered}$ | $\begin{array}{r} 5.0 \\ (57) \\ 2.9 \\ (34) \\ \hline \end{array}$ | $\begin{aligned} & 3.1 \\ & (36) \\ & 6.9 \\ & (82) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.3 \\ & (4) \\ & 0.8 \\ & (9) \\ & \hline \end{aligned}$ | 100.0 <br> $(1145)$ <br> 100.0 <br> $(1191)$ <br> 100. |
| Northern Ireland | Advantaged <br> Disadvantaged | $\begin{aligned} & \hline 73.9 \\ & (534) \\ & 69.8 \\ & (838) \end{aligned}$ | $\begin{aligned} & \hline 21.6 \\ & (156) \\ & 22.4 \\ & (269) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 0.4 \\ (3) \\ 1.2 \\ (14) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 1.7 \\ (12) \\ 1.5 \\ (18) \\ \hline \end{array}$ | $\begin{gathered} \hline 1.8 \\ (13) \\ 4.3 \\ (51) \end{gathered}$ | $\begin{gathered} \hline 0.7 \\ (5) \\ 0.8 \\ (10) \\ \hline \end{gathered}$ | $\begin{gathered} 100.0 \\ (723) \\ 100.0 \\ (1200) \end{gathered}$ |
| Total |  | $\begin{gathered} 72.0 \\ (13857) \end{gathered}$ | $\begin{gathered} 18.3 \\ (3516) \end{gathered}$ | $\begin{gathered} 2.0 \\ (386) \end{gathered}$ | $\begin{gathered} 2.5 \\ (488) \\ \hline \end{gathered}$ | $\begin{gathered} 4.4 \\ (848) \\ \hline \end{gathered}$ | $\begin{gathered} 0.8 \\ (149) \end{gathered}$ | $\begin{gathered} 100.0 \\ (19244) \\ \hline \end{gathered}$ |

Notes: Unweighted per cent. Unweighted sample in parentheses.

## MCS longitudinal response history by UK country

The percentage of families who have participated in all MCS sweeps ranges from 59 per cent in Scotland to 64 per cent in Wales, see Table 2.3. The 60 per cent rate for England includes the new families who joined MCS at sweep 2. If these families are excluded, then 64 per cent of families in England who were in sweep 1 have participated in all sweeps to date.

| Table 2.3 MCS Response History by UK country at MCS1 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Productive <br> sweeps | England | Wales | Scotland | Northern <br> Ireland | Total |
| S1,2,3,4 | 60.4 | 64.5 | 59.2 | 60.9 | 60.9 |
|  | $(7387)$ | $(1779)$ | $(1384)$ | $(1171)$ | $(11721)$ |
| S1,2,3 | 7.6 | 8.1 | 9.1 | 7.9 | 7.9 |
|  | $(927)$ | $(223)$ | $(212)$ | $(151)$ | $(1513)$ |
| S1,2 | 6.3 | 6.6 | 6.7 | 5.7 | 6.3 |
|  | $(772)$ | $(182)$ | $(156)$ | $(109)$ | $(1219)$ |
| S1,3,4 | 4.7 | 4.9 | 7.1 | 8.0 | 5.3 |
|  | $(573)$ | $(136)$ | $(166)$ | $(154)$ | $(1029)$ |
| S1,2,4 | 2.2 | 2.8 | 2.7 | 1.8 | 2.3 |
|  | $(272)$ | $(77)$ | $(62)$ | $(34)$ | $(445)$ |


| Table 2.3 MCS Response History by UK country at MCS1 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Productive <br> sweeps     England <br> Continued Wales Scotland Northern <br> Ireland Total  <br> S1,3 2.1 1.6 2.2 3.0 2.2 <br>  $(262)$ $(43)$ $(52)$ $(58)$ $(415)$ <br> S1,4 0.9 0.9 0.7 0.7 0.9 <br>  $(113)$ $(26)$ $(16)$ $(13)$ $(168)$ <br> S1 10.0 10.7 12.3 12.1 10.6 <br>  $(1227)$ $(294)$ $(288)$ $(233)$ $(2042)$ <br> S2,3,4 3.8 0.0 0.0 0.0 2.4 <br>  $(468)$ $(0)$ $(0)$ $(0)$ $(468)$ <br> S2,3 0.8 0.0 0.0 0.0 0.5 <br>  $(100)$ $(0)$ $(0)$ $(0)$ $(100)$ <br> S2,4 0.2 0.0 0.0 0.0 0.1 <br>  $(26)$ $(0)$ $(0)$ $(0)$ $(26)$ <br> S2 0.8 0.0 0.0 0.0 0.5 <br>  $(98)$ $(0)$ $(0)$ $(0)$ $(98)$ <br> Total 100.0 100.0 100.0 100.0 100.0 <br>  $(12225)$ $(2760)$ $(2336)$ $(1923)$ $(19244)$ |  |  |  |  |  |

Notes: Unweighted per cent. Unweighted sample in parentheses. S1 = families who joined MCS from sweep 1, S2 = families who joined MCS at sweep 2 (new families).

## MCS4 response by ethnicity

Table 2.4 shows MCS4 response by the ethnic group of the cohort child using the six category Census classification (UK). Families with white cohort children had the highest response rate ( $74 \%$ ) while those in the 'other' (this includes Chinese and other Asian) ethnic-group had the lowest (61\%).The refusal rate was highest among families with Pakistani and Bangladeshi children (23\%) and lowest (17\%) among families with a child of mixed ethnicity. It should be noted that the ethnic group of the cohort child is a very close approximate of the main respondent's ethnicity except for cohort children of mixed ethnicity. The relatively higher rates of attrition for Pakistani, Bangladeshi and black groups means that most authors have chosen the combined groups of this six-fold classification in the chapters that follow rather than distinguish separate groups within them.

Table 2.4 MCS4 Response by Cohort Member's Ethnicity

|  | Productive | Refusal | Other <br> unproductive | Ineligible | Untraced | No <br> contact | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White | 73.6 | 17.5 | 1.8 | 2.6 | 3.8 | 0.7 | 100.0 |
|  | $(11591)$ | $(2760)$ | $(276)$ | $(415)$ | $(592)$ | $(104)$ | $(15738)$ |
|  | 64.5 | 18.2 | 3.2 | 5.2 | 8.1 | 0.8 | 100.0 |
| Mixed | $(383)$ | $(108)$ | $(19)$ | $(31)$ | $(48)$ | $(5)$ | $(594)$ |
|  | 69.0 | 21.9 | 2.6 | 1.4 | 4.4 | 0.6 | 100.0 |
| Indian | $(343)$ | $(109)$ | $(13)$ | $(7)$ | $(22)$ | $(3)$ | $(497)$ |
| Pakistani and | 65.8 | 23.0 | 3.7 | 0.8 | 5.7 | 1.0 | 100.0 |
| Bangladeshi | $(888)$ | $(311)$ | $(50)$ | $(11)$ | $(77)$ | $(13)$ | $(1350)$ |
| Black or Black | 62.8 | 21.0 | 2.2 | 1.5 | 10.0 | 2.5 | 100.0 |
| British | $(458)$ | $(153)$ | $(16)$ | $(11)$ | $(73)$ | $(18)$ | $(729)$ |
| Other ethnic group | 61.1 | 19.1 | 3.6 | 4.0 | 10.2 | 2.0 | 100.0 |
| (inc. Chinese and | $(185)$ | $(58)$ | $(11)$ | $(12)$ | $(31)$ | $(6)$ | $(303)$ |
| other Asian) |  |  |  |  |  |  |  |
| Total | 72.1 | 18.2 | 2.0 | 2.5 | 4.4 | 0.8 | 100.0 |
|  | $(13848)$ | $(3499)$ | $(385)$ | $(487)$ | $(843)$ | $(149)$ | $(19211)$ |

Notes: Unweighted per cent. Unweighted sample in parentheses. Ethnicity data missing for 33 singleton cohort children.

## Number of cohort children in MCS4 productive sample

| Table 2.5: Numbers of children and families by UK country and stratum at MCS1 |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Ward type <br> at sweep 1 | Number of <br> singletons | Number <br> of twins | Number <br> of <br> triplets | Total number of <br> cohort children | Total number <br> of productive <br> families |
| England | Advantaged | 3738 | 96 | 6 | 3840 | 3788 |
|  | Disadvantaged | 3328 | 94 | 6 | 3428 | 3377 |
|  | Ethnic | 1662 | 22 | 3 | 1687 | 1674 |
| Wales | Advantaged | 615 | 14 | 0 | 629 | 622 |
|  | Disadvantaged | 1383 | 24 | 3 | 1410 | 1396 |
| Scotland | Advantaged | 814 | 30 | 0 | 844 | 829 |
|  | Disadvantaged | 791 | 10 | 9 | 810 | 799 |
| Northern <br> Ireland | Advantaged | 526 | 14 | 3 | 543 | 534 |
|  | Disadvantaged | 824 | 28 | 0 | 852 | 838 |
| Total |  | 13681 | 332 | 30 | 14043 | 13857 |

Notes: Unweighted sample.
Because some families had multiple births (twins or triplets), there were 14,043 cohort children in the MCS4 productive sample of 13,857 families. Table 2.5 shows the distribution of cohort children in the MCS4 productive sample by UK country and ward type at MCS1, and the number of cohort children in an interviewed family at sweep 4. A total of 166 families with twins, 10 with triplets and 13,681 with single cohort children participated at sweep 4 of the MCS.

## MCS4 residential mobility between UK countries

Table 2.6 below shows MCS4 cohort families' residential moves between UK countries, with reference to their country of residence at MCS1. The table shows that 206 families moved from one UK country to another between sweep 3 and 4. As at sweep 3, England had the largest number of moves with a net gain of 48 families, while Wales had the largest net loss of 46 families. There was a net gain of four families in Northern Ireland and a net loss of six families in Scotland. The diagonal in of the MCS1 by MCS4 country table shows the number of families who did not move across countries between MCS1 and 4 .

Table 2.6: MCS4 Productive families' Residential Mobility between UK countries since MCS1


Notes: Unweighted sample numbers.

## MCS4 partner response

MCS4 partner response rates are shown in Table 2.7 below. Overall 10,940 families included a partner eligible for interview, and 2,917 main respondents had no partner. Eighty-four per cent of the partners gave an interview, and proxy data was collected for another 2.3 per cent of partners. Wales had the highest partner interview rate at 87 per cent, followed by England at 84 per cent. The lowest partner participation rate was in Northern Ireland at about 78 per cent.

Table 2.7: MCS4 Partner response by UK country at interview

|  | Partner interview | Proxy interview | No interview | Total |
| :--- | :---: | :---: | :---: | :---: |
| England | 84.4 | 2.5 | 13.0 | 100.0 |
|  | $(5933)$ | $(177)$ | $(917)$ | $(7027)$ |
| Wales | 86.7 | 1.7 | 11.6 | 100.0 |
|  | $(1310)$ | $(25)$ | $(176)$ | $(1511)$ |
| Scotland | 83.2 | 2.0 | 14.8 | 100.0 |
|  | $(1097)$ | $(27)$ | $(195)$ | $(1319)$ |
| Northern Ireland | 77.6 | 1.8 | 20.6 | 100.0 |
|  | $(840)$ | $(20)$ | $(223)$ | $(1083)$ |
| Total | 83.9 | 2.3 | 13.8 | 100.0 |
|  | $(9180)$ | $(249)$ | $(1511)$ | $(10940)$ |

Notes: Unweighted per cent. Unweighted sample in parentheses. Lone-parent families excluded.
Table 2.8 shows partner response by the ethnic group of the cohort member. Partner participation was highest among families with a white cohort child ( $86 \%$ ). Response was also relatively high among families with a mixed child at 82 per cent and those with a cohort child in the 'other' ethnic group which includes Chinese and other Asians at nearly 83 per cent. The lowest partner participation rates were in families with a Pakistani or Bangladeshi cohort child (68\%), followed by those with a black or black British child at about 72 per cent. There were relatively more main respondents providing proxy information on partners among families with a Pakistani or Bangladeshi cohort child (5\%) or a black or black British cohort child (4\%), but even if
proxy interviews are included, families whose cohort children are of these ethnic groups have the lowest partner response rates.

| Table 2.8: MCS4 Partner response by cohort member's ethnicity |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Cohort member's ethnicity | Partner <br> interview | Proxy <br> interview | No <br> interview | Total |
| White | 85.8 | 2.0 | 12.2 | 100.0 |
|  | $(7896)$ | $(183)$ | $(1126)$ | $(9205)$ |
|  | 82.0 | 3.1 | 14.9 | 100.0 |
|  | $(187)$ | $(7)$ | $(34)$ | $(228)$ |
|  | 80.4 | 1.3 | 18.3 | 100.0 |
|  | $(251)$ | $(4)$ | $(57)$ | $(312)$ |
|  | 68.2 | 5.4 | 26.4 | 100.0 |
|  | $(534)$ | $(42)$ | $(207)$ | $(783)$ |
| Black or black British | 71.6 | 4.0 | 24.4 | 100.0 |
| Other ethnic group (inc. Chinese and | $(179)$ | $(10)$ | $(61)$ | $(250)$ |
| other Asian) | 82.6 | 1.3 | 16.1 | 100.0 |
| Total | $(128)$ | $(2)$ | $(25)$ | $(155)$ |

Notes: Unweighted per cent. Unweighted sample in parentheses. Lone-parent families excluded. A few families eligible for this table were excluded due to missing data on their cohort child's ethnicity.

## Main respondents are still mainly mothers

Table 2.9 shows the numbers of one and two-parent families responding to MCS4 by the sex of the main respondent and their relationship to the cohort child. As in previous surveys the vast majority of main respondents were female. All but 61 were the natural mothers (who constituted $96.6 \%$ of main informants at MCS4 but even more, $99.8 \%$, at MCS1). There were however 404 male informants at MCS4, of whom 392 were natural fathers. Almost one in four (99) was a lone father, 35 were natural fathers living with a stepmother, and the rest represented other couples where for various reasons the man gave the main information. Thus the identity of informants has become a little more complex with developments in family structure, and the fact that that the main respondent does not have to answer the questions about pregnancy and childbirth which determined that the natural mother nearly always did the main interview initially. A main interview was conducted in 13,797 of the 13,857 families. There were 41 productive cases without either parental interview (i.e. only child assessments). In the analyses which follow samples are drawn according the purpose of each table. Where necessary, for example, analyses are confined to the cases where the main informant is either female or a natural mother.

Table 2.9: MCS4 Parent interviews by sex of main respondent and relationship to cohort member

|  | All |  | Female |  | Male |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Frequency | \% | Natural mother | Other | Natural father | Other |
| Main respondent in person (no-one eligible for partner) | 2903 | 20.9 | 2784 | 20 | 98 | 1 |
| Main and partner respondent In person | 9161 | 66.1 | 8885 | 33 | 236 | 7 |
| Main in person, partner by proxy | 249 | 1.8 | 236 | 1 | 11 | 1 |
| Main in person, partner eligible but no response | 1484 | 10.7 | 1431 | 7 | 45 | 1 |
| Main eligible but no interview, partner Interviewed in person | 19 | 0.1 | 18 | 0 | 0 | 1 |
| Main eligible, no response (no-one eligible for partner) | 18 | 0.1 | 17 | 0 | 1 | 0 |
| Main and partner eligible, no response from either | 23 | 0.2 | 21 | 0 | 1 | 1 |
| Total | 13857 | 100 | 13392 | 61 | 392 | 12 |

Notes: Unweighted observations and percentages. Sex is of MAIN respondent in the family, even if they were not interviewed. See Hansen and Joshi (2008) Table 23.

## Attrition and unit non-response survey weighting adjustment

To allow for the attrition reported in the previous sections, and non-response out of the initial issued sample at MCS1, we generated attrition and non-response adjusted weights at MCS4 similar to previous sweeps. The inverse of the probability of being productive for all issued cases at sweep 4 were multiplied with the overall weight from all previous sweeps, including design weights, to produce MCS4 attrition and non-response adjusted weights (see Ketende (2010) for details including predictor variables of response). There are a set of three weights: weights for analyses of each UK country sample, weights for analyses for the whole of the UK sample, and weights for analyses of the Great Britain only sample - all adjusted for longitudinal attrition and unit non-response. Analyses reporting weighted estimates in all chapters in this report use these weights, unless otherwise stated.

Figures 2.1 and 2.2 compare the distributions of non-response and attrition adjusted weights for productive cases in MCS1 and MCS4. Unlike the sampling weights, the overall weights are not a constant within stratum, but reflect the estimated propensities of individual informants to respond. The country-specific weights, shown in Figure 2.1, sum to unity within country (when non-productive cases are included). The most extreme values, not plotted, ranged from 0.24 in ethnic wards in England to 3.73 in advantaged wards in Wales at MCS1. The minimum and maximum at MCS4 were 0.20 in England ethnic wards and 6.19 in advantaged wards in Northern Ireland.

The overall weights for analyses of the whole of the UK sample, which correct for the under-representation of England and sum to unity over all four countries, are plotted in Figure 2.2. The minimum and maximum weights at MCS1 were 0.13 in disadvantaged wards in Northern Ireland to 4.48 in advantaged wards in England.

Equivalent figures at MCS4 were 0.10 in disadvantaged wards in Northern Ireland and 7.88 in disadvantaged wards in England.

The figures plot the $5^{\text {th }}, 25^{\text {th }}$, median, $75^{\text {th }}$ and $95^{\text {th }}$ percentiles of the distributions of the weights. If the over-sampled wards also showed above average non-response, we would expect the weights to move towards unity, between MCS1 and MCS4. In both figures, the weights are going down towards unity in advantaged wards where under sampling was done while in disadvantaged and ethnic wards, which were oversampled, the weights are going upwards towards unity, most clearly in England, as they suffered more attrition. A similar pattern is displayed in Figure 2.2. Note also that the dispersion of weights increases over time.

Figure 2.1: Overall weights for country-specific analyses (weight1) - MCS1 and MCS4 distributions compared by stratum.


[^2]Figure 2.2: Overall weights for analyses of the whole of the UK sample (weight2) - MCS1 and MCS2 distributions compared by stratum.


Although non-respondents at sweep 4 are systematically different from respondents on some key variables, logistic modelling of the sweep 4 response has found that these differences in the propensity to respond are small compared to the unequal selection probabilities built into the sample design. Plewis (2007) had already found the same in analysing the propensity to respond at sweeps 1 and 2 . It is, therefore, unlikely that analyses using the attrition and non-response adjusted overall weights at sweep 4 will make a substantial difference beyond that due to unequal selection probabilities built into the sample design.

## Conclusion

There were small differences in productive response by UK country with the highest rate in Wales. However, there were somewhat larger differences in refusal rates by UK country. Large differences in productive response rates also existed by ward type within all UK countries where the non-disadvantaged families consistently had a higher productive response rate than disadvantaged or ethnic families. Moreover, families in minority ethnic groups were more likely to refuse than those with a white cohort child.

Where partners were present, there is information on six out seven of them. The partner response rate was also highest in Wales. The degree of movement between UK countries continued to be very small. The number of main informants who were
not the natural mother of the cohort child, also continued to be small, but has been growing as diverse family arrangements emerge in the children's lives.

## References

Hansen, K. and Joshi, H. (eds) (2008) Millennium Cohort Study Third Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.
http://www.cls.ioe.ac.uk/core/documents/download.asp?id=1083\&log stat=1
Ketende, S. (ed.) (2008) The Millennium Cohort Study: Technical Report on Response (Second Edition). London: Centre for Longitudinal Studies, Institute of Education, University of London.
http://www.cls.ioe.ac.uk/core/documents/download.asp?id=1166\&log stat=1

Ketende, S. (ed.) (2010) The Millennium Cohort Study: Technical Report on Response (Third Edition). London: Centre for Longitudinal Studies, Institute of Education, University of London.
http://www.cls.ioe.ac.uk/core/documents/download.asp?id=1339\&log stat=1

Plewis, I. (ed) (2007) The Millennium Cohort Study: Technical Report on Sampling (Fourth Edition). London: Institute of Education, University of London. http://www.cls.ioe.ac.uk/studies.asp?section=00010002000100040006

## Chapter 3

## FAMILY DEMOGRAPHICS

## Lisa Calderwood

## Chapter overview

This chapter looks at the composition and stability of the families in which the Millennium Cohort Study children live. It examines:

- Family type - whether the children are living with both natural parents, in loneparent or step-parent families
- Changes in family type between the first and fourth surveys
- Number of siblings
- Types of siblings i.e. natural, half, step, foster siblings etc
- Non-resident fathers' contact with children and maintenance payments


## Introduction

Children's lives have changed significantly in the UK over the last 30 years. One of the main changes has been in the composition and stability of the families in which children live. Rising rates of partnership dissolution among families with children and increasing proportions of children born outside marital or cohabiting unions have meant it has become increasingly common for children to live apart from their natural father (Kiernan, 2004). This trend has in turn led to increasing proportions of children living with stepfathers as their natural mothers form new co-residential partnerships. This also entails more children living with half and step siblings as these new partnerships both produce new children and bring together children from previous relationships.

Overall, the proportion of children living in lone-parent families in Great Britain has increased from 7 per cent in 1971 to 26 per cent in 2009. About nine in ten loneparent families are headed by mothers (ONS, 2009). In 2005, about 10 per cent of all families with dependent children in Great Britain were step-parent families (ONS, 2007) and 86 per cent of step-parent families in 2007 comprised a natural mother and stepfather (ONS, 2009). The proportion of children living in families with three or more children fell from 44 per cent in 1972 to 29 per cent in 2006. In 2006, 46 per cent of children lived in families with two children (ONS, 2007).

The changing nature of family life and its impact on the wellbeing of children has been a major concern for social policy since the 1980s. The rise in the proportion of children living with lone parents, with low levels of labour market participation and correspondingly high rates of dependency on state benefits, was one of the main reasons that the proportion of children growing up in poverty increased dramatically
in the 1980s and 1990s. In 1998/9, there were 3.4 million children living in poverty. This had fallen to 2.8 million ten years later (DWP, 2010).

One policy response was the 1991 Child Support Act. This created the Child Support Agency (CSA) whose objective was to enforce payment of child maintenance by nonresident parents, who were primarily fathers. The change of government in 1997 brought a new emphasis. The aim of reducing poverty among lone-parent families was to be met through increasing lone mothers' participation in the labour market through schemes such as the New Deal for Lone Parents and the National Childcare Strategy (and its equivalents in Scotland, Wales and Northern Ireland). ${ }^{3}$ In addition, state financial support to families with children was increased and redesigned through rises in child benefit and the introduction of in-work tax credits.

The changes in family life have also led to a morally charged debate between political parties about the reasons for, and broader impact of, the decline of the 'traditional' nuclear family and whether government policy should promote certain types of family forms. Labour party policy has tended to focus on the wellbeing of children and has been neutral between different family forms. For example, the longstanding married couple's tax allowance was abolished in 1999 and its restoration was included in the Conservative manifesto. The 2010 ConservativeLiberal Democrat coalition government has pledged to review the marriage penalty in the tax credit system as one of a battery of measures to promote 'strong and stable families of all kinds are the bedrock of a strong and stable society'.

This chapter provides evidence on the prevalence of different family types in which the Millennium Cohort children live, and how this has changed over the first seven years of their lives. It also provides evidence on differences between countries and some of the demographic factors which are associated with different family types and family change, including the marital status of the parents.

It goes on to describe the number and type of siblings living with the cohort child and examines some of the factors associated with this. Finally, this chapter provides evidence on contact with, and financial support from non-resident fathers and how this is related to other demographic factors, including the current relationship status of both mothers and non-resident fathers.

The sample for the analysis of family type and siblings in this chapter is all families. The data are taken from the household grid which includes information on household composition and relationships between household members. The sample of families with non-resident fathers in this chapter is headed by natural mothers without a partner or living with a stepfather. The data on contact with, and maintenance payments from, non-resident fathers are taken from the face-to-face interview with the mother and the data on the relationship status of mothers and non-resident fathers are taken from the household grid in combination with information from the mothers in the self-completion questionnaire. All of the analysis in this chapter is at family level rather than child level. For this reason, references to the proportion of

[^3]children are based on counting only one child per family in those families with multiple cohort children, i.e. twins and triplets.

## Family type

As children get older they are less likely to be living with both of their natural parents and more likely to be living in lone-parent or step-parent families. This is due to a combination of the dissolution of co-residential partnerships between their natural parents and the formation of new partnerships between one of their natural parents and a step-parent. However, family change can also occur in the opposite direction, i.e. natural parents who were not living together at the child's birth may start to do so later.

As shown in Table 3.1, by age seven over one in five (22\%) children was living in a lone natural-mother family and over one in twenty (6\%) was living with a natural mother and a stepfather. Around seven in ten (69\%) children lived with both natural parents with just over half $(55 \%)$ living with married natural parents. The relatively small number of families where children lived with a stepmother and natural father or a lone father are included in 'other' family type. ${ }^{4}$

The proportions of seven-year-old children living in lone-mother families and stepfather families are lower than those from the national statistics (reported above). The proportions for seven-year-old children are expected to be lower than for all children given the increasing incidence of family break-up and reconstitution at later ages. Another reason that they are lower is that the national statistics are for all lone parent and step-parent families i.e. including lone fathers and stepmother families, included here in 'other' family type.

There was a marked contrast between Northern Ireland and the other UK countries. The proportion of children living with married natural parents was much higher ( $61 \%$ compared with $55 \%$ in England, $53 \%$ in Scotland and $51 \%$ in Wales) and the proportion of children living in stepfather families was much lower ( $2 \%$ compared with 6\% in England and 7\% in Scotland and Wales).

Taking figures from earlier sweeps of the MCS (Calderwood, 2008) shows how the prevalence of different family types has changed since the children were nine months old. The proportion of all children at each survey living with both natural parents has declined steadily from 86 per cent at nine months, and 77 per cent at age five, to 69 per cent at age seven. Between nine months and age five, this decline was almost entirely explained by a reduction in the proportion living with cohabiting natural parents ( $24 \%$ to $14 \%$ ). Interestingly, between ages five and seven, this reduction was largely due to a fall in the proportion living with married natural parents ( $63 \%$ to $55 \%$ ). This notable fall in the proportion of married couple families is particularly interesting as at the first three sweeps it had been very stable at around 60 per cent. This may indicate delayed partnership dissolution among married couples. Another possible

[^4]explanation is that the offsetting effect of the formation of new marriages by previously cohabiting parents or between lone mothers and non-resident fathers/stepfathers, which was evident between nine months and age five (Calderwood, 2006), may have lessened between ages five and seven. There have been corresponding rises in the proportion of children living in lone-mother families from 14 per cent at nine months, to 17 per cent at age five and 22 per cent at age seven and in stepfather families from under half a per cent at nine months, to 4 per cent and 6 per cent respectively.

| Table 3.1: Family type by country at MCS4 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Family type | England | Wales | Scotland | Northern <br> lreland | UK |
| Both natural parents | 6421 | 1339 | 1204 | 1029 | 9993 |
|  | $(69.4)$ | $(66.6)$ | $(70.0)$ | $(72.6)$ | $(69.4)$ |
| - Married | 5232 | 1018 | 948 | 875 | 8073 |
|  | $(54.9)$ | $(51.0)$ | $(53.1)$ | $(61.4)$ | $(54.7)$ |
| - Cohabiting | 1074 | 297 | 245 | 138 | 1754 |
|  | $(13.2)$ | $(14.4)$ | $(16.2)$ | $(10.1)$ | $(13.4)$ |
| - Other/unknown relationship | 115 | 24 | - | - | 166 |
|  | $(1.3)$ | $(1.2)$ |  | $(1.2)$ |  |
| Natural mother and stepfather | 436 | 122 | 87 | 33 | 678 |
|  | $(5.8)$ | $(6.5)$ | $(6.7)$ | $(2.2)$ | $(5.7)$ |
| Lone natural mother | 1773 | 452 | 292 | 281 | 2798 |
|  | $(21.3)$ | $(23.4)$ | $(20.6)$ | $(22.7)$ | $(21.5)$ |
| Other family type | 257 | 59 | 39 | 33 | 388 |
|  | $(3.5)$ | $(3.5)$ | $(2.7)$ | $(2.6)$ | $(3.4)$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | 8887 | 1972 | 1622 | 1376 | 13857 |
|  | 8886 | 1970 | 1615 | 1380 | 13851 |
| Sign. (excluding marital status) |  |  |  |  |  |
| Sign. (including marital status ${ }^{5}$ ) |  |  |  |  |  |

Sample: All families. Table displays unweighted observations and weighted percentages (country totals using dovwt1 and UK totals using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

Table 3.2 (and Figure 3.1) shows that family type was strongly related to the age of the main respondent. ${ }^{6}$ Around 1 in 6 of them was still under 30 when the cohort child was aged 7 . These younger parents show considerable contrast in family situation with those where the main respondent was 35 and over at MCS4. Children with a younger parent were much more likely to be living in a lone-mother family ( $39 \%$ compared with around $16 \%$ ), or with a stepfather ( $15 \%$ compared with around $3 \%$ ) and much less likely to be living with both natural parents ( $42 \%$ compared with around $79 \%$ ) and with married natural parents ( $19 \%$ compared with around $68 \%$ ). Among children with a mother/respondent aged 30 to 34, one in five lived in a lonemother family and just under half ( $48 \%$ ) lived with married natural parents.

[^5]Figure 3.1: Family status by age of main respondent at MCS4


Table 3.2: Family type by main respondent's age at MCS4

| Family type | Under 30 | 30-34 | 35-39 | 40 plus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Both natural parents | $\begin{gathered} 1049 \\ (42.3) \end{gathered}$ | $\begin{aligned} & 1986 \\ & (65.0) \end{aligned}$ | $\begin{gathered} 3632 \\ (78.5) \end{gathered}$ | $\begin{aligned} & \hline 3326 \\ & (79.6) \end{aligned}$ | $\begin{gathered} 9993 \\ (69.4) \end{gathered}$ |
| - Married | $\begin{gathered} 513 \\ (19.4) \end{gathered}$ | $\begin{gathered} 1542 \\ (48.4) \end{gathered}$ | $\begin{gathered} 3128 \\ (66.8) \end{gathered}$ | $\begin{aligned} & 2890 \\ & (68.4) \end{aligned}$ | $\begin{aligned} & 8073 \\ & (54.7) \end{aligned}$ |
| - Cohabiting | $\begin{gathered} 479 \\ (20.5) \\ \hline \end{gathered}$ | $\begin{gathered} 413 \\ (15.6) \\ \hline \end{gathered}$ | $\begin{gathered} 458 \\ (10.6) \\ \hline \end{gathered}$ | $\begin{gathered} 404 \\ (10.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 1754 \\ (13.4) \\ \hline \end{array}$ |
| - Other/unknown relationship | $\begin{gathered} 57 \\ (2.5) \end{gathered}$ | $\begin{gathered} 31 \\ (0.9) \\ \hline \end{gathered}$ | $\begin{gathered} 46 \\ (1.1) \end{gathered}$ | $\begin{gathered} 32 \\ (0.8) \end{gathered}$ | $\begin{aligned} & 166 \\ & (1.2) \end{aligned}$ |
| Natural mother and stepfather | $\begin{gathered} 313 \\ (15.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 169 \\ (6.6) \\ \hline \end{array}$ | $\begin{array}{r} 126 \\ (3.1) \\ \hline \end{array}$ | $\begin{gathered} 70 \\ (1.9) \\ \hline \end{gathered}$ | $\begin{array}{r} 678 \\ (5.7) \\ \hline \end{array}$ |
| Lone natural mother | $\begin{gathered} 848 \\ (39.0) \end{gathered}$ | $\begin{gathered} 664 \\ (24.2) \end{gathered}$ | $\begin{gathered} 687 \\ (16.1) \end{gathered}$ | $\begin{gathered} 599 \\ (14.5) \end{gathered}$ | $\begin{aligned} & 2798 \\ & (21.5) \end{aligned}$ |
| Other family type | $\begin{gathered} 83 \\ (3.6) \end{gathered}$ | $\begin{gathered} 95 \\ (4.2) \end{gathered}$ | $\begin{gathered} 84 \\ (2.3) \end{gathered}$ | $\begin{aligned} & 126 \\ & (3.9) \end{aligned}$ | $\begin{aligned} & 388 \\ & (3.4) \end{aligned}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 2293 \\ & 2528 \end{aligned}$ | $\begin{aligned} & 2914 \\ & 2938 \end{aligned}$ | $\begin{aligned} & 4529 \\ & 4410 \end{aligned}$ | $\begin{aligned} & 4121 \\ & 3975 \end{aligned}$ | $\begin{aligned} & 13857 \\ & 13851 \end{aligned}$ |
| Sign. (excluding marital status) |  |  |  |  | $\mathrm{P}=0.000$ |
| Sign. (including marital status) |  |  |  |  | $\mathrm{P}=0.000$ |

Sample: All families. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics.

Table 3.3 shows that family type was also strongly related to ethnic group. Around nine in ten Indian (89\%) and Bangladeshi (90\%) children were living with both natural parents and their parents were almost always married to each other. A slightly lower proportion of Pakistani children were living with both natural parents ( $85 \%$ ) and lone
motherhood was also slightly more common among Pakistani children than Indian and Bangladeshi children ( $14 \%$ compared with $10 \%$ and $8 \%$ respectively).

Black Caribbean and black African children were the most likely to be living in a lonemother family ( $50 \%$ and $43 \%$ compared with $22 \%$ overall). This was the most common family type for black Caribbean children. A minority of children, 40 per cent, in this ethnic group lived with both natural parents who were married to each other in just over half of these families, 23 per cent overall. In contrast, living with both natural parents was the most common situation for black African children (54\%). In four-fifths of these families, the parents were married to each other.

Table 3.3: Family type at MCS4 by cohort member's ethnic group

| Family type | \#10 | $\begin{aligned} & \text { ס्㐅 } \\ & \dot{x} \end{aligned}$ |  |  |  |  |  |  | $\stackrel{\text { ¢ }}{\square}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Both natural parents | $\begin{array}{r} 8297 \\ (69.8) \\ \hline \end{array}$ | $\begin{gathered} 202 \\ (52.7) \\ \hline \end{gathered}$ | $\begin{gathered} 305 \\ (88.9) \\ \hline \end{gathered}$ | $\begin{gathered} 539 \\ (84.6) \\ \hline \end{gathered}$ | $\begin{gathered} 224 \\ (89.9) \\ \hline \end{gathered}$ | $\begin{gathered} 63 \\ (39.8) \\ \hline \end{gathered}$ | $\begin{gathered} 149 \\ (54.0) \\ \hline \end{gathered}$ | $\begin{gathered} 169 \\ (67.4) \\ \hline \end{gathered}$ | $\begin{gathered} 9948 \\ (69.6) \\ \hline \end{gathered}$ |
| - Married | $\begin{array}{r} 6537 \\ (53.9) \\ \hline \end{array}$ | $\begin{gathered} 147 \\ (36.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 299 \\ (87.5) \\ \hline \end{array}$ | $\begin{gathered} 522 \\ (81.9) \\ \hline \end{gathered}$ | $\begin{gathered} 208 \\ (83.0) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (22.8) \\ \hline \end{gathered}$ | $\begin{gathered} 126 \\ (46.0) \\ \hline \end{gathered}$ | $\begin{gathered} 156 \\ (62.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 8036 \\ (54.9) \\ \hline \end{array}$ |
| - Cohabiting | $\begin{array}{r} 1648 \\ (14.8) \\ \hline \end{array}$ | $\begin{gathered} 51 \\ (14.7) \\ \hline \end{gathered}$ | - | - | - | - | - | - | $\begin{array}{r} 1747 \\ (13.5) \\ \hline \end{array}$ |
| - Other/unknown relationship | $\begin{gathered} 112 \\ (1.0) \end{gathered}$ | - | - | - | - | - | - | - | $\begin{gathered} 165 \\ (1.2) \end{gathered}$ |
| Natural mother and stepfather | $\begin{aligned} & 632 \\ & (6.3) \end{aligned}$ | - | - | - | - | - | - | - | $\begin{aligned} & 676 \\ & (5.7) \end{aligned}$ |
| Lone natural mother | $\begin{aligned} & 2280 \\ & (20.7) \end{aligned}$ | $\begin{gathered} 149 \\ (40.8) \end{gathered}$ | $\begin{gathered} \hline 30 \\ (9.7) \end{gathered}$ | $\begin{gathered} 80 \\ (13.9) \end{gathered}$ | - | $\begin{gathered} 79 \\ (49.7) \end{gathered}$ | $\begin{gathered} 104 \\ (43.0) \end{gathered}$ | $\begin{gathered} 46 \\ (26.3) \end{gathered}$ | $\begin{aligned} & 2785 \\ & (21.6) \end{aligned}$ |
| Other family type | $\begin{array}{r} 319 \\ (3.2) \\ \hline \end{array}$ | - | - | - | - | - | - | - | $\begin{array}{r} 346 \\ (3.0) \\ \hline \end{array}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 11528 \\ & 11731 \end{aligned}$ | $\begin{aligned} & 373 \\ & 450 \end{aligned}$ | $\begin{aligned} & \hline 341 \\ & 264 \end{aligned}$ | $\begin{aligned} & 627 \\ & 480 \end{aligned}$ | $\begin{aligned} & 247 \\ & 163 \end{aligned}$ | $\begin{aligned} & \hline 155 \\ & 163 \end{aligned}$ | $\begin{aligned} & 261 \\ & 251 \end{aligned}$ | $\begin{aligned} & 223 \\ & 218 \end{aligned}$ | $\begin{aligned} & 13755 \\ & 13720 \end{aligned}$ |
| Sign. (excluding marital status) |  |  |  |  |  |  |  |  | $\mathrm{P}=0.000$ |
| Sign. (including marital status) |  |  |  |  |  |  |  |  | $\mathrm{P}=0.000$ |

Sample: All families. 102 observations are excluded due to missing data on cohort member's ethnic group. Table
displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

This section has shown that overall a clear majority of seven-year-old children are living with both of their natural parents. However, only a minority of black Caribbean children and those with younger main respondents live with both natural parents. Substantial proportions of children in these groups, as well as black African and children in the mixed ethnic group, live in lone-mother families. In addition, a notable and increasing proportion of children, particularly in families with main respondents under 30 , are living with a stepfather as well as their natural mother.

The next section looks in detail at the family transitions in the first seven years of the children's lives.

## Change in family type

This section provides more detail on the different kinds of transitions which lie behind the overall net change in family type between nine months and seven years reported above. The analysis sample here is restricted to families who took part in both MCS1 and MCS4. In addition, for ease of interpretation, the sample is restricted to families containing either both natural parents, or a lone natural mother at MCS1, and then any situation where the child was living with the natural mother at MCS4. This restriction excludes the small number of cases where the child was living with a lonenatural father, a stepmother or neither natural parent at either survey, and those who were living with their natural mother and stepfather at MCS1.

Table 3.4 shows over one in five ( $21 \%$ ) children had a change in family type between nine months and age seven. Their household had either gained a parent (if they started out with a lone mother) or lost a parent (if they were originally living with both natural parents). This proportion was slightly lower in Northern Ireland compared with other UK countries (18\% compared with $21 \%$ in England and 22\% in Wales and Scotland).

This is likely to be an underestimate of the total proportion of children with a family change between nine months and seven years because some of the children who were in the same family type at MCS1 and MCS4 may have experienced changes at some point during this period e.g. if their parents had split up after the first survey but got back together by the age seven interview, these events would not be apparent.

Table 3.4: Any change in family type between MCS1 and MCS4 by country

| Family type | England | Wales | Scotland | Northern Ireland | UK |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Both natural parents at | 5910 | 1261 | 1150 | 958 | 9279 |
| MCS1 and MCS4 | $(69.9)$ | $(65.4)$ | $(68.1)$ | $(68.9)$ | $(69.4)$ |
| Lone natural mother at | 688 | 232 | 118 | 151 | 1189 |
| MCS1 and MCS4 | $(9.3)$ | $(12.8)$ | $(9.4)$ | $(13.3)$ | $(9.7)$ |
| Change in family type | 1558 | 413 | 310 | 232 | 2513 |
|  | $(20.8)$ | $(21.7)$ | $(22.4)$ | $(17.8)$ | $(20.9)$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | 8156 | 1906 | 1578 | 1341 | 12981 |
|  | 8154 | 1895 | 1564 | 1342 | 12787 |
| Sign. |  |  |  |  |  |

Sample: All families responding at both MCS1 and MCS4 where family type at MCS1 was either both natural parents or lone natural mother and natural mother was resident at MCS4. Table displays unweighted observations and weighted percentages (country totals using dovwt1 and UK total using dovwt2). Weighted total observations are in italics.

Table 3.5 shows the change and stability of family change up to age seven by family type at MCS1 and country. Overall, more than a third (37\%) of children living with a lone parent at nine months had a change in their family situation by age seven compared with less than one in five (18\%) children living with both natural parents at nine months.

Over eight in ten (82\%) children who were living with their two natural parents at nine months were still living with both of them at age seven while around one in seven (14\%) was living with their natural mother only and just under one in twenty (4\%) was living in a stepfather family by age seven. In Northern Ireland, a higher proportion of
families containing both natural parents were still together by age seven (87\% compared with $82 \%$ in all other UK countries). A similar proportion had made the transition to lone-mother families ( $13 \%$ compared with $14 \%$ in all other countries) but a much lower proportion had made the transition to stepfather families ( $1 \%$ compared with $4 \%$ in all other countries).

Looking at transitions from lone natural-mother families, Table 3.5 shows around one in five ( $21 \%$ ) children living with their natural mother only at nine months, was living with both of their natural parents at age seven. In around a quarter of these families ( $6 \%$ overall) their natural parents were now married to each other. Around one in six ( $16 \%$ ) children who were living in lone natural-mother families at nine months was living in a stepfather family by age seven.

The addition of the natural father into a lone-mother family was more common in Northern Ireland (28\%) and Scotland (23\%) than England (20\%) and Wales (19\%). The transition from lone-mother family to stepfather family was also much less common in Northern Ireland (7\%) compared with England and Wales (both 16\%) and Scotland (21\%). Interestingly, in Scotland, the proportion of children living with lone parents at nine months who experienced family change by age seven was higher than in all other countries ( $45 \%$ compared with 36\% in England and Wales and 34\% in Northern Ireland).

Table 3.5: Type of change in family type between MCS1 and MCS4 by country

| Family type at MCS1 | Family type at MCS4 | England | Wales | Scotland | Northern Ireland | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Both natural parents | Both natural parents | $\begin{array}{r} 5910 \\ (81.7) \\ \hline \end{array}$ | $\begin{gathered} 1261 \\ (81.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 1150 \\ (82.1) \\ \hline \end{array}$ | $\begin{gathered} 958 \\ (86.5) \\ \hline \end{gathered}$ | $\begin{gathered} 9279 \\ (82.0) \\ \hline \end{gathered}$ |
|  | Lone natural mother | $\begin{gathered} 935 \\ (14.3) \\ \hline \end{gathered}$ | $\begin{gathered} 216 \\ (14.1) \\ \hline \end{gathered}$ | $\begin{gathered} 172 \\ (14.0) \\ \hline \end{gathered}$ | $\begin{gathered} 130 \\ (12.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 1453 \\ (14.2) \\ \hline \end{array}$ |
|  | Natural mother and stepfather | $\begin{aligned} & 240 \\ & (4.0) \end{aligned}$ | $\begin{gathered} 61 \\ (4.2) \end{gathered}$ | $\begin{gathered} 43 \\ (3.8) \end{gathered}$ | - | $\begin{aligned} & 356 \\ & (3.8) \end{aligned}$ |
| Total percentage |  | 100 | 100 | 100 | 100 | 100 |
| Total observations |  | $\begin{aligned} & 7085 \\ & 6975 \end{aligned}$ | $\begin{aligned} & 1538 \\ & 1517 \end{aligned}$ | $\begin{aligned} & 1365 \\ & 1298 \end{aligned}$ | $\begin{aligned} & 1100 \\ & 1069 \end{aligned}$ | $\begin{aligned} & 11088 \\ & 10832 \end{aligned}$ |
| Sign. |  |  |  |  |  | $\mathrm{P}=0.003$ |
| Lone natural mother | Lone natural mother | $\begin{gathered} 688 \\ (64.1) \end{gathered}$ | $\begin{gathered} 232 \\ (64.4) \\ \hline \end{gathered}$ | $\begin{gathered} 118 \\ (55.4) \\ \hline \end{gathered}$ | $\begin{gathered} 151 \\ (65.7) \end{gathered}$ | $\begin{array}{r} 1189 \\ (63.4) \\ \hline \end{array}$ |
|  | Both natural parents | $\begin{gathered} 227 \\ (19.6) \end{gathered}$ | $\begin{gathered} 78 \\ (19.3) \end{gathered}$ | $\begin{gathered} 52 \\ (23.2) \end{gathered}$ | $\begin{gathered} 70 \\ (27.8) \end{gathered}$ | $\begin{gathered} 427 \\ (20.5) \end{gathered}$ |
|  | - Married | $\begin{gathered} 86 \\ (5.6) \end{gathered}$ | - | - | $\begin{gathered} 24 \\ (8.1) \end{gathered}$ | $\begin{gathered} 142 \\ (5.8) \end{gathered}$ |
|  | - Cohabiting | $\begin{gathered} 97 \\ (10.0) \end{gathered}$ | $\begin{gathered} 45 \\ (11.1) \end{gathered}$ | $\begin{gathered} 35 \\ (15.0) \end{gathered}$ | $\begin{gathered} 36 \\ (15.5) \end{gathered}$ | $\begin{gathered} 213 \\ (11.0) \end{gathered}$ |
|  | - Other or unknown relationship | $\begin{gathered} \hline 44 \\ (4.0) \end{gathered}$ | - | - | - | $\begin{gathered} \hline 72 \\ (3.7) \end{gathered}$ |
|  | Natural mother and stepfather | $\begin{gathered} 156 \\ (16.3) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 58 \\ (16.3) \\ \hline \end{gathered}$ | $\begin{gathered} 43 \\ (21.4) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 20 \\ (6.5) \\ \hline \end{gathered}$ | $\begin{gathered} 277 \\ (16.1) \\ \hline \end{gathered}$ |
| Total percentage |  | 100 | 100 | 100 | 100 | 100 |
| Total observations |  | $\begin{aligned} & \hline 1071 \\ & 1179 \end{aligned}$ | $\begin{aligned} & 368 \\ & 378 \end{aligned}$ | $\begin{aligned} & 213 \\ & 267 \end{aligned}$ | $\begin{aligned} & \hline 241 \\ & 273 \end{aligned}$ | $\begin{aligned} & 1893 \\ & 1954 \end{aligned}$ |
| Sign. (excluding marital status) |  |  |  |  |  | $\mathrm{P}=0.001$ |
| Sign. (including marital status) |  |  |  |  |  | $\mathrm{P}=0.002$ |

Sample: All families responding at both MCS1 and MCS4 where family type at MCS1 was either both natural parents or lone natural mother and natural mother was resident at MCS4. Table displays unweighted observations and weighted percentages (country totals using dovwt1 and UK total using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

Table 3.6 shows that among natural parents, almost nine in ten (88\%) couples who were married at nine months, were still together when the children were seven compared with 69 per cent of those couples who were cohabiting at nine months. Almost one in four (23\%) children living with cohabiting parents at nine months was in lone mother families by age seven compared with only one in ten (10\%) living with married parents at nine months

| Table 3.6: Type of change in family type between MCS1 and MCS4 by marital status of <br> natural parents: couples at MCS1 |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Family type at MCS1 | Family type at MCS4 | Married at <br> MCS1 | Cohabiting at <br> MCS1 | Total |  |
| Both natural parents | Both natural parents | 7200 | 2049 | 9249 |  |
|  |  | $(87.7)$ | $(69.4)$ | $(82.2)$ |  |
|  | Lone natural mother | 771 | 661 | 1432 |  |
|  | $(10.1)$ | $(23.4)$ | $(14.1)$ |  |  |
|  | Natural mother and | 153 | 195 | 348 |  |
| stepfather | $(2.2)$ | $(7.2)$ | $(3.8)$ |  |  |
| Total percentage |  |  |  |  |  |
|  |  | 100 | 100 | 100 |  |
| Total observations |  |  |  |  |  |
|  |  | 8124 | 2905 | 11029 |  |
| Sign. | 7692 | 3097 | 10766 |  |  |

Sample: All families responding at both MCS1 and MCS4 where family type at MCS1 was both natural parents and their marital status was not other or unknown and natural mother was resident at MCS4. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics.

Table 3.7 shows that children's risk of family change in their first seven years of life decreases with the age of the mother (who is usually the main respondent). Almost four in ten $(39 \%)$ children living with main respondents aged under 30 and one in four $(25 \%)$ living with main respondents aged $30-34$ had a family change between MCS1 and MCS 4 compared with 16 per cent and 13 per cent respectively of those with main respondents aged 35-39 and 40 and over.

| $\|l\|$ <br> Table 3.7: Any change in family type between MCS1 and MCS4 by main respondent's age <br> at MCS4 | Under 30 | $\mathbf{3 0 - 3 4}$ | $\mathbf{3 5 - 3 9}$ | $\mathbf{4 0}$ plus | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Family type |  |  |  |  |  |  |
| Both natural parents at MCS1 and | 820 | 1815 | 3475 | 3169 | 9279 |  |
| MCS4 | $(37.4)$ | $(64.5)$ | $(78.8)$ | $(81.9)$ | $(69.4)$ |  |
| Lone natural mother at MCS1 and | 473 | 266 | 236 | 214 | 1189 |  |
| MCS4 | $(23.1)$ | $(10.7)$ | $(5.6)$ | $(5.3)$ | $(9.7)$ |  |
| Change in family type | 770 | 636 | 624 | 483 | 2513 |  |
|  | $(39.4)$ | $(24.8)$ | $(15.6)$ | $(12.7)$ | $(20.9)$ |  |
| Total percentage | 100 | 100 | 100 | 100 | 100 |  |
| Total observations | 2063 | 2717 | 4335 | 3866 | 12981 |  |
|  | 2243 | 2704 | 4179 | 3660 | 12787 |  |
| Sign. |  |  |  |  |  |  |

Sample: All families responding at both MCS1 and MCS4 where family type at MCS1 was either both natural parents or lone natural mother and natural mother was resident at MCS4. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are shown in italics.

Table 3.8 gives more detail on the type of family change by main respondent's age. It shows that, regardless of their original family situation, children living with younger mothers were more likely than those with older main respondents to experience family change in their first seven years of life. This indicates that the relationship status of younger parents is more changeable than older parents For example, where the children had been with both natural parents initially, children had experienced
family change in 38 per cent of cases if the main respondent was under 30 at MCS4, and 11 per cent of cases where they were aged 40 and over. Where the child had been living with a lone mother at MCS1, the figures were 42 per cent for the younger group of parents, and 28 per cent for the older. Table 3.9 shows that the association between family change and parents' marital status holds for all parental age groups among families who started out as two natural parents. For lone-mother families at age nine months, the most common family transition by age seven was to a partnership of both natural parents. This applied to all age groups except the youngest (Table 3.8).

| Family type at MCS1 | Family type at MCS4 | Under 30 | 30-34 | 35-39 | 40 plus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Both natural parents | Both natural parents | $\begin{gathered} 820 \\ (62.2) \end{gathered}$ | $\begin{aligned} & 1815 \\ & (77.0) \end{aligned}$ | $\begin{gathered} 3475 \\ (86.1) \end{gathered}$ | $\begin{gathered} 3169 \\ (88.5) \end{gathered}$ | $\begin{gathered} 9279 \\ (82.0) \end{gathered}$ |
|  | Lone natural mother | $\begin{array}{r} 304 \\ (27.3) \\ \hline \end{array}$ | $\begin{array}{r} 368 \\ (16.9) \\ \hline \end{array}$ | $\begin{gathered} 427 \\ (11.6) \\ \hline \end{gathered}$ | $\begin{gathered} 354 \\ (10.2) \\ \hline \end{gathered}$ | $\begin{gathered} 1453 \\ (14.2) \end{gathered}$ |
|  | Natural mother and stepfather | $\begin{gathered} 121 \\ (10.4) \end{gathered}$ | $\begin{aligned} & 108 \\ & (6.0) \end{aligned}$ | $\begin{gathered} \hline 83 \\ (2.3) \end{gathered}$ | $\begin{gathered} \hline 44 \\ (1.4) \end{gathered}$ | $\begin{aligned} & \hline 356 \\ & (3.8) \end{aligned}$ |
| Total percentage |  | 100 | 100 | 100 | 100 | 100 |
| Total observations |  | $\begin{aligned} & 1245 \\ & 1350 \end{aligned}$ | $\begin{aligned} & 2291 \\ & 2266 \end{aligned}$ | $\begin{aligned} & 3985 \\ & 3826 \end{aligned}$ | $\begin{aligned} & 3567 \\ & 3390 \end{aligned}$ | $\begin{aligned} & \hline 11088 \\ & 10832 \end{aligned}$ |
| Sign. |  |  |  |  |  | $\mathrm{P}=0.000$ |
| Lone natural mother | Lone natural mother | $\begin{gathered} 473 \\ (58.1) \end{gathered}$ | $\begin{gathered} 266 \\ (66.1) \end{gathered}$ | $\begin{gathered} 236 \\ (66.6) \end{gathered}$ | $\begin{gathered} 214 \\ (72.2) \end{gathered}$ | $\begin{gathered} 1189 \\ (63.4) \end{gathered}$ |
|  | Both natural parents | $\begin{gathered} 183 \\ (19.6) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (23.2) \end{gathered}$ | $\begin{gathered} 73 \\ (20.5) \\ \hline \end{gathered}$ | $\begin{gathered} 63 \\ (19.0) \\ \hline \end{gathered}$ | $\begin{gathered} 427 \\ (20.5) \\ \hline \end{gathered}$ |
|  | - Married | $\begin{gathered} 47 \\ (4.3) \end{gathered}$ | $\begin{gathered} 37 \\ (6.1) \end{gathered}$ | $\begin{gathered} 28 \\ (7.7) \end{gathered}$ | $\begin{gathered} 30 \\ (7.6) \end{gathered}$ | $\begin{aligned} & 142 \\ & (5.8) \end{aligned}$ |
|  | - Cohabiting | $\begin{gathered} 98 \\ (11.0) \end{gathered}$ | $\begin{gathered} 58 \\ (14.1) \end{gathered}$ | $\begin{gathered} 30 \\ (8.2) \end{gathered}$ | $\begin{gathered} 27 \\ (9.5) \end{gathered}$ | $\begin{gathered} 213 \\ (11.0) \end{gathered}$ |
|  | - Other or unknown relationship | $\begin{gathered} 38 \\ (4.3) \end{gathered}$ | - | - | - | $\begin{gathered} 72 \\ (3.7) \end{gathered}$ |
|  | Natural mother and stepfather | $\begin{gathered} 162 \\ (22.2) \end{gathered}$ | $\begin{gathered} 52 \\ (10.8) \end{gathered}$ | $\begin{gathered} 41 \\ (12.8) \end{gathered}$ | $\begin{gathered} 22 \\ (8.8) \end{gathered}$ | $\begin{gathered} 277 \\ (16.1) \end{gathered}$ |
| Total percentage |  | 100 | 100 | 100 | 100 | 100 |
| Total observations |  | $\begin{aligned} & 818 \\ & 893 \end{aligned}$ | $\begin{aligned} & 426 \\ & 438 \end{aligned}$ | $\begin{aligned} & 350 \\ & 352 \end{aligned}$ | $\begin{aligned} & 299 \\ & 271 \end{aligned}$ | $\begin{aligned} & 1893 \\ & 1954 \end{aligned}$ |
| Sign. (excluding marital status) |  |  |  |  |  | $\mathrm{P}=0.000$ |
| Sign. (including marital status) |  |  |  |  |  | $\mathrm{P}=0.000$ |

Sample: All families responding at both MCS1 and MCS4 where family type at MCS1 was either both natural parents or lone natural mother and natural mother was resident at MCS4. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

| Family type at MCS1 | Family type at MCS4 | Under 30 | 30-34 | 35-39 | 40 plus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Both natural parents married | Both natural parents | $\begin{gathered} 342 \\ (73.3) \end{gathered}$ | $\begin{array}{r} 1305 \\ (82.5) \\ \hline \end{array}$ | $\begin{gathered} 2884 \\ (88.9) \\ \hline \end{gathered}$ | $\begin{array}{r} 2669 \\ (90.6) \\ \hline \end{array}$ | $\begin{gathered} 7200 \\ (87.4) \\ \hline \end{gathered}$ |
|  | Lone natural mother | $\begin{gathered} 73 \\ (20.2) \end{gathered}$ | $\begin{gathered} 193 \\ (13.7) \end{gathered}$ | $\begin{gathered} 266 \\ (9.1) \end{gathered}$ | $\begin{array}{r} 239 \\ (8.2) \end{array}$ | $\begin{gathered} 771 \\ (10.3) \end{gathered}$ |
|  | Natural mother and stepfather | $\begin{gathered} 25 \\ (6.6) \end{gathered}$ | $\begin{gathered} 45 \\ (3.8) \end{gathered}$ | $\begin{gathered} 53 \\ (2.0) \end{gathered}$ | $\begin{gathered} 30 \\ (1.2) \end{gathered}$ | $\begin{array}{r} 153 \\ (2.3) \end{array}$ |
| Total percentage |  | 100 | 100 | 100 | 100 | 100 |
| Total observations |  | $\begin{aligned} & 440 \\ & 431 \end{aligned}$ | $\begin{aligned} & 1543 \\ & 1431 \end{aligned}$ | $\begin{aligned} & 3203 \\ & 3017 \end{aligned}$ | $\begin{aligned} & 2938 \\ & 2749 \end{aligned}$ | $\begin{aligned} & 8124 \\ & 7628 \end{aligned}$ |
| Sign. |  |  |  |  |  | $\mathrm{P}=0.000$ |
| Both natural parents cohabiting | Both natural parents | $\begin{gathered} 467 \\ (57.9) \\ \hline \end{gathered}$ | $\begin{gathered} 504 \\ (67.7) \\ \hline \end{gathered}$ | $\begin{gathered} 586 \\ (75.8) \\ \hline \end{gathered}$ | $\begin{gathered} 492 \\ (79.7) \\ \hline \end{gathered}$ | $\begin{gathered} 2049 \\ (69.4) \\ \hline \end{gathered}$ |
|  | - Married | $\begin{gathered} 112 \\ (13.6) \end{gathered}$ | $\begin{array}{r} 165 \\ (22.3) \end{array}$ | $\begin{gathered} 175 \\ (22.7) \end{gathered}$ | $\begin{gathered} 137 \\ (21.6) \end{gathered}$ | $\begin{gathered} 589 \\ (19.8) \end{gathered}$ |
|  | - Cohabiting | $\begin{gathered} 347 \\ (42.9) \end{gathered}$ | $\begin{gathered} 336 \\ (45.2) \end{gathered}$ | $\begin{gathered} 404 \\ (51.9) \end{gathered}$ | $\begin{gathered} 349 \\ (57.3) \end{gathered}$ | $\begin{gathered} 1436 \\ (48.7) \end{gathered}$ |
|  | - Other or unknown relationship | - | - | - | - | $\begin{gathered} 24 \\ (0.9) \\ \hline \end{gathered}$ |
|  | Lone natural mother | $\begin{gathered} 219 \\ (30.0) \\ \hline \end{gathered}$ | $\begin{gathered} 174 \\ (22.5) \\ \hline \end{gathered}$ | $\begin{gathered} 157 \\ (20.9) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 111 \\ (18.1) \end{gathered}$ | $\begin{gathered} 661 \\ (23.3) \end{gathered}$ |
|  | Natural mother and stepfather | $\begin{gathered} 92 \\ (12.1) \end{gathered}$ | $\begin{gathered} 62 \\ (9.9) \\ \hline \end{gathered}$ | $\begin{gathered} 27 \\ (3.3) \\ \hline \end{gathered}$ | - | $\begin{aligned} & 195 \\ & (7.3) \\ & \hline \end{aligned}$ |
| Total percentage |  | 100 | 100 | 100 | 100 | 100 |
| Total observations |  | $\begin{aligned} & 778 \\ & 880 \end{aligned}$ | $\begin{aligned} & 740 \\ & 829 \end{aligned}$ | $\begin{aligned} & 770 \\ & 799 \end{aligned}$ | $\begin{aligned} & 617 \\ & 629 \end{aligned}$ | $\begin{aligned} & 2905 \\ & 3137 \end{aligned}$ |
| Sign. (excluding marital status) |  |  |  |  |  | $\mathrm{P}=0.000$ |
| Sign. (including marital status) |  |  |  |  |  | $\mathrm{P}=0.000$ |

Sample: All families responding at both MCS1 and MCS4 where family type at MCS1 was both natural parents and their marital status was not other or unknown and natural mother was resident at MCS4. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

This section has shown that although the majority of children lived in stable family circumstances in their first seven years of life, a significant minority ( $21 \%$ ) had experienced a change in their family situation. Children living with a lone mother at MCS1 were more likely to experience family change than those living with both natural parents at MCS1 ( $37 \%$ compared with $18 \%$ ) and children living with cohabiting natural parents at MCS1 were more likely to experience family change than children living with married natural parents ( $31 \%$ compared with $12 \%$ ). For many children family change represented a weakening of the ties between their natural parents, but, in some cases, the change represented a strengthening of these ties. In particular, one in five (20\%) natural parents who were cohabiting at nine months had got married to each other by seven years and one in five (21\%) lone natural mothers at nine months was living with the child's natural father by seven years. Overall, lone natural mothers were more likely to have started living with the child's natural father than with a stepfather ( $21 \%$ compared with $16 \%$ ).

For some of these children, the arrival of a stepfather may have been associated with another change. Their mother may have had another baby with her new partner and the cohort child may have acquired a younger half brother or sister. It is also possible
that the stepfather may have brought his children from previous relationships into the household and the cohort child may now have a stepbrother or sister. The next two sections will broaden the picture of our families to include their co-resident brothers and sisters.

## Number of siblings

Although overall the average number of children per family has declined over the last 30 years, the increase in stepfamilies makes it now more likely for children to be living with half or stepbrothers and sisters. Stepfamilies also tend to be larger; 27 per cent of them have three or more children compared with 18 per cent of nonstepfamilies (ONS, 2007).

This section provides evidence on the overall number of siblings per family and the next section looks at different types of siblings. This information comes from the household grid which collects data on everyone present in the cohort member's household and the relationships between household members. Both sections explore how number of siblings and the presence of different types of siblings vary by country, age of the main respondent, ethnic group of the cohort child and family type.

The definition of sibling used in this section includes step, half, foster and adopted siblings besides full natural siblings excluding those who are part of a twin or triplet of the cohort child. The definition of sibling used in these sections is restricted to coresidential siblings (and so excludes siblings living elsewhere) and includes coresidential siblings of any age (and so includes co-residential siblings who are adults).

Table 3.10 shows that almost nine in ten (86\%) seven-year-olds had at least one sibling. This has increased from just under six in ten ( $57 \%$ ) at nine months (Calderwood, 2008). The most common number of siblings was one, with just under half ( $46 \%$ ) of children in this category. Over one in four (27\%) had two siblings and one in seven (14\%) had three or more.

There were some differences between countries in the number of siblings. Children in Northern Ireland and England were less likely to be the only child in the family than in Scotland and Wales ( $12 \%$ and $13 \%$ respectively compared with $16 \%$ ). Children in Northern Ireland also had more siblings than in all other countries. In this country, 30 per cent of children had two siblings compared with between 25 and 27 per cent in England, Wales and Scotland and 20 per cent had three or more children compared with 11-14 per cent in the other UK countries.

Table 3.10: Number of siblings by country at MCS4

|  | Country at MCS4 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of siblings | England | Wales | Scotland | Northern Ireland | UK |  |
| None | 1117 | 306 | 260 | 152 | 1835 |  |
|  | $(13.1)$ | $(15.9)$ | $(16.4)$ | $(12.0)$ | $(13.6)$ |  |
| One | 4007 | 911 | 812 | 519 | 6249 |  |
|  | $(46.3)$ | $(46.0)$ | $(48.0)$ | $(38.0)$ | $(46.0)$ |  |
| Two | 2398 | 506 | 403 | 428 | $(29.7)$ |  |
|  | $(26.8)$ | $(25.6)$ | $(25.0)$ | $(26.7)$ |  |  |
| Three or more | 1365 | 249 | 147 | 277 | 2038 |  |
|  | $(13.7)$ | $(12.5)$ | $(10.7)$ | $(20.3)$ | $(13.7)$ |  |
| Total percentage | 100 | 100 | 100 | 100 | 100 |  |
| Total observations | 8887 | 1972 | 1622 | 1376 | 13857 |  |
|  | 8886 | 1970 | 1615 | 1380 | 13851 |  |
| Sign. |  |  |  |  |  |  |

Sample: All families. Table displays unweighted observations and weighted percentages (country totals using dovwt1 and UK totals using dovwt2). Weighted total observations are in italics.

Table 3.11 shows that the number of siblings is strongly related to the age of the mother. Children of main respondents under 30 and 40 and over were less likely than those with main respondents in their thirties to have any siblings. Children with main respondents under 30 were particularly less likely than all other groups to have three or more siblings.

| Table 3.11: Number of siblings by main respondent's age at MCS4 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of siblings | Under 30 | $\mathbf{3 0 - 3 4}$ | $\mathbf{3 5 - 3 9}$ | $\mathbf{4 0}$ plus | Total |  |
| None | 468 | 333 | 465 | 569 | 1835 |  |
|  | $(19.9)$ | $(11.6)$ | $(10.6)$ | $(14.3)$ | $(13.6)$ |  |
| One | 979 | 1253 | 2177 | 1840 | 6249 |  |
|  | $(42.2)$ | $(44.7)$ | $(48.8)$ | $(46.3)$ | $(46.0)$ |  |
| Two | 594 | 846 | 1225 | 1070 | 3735 |  |
|  | $(26.7)$ | $(28.2)$ | $(26.8)$ | $(25.3)$ | $(26.7)$ |  |
| Three or more | 252 | 482 | 662 | 642 | 2038 |  |
|  | $(11.1)$ | $(15.4)$ | $(13.8)$ | $(14.0)$ | $(13.7)$ |  |
| Total percentage | 100 | 100 | 100 | 100 | 100 |  |
| Total observations | 2293 | 2914 | 4529 | 4121 | 13857 |  |
|  | 2528 | 2938 | 4410 | 3975 | 13851 |  |
| Sign. |  |  |  |  |  |  |

Sample: All families. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics.

Table 3.12 shows how the number of siblings varied by the cohort member's ethnic group. Indian, Pakistani and Bangladeshi children were much less likely (10\%, 7\% and $4 \%$ respectively) and black Caribbean and mixed children were much more likely ( $18 \%$ and $22 \%$ respectively) to be the only child in the family than children in other ethnic groups (13-14\%). Pakistani, Bangladeshi and black African children had more siblings than children in other ethnic groups. The most common number of siblings was two for Pakistani children (39\%) and three or more for Bangladeshi (42\%) and black African (32\%) children. In all other groups the most common number of siblings was one.

Table 3.12: Number of siblings by cohort member's ethnic group at MCS4

| Number of siblings | $\stackrel{\text { © }}{\substack{3}}$ | $\begin{aligned} & \text { ס्㐅 } \\ & \stackrel{\rightharpoonup}{\boldsymbol{x}} \end{aligned}$ | $\begin{aligned} & \text { 등 } \\ & \text { 응 } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \overline{\mathrm{I}} \\ & \stackrel{\circ}{\mathrm{O}} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | $\begin{gathered} 1578 \\ (13.5) \end{gathered}$ | $\begin{gathered} 72 \\ (21.5) \end{gathered}$ | $\begin{gathered} \hline 30 \\ (9.8) \end{gathered}$ | $\begin{gathered} \hline 32 \\ (6.5) \end{gathered}$ | - | $\begin{gathered} 29 \\ (18.1) \end{gathered}$ | $\begin{gathered} 28 \\ (13.4) \end{gathered}$ | $\begin{gathered} 21 \\ (13.5) \end{gathered}$ | $\begin{aligned} & 1801 \\ & (13.4) \end{aligned}$ |
| One | $\begin{aligned} & 5520 \\ & (48.5) \end{aligned}$ | $\begin{gathered} 151 \\ (38.6) \end{gathered}$ | $\begin{gathered} 165 \\ (50.1) \end{gathered}$ | $\begin{gathered} 114 \\ (18.3) \end{gathered}$ | $\begin{gathered} 53 \\ (22.0) \end{gathered}$ | $\begin{gathered} 59 \\ (37.1) \end{gathered}$ | $\begin{gathered} 58 \\ (24.1) \end{gathered}$ | $\begin{gathered} 87 \\ (37.9) \end{gathered}$ | $\begin{gathered} 6207 \\ (46.1) \end{gathered}$ |
| Two | $\begin{gathered} 3019 \\ (25.9) \end{gathered}$ | $\begin{gathered} 100 \\ (28.4) \end{gathered}$ | $\begin{gathered} 119 \\ (33.8) \end{gathered}$ | $\begin{gathered} 228 \\ (38.6) \end{gathered}$ | $\begin{gathered} 76 \\ (31.4) \end{gathered}$ | $\begin{gathered} 45 \\ (28.4) \end{gathered}$ | $\begin{gathered} 77 \\ (30.3) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (26.3) \end{gathered}$ | $\begin{gathered} 3720 \\ (26.8) \end{gathered}$ |
| Three or more | $\begin{gathered} 1411 \\ (12.1) \end{gathered}$ | $\begin{gathered} 50 \\ (11.6) \end{gathered}$ | $\begin{gathered} 27 \\ (6.3) \end{gathered}$ | $\begin{gathered} 253 \\ (36.7) \end{gathered}$ | $\begin{gathered} 107 \\ (42.3) \end{gathered}$ | $\begin{gathered} 22 \\ (16.3) \end{gathered}$ | $\begin{gathered} 98 \\ (32.2) \end{gathered}$ | $\begin{gathered} 59 \\ (22.3) \end{gathered}$ | $\begin{gathered} 2027 \\ (13.7) \end{gathered}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 11528 \\ & 11731 \end{aligned}$ | $\begin{aligned} & 373 \\ & 450 \end{aligned}$ | $\begin{aligned} & 341 \\ & 264 \end{aligned}$ | $\begin{aligned} & 627 \\ & 480 \end{aligned}$ | $\begin{gathered} 247 \\ 163 \end{gathered}$ | $\begin{aligned} & 155 \\ & 163 \end{aligned}$ | $\begin{aligned} & 261 \\ & 251 \end{aligned}$ | $\begin{aligned} & 223 \\ & 218 \end{aligned}$ | $\begin{aligned} & 13755 \\ & 13720 \end{aligned}$ |
| Sign. |  |  |  |  |  |  |  |  | $\mathrm{P}=0.000$ |

Sample: All families. 102 observations are excluded due to missing data on cohort member's ethnic group. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

As Table 3.13 shows, number of siblings is also related to family type. Children living with lone mothers are the most likely ( $26 \%$ ) and those living with married natural parents are the least likely ( $8 \%$ ) to be the only child in the family. Children living in stepfather families are the most likely, of the major groups, to have three or more siblings ( $19 \%$ compared with $14 \%$ overall).

Table 3.13: Number of siblings by family type at MCS4

| Number of <br> siblings | Married <br> natural <br> parents | Cohabiting <br> natural <br> parents | Natural <br> parents <br> (other/ <br> unknown) | Natural <br> mother and <br> stepfather | Lone <br> natural <br> mother | Other <br> family <br> type | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | 630 | 232 | - | 116 | 723 | 118 | 1835 |
|  | $(7.6)$ | $(13.0)$ |  | $(15.0)$ | $(26.2)$ | $(32.2)$ | $(13.6)$ |
| One | 3862 | 841 | 57 | 259 | 1084 | 146 | 6249 |
|  | $(49.9)$ | $(47.2)$ | $(40.8)$ | $(37.8)$ | $(39.5)$ | $(37.0)$ | $(46.0)$ |
| Two | 2377 | 449 | 51 | 188 | 589 | 81 | 3735 |
|  | $(29.3)$ | $(26.3)$ | $(25.6)$ | $(28.4)$ | $(20.9)$ | $(20.1)$ | $(26.7)$ |
| Three or more | 1204 | 232 | 42 | 115 | 402 | 43 | 2038 |
|  | $(13.3)$ | $(13.5)$ | $(23.8)$ | $(18.8)$ | $(13.5)$ | $(10.8)$ | $(13.7)$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total | 8073 | 1754 | 166 | 678 | 2798 | 388 | 13857 |
| observations | 7575 | 1863 | 169 | 791 | 2982 | 472 | 13851 |
| Sign. |  |  |  |  |  |  |  |

Sample: All families. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted
total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.
This may be related to the prevalence of half-siblings and step-siblings in this family type. The next section examines this in more detail.

## Types of siblings

This section provides evidence on the different types of siblings living with the cohort child. A natural sibling is one with whom the cohort child shares both biological parents and a half-sibling is one with whom the cohort child shares one biological parent. No biological parents are shared between step-siblings, foster or adoptive siblings. However, unlike foster or adoptive siblings, one of the biological parents of a step-sibling usually still lives with them and is a step-parent to the cohort child.

The shared natural parent of half-siblings may be either their natural mother or their natural father. However, as most children continue to live with their natural mother when their parents live apart, in most families these half-siblings will be the natural child of the cohort member's mother with a new partner (if they are a younger halfsibling) or previous partner (if they are an older half-sibling). Similarly, step-siblings can be the biological child of either a stepfather or a stepmother.

Table 3.14 shows the overall prevalence of different types of siblings by country, with natural siblings by far, the most common. More children had older natural siblings ( $47 \%$ ) than younger natural siblings ( $44 \%$ ). Around one in six ( $16 \%$ ) children was living with a half-sibling at age seven. Older half-siblings were more common than younger half-siblings ( $12 \%$ compared with $5 \%$ ). Less than one in a hundred children lived with a step, foster or adoptive sibling.

Children in Northern Ireland were the least likely to have a half-sibling ( $10 \%$ compared with 15\% in Scotland, 16\% in England and 18\% in Wales).

| Table 3.14: Type of siblings by country at MCS4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type of siblings | England | Wales | Scotland | Northern Ireland | UK |
| Any natural sibling | $\begin{aligned} & 7032 \\ & (77.5) \end{aligned}$ | $\begin{aligned} & 1467 \\ & (73.8) \end{aligned}$ | $\begin{gathered} 1244 \\ (75.1) \end{gathered}$ | $\begin{gathered} 1148 \\ (82.9) \end{gathered}$ | $\begin{aligned} & 10891 \\ & (77.3) \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |
| Older natural sibling | $\begin{gathered} 4345 \\ (47.5) \end{gathered}$ | $\begin{gathered} \hline 895 \\ (45.1) \end{gathered}$ | $\begin{gathered} 747 \\ (45.4) \end{gathered}$ | $\begin{gathered} 753 \\ (54.6) \end{gathered}$ | $\begin{aligned} & \hline 6740 \\ & (47.4) \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.002$ |
| Younger natural sibling | $\begin{gathered} 4030 \\ (43.7) \end{gathered}$ | $\begin{gathered} 786 \\ (39.8) \end{gathered}$ | $\begin{gathered} 676 \\ (41.9) \end{gathered}$ | $\begin{gathered} 658 \\ (47.0) \end{gathered}$ | $\begin{aligned} & 6150 \\ & (43.5) \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |
| Any half-sibling | $\begin{aligned} & 1306 \\ & (16.4) \end{aligned}$ | $\begin{gathered} \hline 364 \\ (18.4) \end{gathered}$ | $\begin{gathered} 206 \\ (15.1) \end{gathered}$ | $\begin{aligned} & \hline 131 \\ & (9.6) \end{aligned}$ | $\begin{aligned} & 2007 \\ & (16.1) \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |
| Older half-sibling | $\begin{gathered} 966 \\ (11.6) \end{gathered}$ | $\begin{gathered} 277 \\ (13.7) \end{gathered}$ | $\begin{gathered} 160 \\ (11.1) \end{gathered}$ | $\begin{gathered} 98 \\ (6.9) \end{gathered}$ | $\begin{aligned} & 1501 \\ & (11.5) \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.017$ |
| Younger half-sibling | $\begin{gathered} 401 \\ (5.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 107 \\ (5.8) \\ \hline \end{array}$ | $\begin{gathered} 53 \\ (4.4) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (3.2) \end{gathered}$ | $\begin{gathered} 602 \\ (5.4) \\ \hline \end{gathered}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |
| Any step sibling | $\begin{gathered} 55 \\ (0.8) \end{gathered}$ | - | - | - | $\begin{gathered} 89 \\ (0.8) \end{gathered}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.276$ |

Table 3.14: Type of siblings by country at MCS4

| Type of siblings | England | Wales | Scotland | Northern <br> Ireland | UK |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |
| Older step sibling | 66 <br> $(0.5)$ | - | - | - | 55 |  |
|  |  |  |  |  |  |  |
| Sign. | 20 | - | - | - | $\mathrm{P}=0.461$ |  |
| Younger step-sibling | $(0.3)$ | - | 35 |  |  |  |
|  |  |  |  |  |  |  |
| Sign. | 27 | - | - | - | $\mathrm{P}=0.064$ |  |
| Any foster or adoptive sibling | $(0.3)$ | - | 43 |  |  |  |
|  |  |  |  |  |  |  |
| Sign. | 8887 | 1972 | 1622 | 1376 | 13857 |  |
| Total observations | 8886 | 1970 | 1615 | 1380 | 13851 |  |

Sample: All families. Table displays unweighted observations and weighted percentages (country totals using dovwt1 and UK totals using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

Table 3.15 shows how type of sibling varies with main respondent's age. Children of main respondents aged 40 and over are almost three times as likely to have older siblings than children of main respondents aged under 30 ( $60 \%$ compared with 23\%) and children of main respondents aged under 30 are twice as likely as children of main respondents aged 40 and over to have younger siblings ( $54 \%$ compared with $27 \%)$. Overall, the proportion of children living with half siblings declines with the age of the main respondent. Among children of main respondents under 30, 23 per cent had a half-sibling. This falls to 18 per cent in the 30-34 age group, 13 per cent in the $35-34$ age group and 14 per cent in the 40 plus age group. However, as with natural siblings, children of older main respondents are more likely to have older half-siblings and children of younger main respondents are more likely to have younger halfsiblings.

Table 3.15: Type of siblings by main respondent's age at MCS4

| Type of siblings | Under 30 | 30-34 | 35-39 | 40 plus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Any natural sibling | $\begin{array}{r} 1529 \\ (65.7) \\ \hline \end{array}$ | $\begin{array}{r} 2355 \\ (79.7) \\ \hline \end{array}$ | $\begin{gathered} 3787 \\ (82.7) \end{gathered}$ | $\begin{gathered} 3220 \\ (76.8) \end{gathered}$ | $\begin{aligned} & 10891 \\ & (77.3) \end{aligned}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |
| Older natural sibling | $\begin{gathered} 504 \\ (22.9) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 1348 \\ (45.5) \\ \hline \end{array}$ | $\begin{array}{r} 2334 \\ (50.9) \\ \hline \end{array}$ | $\begin{aligned} & \hline 2554 \\ & (60.3) \\ & \hline \end{aligned}$ | $\begin{gathered} 6740 \\ (47.4) \\ \hline \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |
| Younger natural sibling | $\begin{array}{r} 1278 \\ (54.1) \\ \hline \end{array}$ | $\begin{aligned} & \hline 1571 \\ & (51.7) \end{aligned}$ | $\begin{aligned} & 2152 \\ & (46.6) \end{aligned}$ | $\begin{aligned} & \hline 1149 \\ & (27.4) \end{aligned}$ | $\begin{gathered} 6150 \\ (43.5) \\ \hline \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |
| Any half-sibling | $\begin{gathered} 457 \\ (22.7) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 465 \\ (18.0) \\ \hline \end{gathered}$ | $\begin{gathered} 545 \\ (13.1) \\ \hline \end{gathered}$ | $\begin{gathered} 540 \\ (14.0) \\ \hline \end{gathered}$ | $\begin{gathered} 2007 \\ (16.1) \\ \hline \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |
| Older half-sibling | $\begin{aligned} & \hline 142 \\ & (6.6) \end{aligned}$ | $\begin{gathered} 348 \\ (13.0) \\ \hline \end{gathered}$ | $\begin{gathered} 496 \\ (11.7) \end{gathered}$ | $\begin{gathered} \hline 515 \\ (13.3) \end{gathered}$ | $\begin{gathered} 1501 \\ (11.5) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |
| Younger half-sibling | $\begin{gathered} 332 \\ (17.0) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (6.6) \\ \hline \end{gathered}$ | $\begin{gathered} 72 \\ (1.9) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 39 \\ (1.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 602 \\ (5.4) \\ \hline \end{array}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |
| Any step-sibling | $\begin{gathered} 28 \\ (1.8) \end{gathered}$ | $\begin{gathered} 23 \\ (0.9) \end{gathered}$ | $\begin{gathered} 24 \\ (0.6) \end{gathered}$ | - | $\begin{gathered} 89 \\ (0.8) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |


| Type of siblings | Under 30 | 30-34 | 35-39 | 40 plus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |
| Older step-sibling | - | - | - | - | $\begin{gathered} 55 \\ (0.5) \\ \hline \end{gathered}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.089$ |
| Younger step-sibling | - | - | - | - | $\begin{gathered} 35 \\ (0.3) \\ \hline \end{gathered}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |
| Any foster or adoptive sibling | - | - | - | - | $\begin{gathered} 43 \\ (0.3) \\ \hline \end{gathered}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.090$ |
| Total observations | $\begin{aligned} & 2293 \\ & 2528 \end{aligned}$ | $\begin{aligned} & 2914 \\ & 2938 \end{aligned}$ | $\begin{aligned} & 4529 \\ & 4410 \end{aligned}$ | $\begin{aligned} & 4121 \\ & 3975 \end{aligned}$ | $\begin{aligned} & 13857 \\ & 13851 \end{aligned}$ |

Sample: All families. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with ' - '.

As shown in Table 3.16, there is a strong association between cohort member's ethnic group and the type of siblings. Black Caribbean and mixed children were much less likely than average to have natural siblings ( $65 \%$ and $66 \%$ respectively compared with $78 \%$ overall) and much more likely to have half-siblings ( $28 \%$ and $20 \%$ respectively compared with $16 \%$ overall). The half-siblings of children in these ethnic groups are more likely to be older than younger.

A higher proportion of Indian, Pakistani, Bangladeshi and black African children had natural siblings compared with the average for all children (89\%, $92 \%, 95 \%$ and $84 \%$ respectively compared with $78 \%$ overall). This reflects the fact, described in the previous section, that children in these groups had a higher number of siblings overall. Children in these groups were also less likely than average to have a halfsibling ( $1 \%, 2 \%, 3 \%$ and $8 \%$ respectively compared with $16 \%$ overall).

Table 3.16: Type of sibling by cohort member's ethnic group at MCS4

| Type of siblings |  | $\begin{aligned} & \text { ס } \\ & \stackrel{x}{\Sigma} \end{aligned}$ | - |  |  |  |  |  | 픙 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Any natural sibling | $\begin{aligned} & \hline 8938 \\ & (76.8) \end{aligned}$ | $\begin{gathered} 254 \\ (65.9) \end{gathered}$ | $\begin{gathered} 305 \\ (89.3) \end{gathered}$ | $\begin{gathered} 584 \\ (92.0) \end{gathered}$ | $\begin{gathered} 234 \\ (95.2) \end{gathered}$ | $\begin{gathered} 100 \\ (65.3) \end{gathered}$ | $\begin{gathered} 225 \\ (83.6) \end{gathered}$ | $\begin{gathered} 195 \\ (82.8) \end{gathered}$ | $\begin{aligned} & \hline 10835 \\ & (77.5) \end{aligned}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |  |
| Older natural sibling | $\begin{gathered} 5420 \\ (46.1) \end{gathered}$ | $\begin{gathered} 158 \\ (42.0) \\ \hline \end{gathered}$ | $\begin{gathered} 184 \\ (54.4) \end{gathered}$ | $\begin{gathered} 401 \\ (62.6) \\ \hline \end{gathered}$ | $\begin{gathered} 180 \\ (74.0) \\ \hline \end{gathered}$ | $\begin{gathered} 70 \\ (43.5) \end{gathered}$ | $\begin{gathered} 169 \\ (61.7) \\ \hline \end{gathered}$ | $\begin{gathered} 123 \\ (54.9) \\ \hline \end{gathered}$ | $\begin{array}{r} 6705 \\ (47.5) \\ \hline \end{array}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |  |
| Younger natural sibling | $\begin{gathered} 4905 \\ (42.3) \end{gathered}$ | $\begin{gathered} 152 \\ (39.8) \\ \hline \end{gathered}$ | $\begin{gathered} 163 \\ (47.4) \\ \hline \end{gathered}$ | $\begin{gathered} 413 \\ (65.3) \\ \hline \end{gathered}$ | $\begin{gathered} 162 \\ (65.6) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (35.6) \\ \hline \end{gathered}$ | $\begin{gathered} 148 \\ (55.0) \\ \hline \end{gathered}$ | $\begin{gathered} 125 \\ (49.9) \end{gathered}$ | $\begin{gathered} 6117 \\ (43.7) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |  |
| Any half-sibling | $\begin{array}{r} 1818 \\ (17.4) \end{array}$ | $\begin{gathered} 71 \\ (20.3) \end{gathered}$ | - | - | - | $\begin{gathered} 42 \\ (28.2) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (8.3) \end{gathered}$ | - | $\begin{array}{r} 1997 \\ (16.2) \end{array}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |  |
| Older halfsibling | $\begin{gathered} 1356 \\ (12.4) \end{gathered}$ | $\begin{gathered} 53 \\ (13.4) \end{gathered}$ | - | - | - | $\begin{gathered} 37 \\ (24.2) \end{gathered}$ | - | - | $\begin{gathered} 1496 \\ (11.6) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |  |
| Younger halfsibling | $\begin{gathered} \hline 547 \\ (5.8) \end{gathered}$ | $\begin{gathered} \hline 23 \\ (8.4) \\ \hline \end{gathered}$ | - | - | - | - | - | - | $\begin{gathered} 597 \\ (5.4) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |  |

Table 3.16: Type of sibling by cohort member's ethnic group at MCS4

| Type of siblings | ¢ |  |  |  |  |  |  |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |  |  |  |
| Any stepsibling | $\begin{gathered} \hline 75 \\ (0.8) \end{gathered}$ | - | - | - | - | - | - | - | $\begin{gathered} \hline 87 \\ (0.7) \end{gathered}$ |
| Sign. |  |  |  |  |  |  |  |  | $\mathrm{P}=0.564$ |
| Older stepsibling | $\begin{gathered} \hline 48 \\ (0.5) \end{gathered}$ | - | - | - | - | - | - | - | $\begin{gathered} 55 \\ (0.5) \end{gathered}$ |
| Sign. |  |  |  |  |  |  |  |  |  |
| Younger stepsibling | $\begin{gathered} \hline 27 \\ (0.2) \\ \hline \end{gathered}$ | - | - | - | - | - | - | - | $\begin{gathered} \hline 33 \\ (0.3) \\ \hline \end{gathered}$ |
| Sign. |  |  |  |  |  |  |  |  |  |
| Any foster or adoptive sibling | $\begin{gathered} \hline 31 \\ (0.2) \end{gathered}$ | - | - | - | - | - | - | - | $\begin{gathered} \hline 38 \\ (0.2) \end{gathered}$ |
| Sign. |  |  |  |  |  |  |  |  |  |
| Total | 11528 | 373 | 341 | 627 | 247 | 155 | 261 | 223 | 13755 |
| observations | 11731 | 450 | 264 | 480 | 163 | 163 | 251 | 218 | 13720 |

Sample: All families. 102 observations are excluded due to missing data on cohort member's ethnic group. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

Table 3.17 shows that there is also a strong association between type of sibling and family type. Children living with married natural parents were the most likely to have natural siblings (89\%), and children living with a lone natural mother ( $58 \%$ ), and natural mother and a stepfather (48\%), are the least likely to have natural siblings. This was also true in relation to younger natural siblings. The highest proportion of children with half-siblings was those living in stepfather families ( $55 \%$ ). In stepfather families, half-siblings were very likely to be younger than the cohort child whereas in lone-mother families, half-siblings were more likely to be older.

Table 3.17: Type of siblings by family type at MCS4

| Type of siblings | Married natural parents | Cohabiting natural parents | Natural parents (other/ unknown) | Natural mother and stepfather | Lone natural mother | Other family type | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Any natural sibling | $\begin{array}{r} 7221 \\ (89.3) \\ \hline \end{array}$ | $\begin{array}{r} 1359 \\ (77.2) \\ \hline \end{array}$ | $\begin{gathered} 139 \\ (81.6) \\ \hline \end{gathered}$ | $\begin{gathered} 318 \\ (47.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1655 \\ (58.5) \\ \hline \end{array}$ | $\begin{gathered} 199 \\ (50.5) \end{gathered}$ | $\begin{aligned} & 10891 \\ & (77.3) \\ & \hline \end{aligned}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |
| Older natural sibling | $\begin{gathered} 4556 \\ (55.9) \end{gathered}$ | $\begin{gathered} 642 \\ (37.2) \end{gathered}$ | $\begin{gathered} 87 \\ (49.0) \end{gathered}$ | $\begin{gathered} 220 \\ (33.6) \end{gathered}$ | $\begin{gathered} 1101 \\ (37.9) \end{gathered}$ | $\begin{gathered} 134 \\ (32.9) \end{gathered}$ | $\begin{gathered} 6740 \\ (47.4) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |
| Younger natural sibling | $\begin{gathered} 4058 \\ (49.8) \end{gathered}$ | $\begin{gathered} 957 \\ (54.4) \end{gathered}$ | $\begin{gathered} 87 \\ (53.7) \end{gathered}$ | $\begin{gathered} \hline 144 \\ (21.0) \end{gathered}$ | $\begin{gathered} 811 \\ (29.3) \end{gathered}$ | $\begin{gathered} 93 \\ (24.2) \end{gathered}$ | $\begin{gathered} 6150 \\ (43.5) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |
| Any half sibling | $\begin{array}{r} \hline 526 \\ (7.2) \\ \hline \end{array}$ | $\begin{gathered} \hline 335 \\ (19.7) \\ \hline \end{gathered}$ | $\begin{gathered} 26 \\ (15.5) \end{gathered}$ | $\begin{gathered} 356 \\ (55.0) \end{gathered}$ | $\begin{gathered} 673 \\ (25.0) \end{gathered}$ | $\begin{gathered} 91 \\ (24.4) \end{gathered}$ | $\begin{gathered} 2007 \\ (16.1) \end{gathered}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |
| Older half sibling | $\begin{gathered} 524 \\ (7.2) \end{gathered}$ | $\begin{gathered} 332 \\ (19.5) \end{gathered}$ | $\begin{gathered} 22 \\ (12.0) \end{gathered}$ | $\begin{gathered} 91 \\ (12.7) \end{gathered}$ | $\begin{gathered} 483 \\ (17.2) \end{gathered}$ | $\begin{gathered} 49 \\ (10.8) \end{gathered}$ | $\begin{array}{r} 1501 \\ (11.5) \end{array}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |  |  |
| Younger half sibling | - | - | - | $\begin{gathered} 301 \\ (47.3) \end{gathered}$ | $\begin{array}{r} \hline 241 \\ (9.8) \\ \hline \end{array}$ | $\begin{gathered} 48 \\ (15.1) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 602 \\ (5.4) \\ \hline \end{array}$ |



Sample: All families. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

This section has shown that natural siblings are by far the most common type of sibling and that over three-quarters (77\%) of seven-year-old children are living with a natural sibling. Over four in ten (44\%) children experienced the arrival of a younger natural brother and sister by age seven. New siblings were more common in families with younger parents, or where the parents were living as a couple, married or cohabiting.

Although overall the arrival of a younger half-sibling was uncommon (5\%), almost half ( $47 \%$ ) of children living with a natural mother and stepfather and one in six (17\%) children living with a main respondent aged under 30 had this experience. This is likely to reflect the higher prevalence of step-parent families among younger mothers.

Children of older respondents, those living with cohabiting natural parents or a lone mother were most likely to have older half-siblings. These older half-siblings are likely to be from a previous relationship of their mother's, though they may also be the child of their natural father from a prior relationship.

Half-siblings were also relatively common for black Caribbean and mixed children, even though few of them lived with a step-parent. In these families, the half-siblings are almost all older than the cohort child and so likely to be from a prior relationship of their natural mother.

## Non-resident fathers

We have seen earlier that over one in four children, at age seven years, was not living with their natural father. For a small minority of these families, the child's natural father may have died but in most families he is likely to be living elsewhere.

This section provides evidence on frequency of contact with, and the regularity of maintenance payments from, the non-resident natural father.

Much of the literature on non-resident fathers' involvement relates contact rates and payment of child support to aspects of children's behaviour. Given the policy interest in child support, it is not surprising that research has focused on this area. A review of evidence from the US has shown that while payment of child support is consistently related to positive child outcomes, frequency of contact alone does not seem to be. Rather it is the nature of contact that is the critical factor in relation to child development and adjustment (Amato and Gilbreth, 1999).

There is a limited body of quantitative evidence in the UK about children's contact with their non-resident fathers and child support. A survey of around 600 nonresident fathers in the UK in 1995-6 found that around 57 per cent reported that they were currently paying child support and 68 per cent reported seeing their child at least once a month, with nearly half seeing them at least one a week (Bradshaw et al., 1999). Work using the 1991 sweep of the National Child Development Study (1958 cohort) reported that seven in ten fathers who did not live with their children had contact with them (Clarke and Burghes, 1997). More recent work using a subsample of families drawn from the Avon Longitudinal Study of Parents and Children (ALSPAC) found that eight in ten children had some contact with their nonresident fathers and among those in contact a third saw their children at least weekly (Dunn, 2003). A school-based survey reported that 43 per cent of non-resident fathers had face-to-face contact at least once a week with their child (Welsh et al., 2004).

The sample used in this section is lone natural-mother families and families with a natural mother and a stepfather. The information on contact and maintenance payments is reported by the natural mother as part of the main interview. Frequent contact was defined as three or more times a week. Less frequent contact was defined as once or twice a week or less often.

Table 3.18 shows the frequency of contact and paying maintenance by non-resident natural fathers by country. Around one in five (19\%) children are in frequent contact with their non-resident natural father, over half are in less frequent contact (52\%) and around three in ten $(29 \%)$ are not in any contact. Over half of non-resident fathers $(52 \%)$ do not make maintenance payments. Four in ten (39\%) non-resident fathers make regular payments and less than one in ten (8\%) makes irregular payments.

A higher proportion of children in Northern Ireland (25\%) and Wales (21\%) have frequent contact with their non-resident natural fathers than in England (18\%) and Scotland (17\%). Interestingly, the association between maintenance payments and country is the inverse of the relationship between contact and country. A lower proportion of non-resident fathers in Northern Ireland (31\%) and Wales (35\%) make regular maintenance payments than in England (40\%) and Scotland (39\%).

| Contact and maintenance payments by non-resident natural father | England | Wales | Scotland | Northern Ireland | UK |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Contact |  |  |  |  |  |
| Frequent (three or more times a week) | $\begin{gathered} 406 \\ (18.4) \end{gathered}$ | $\begin{gathered} 118 \\ (21.0) \end{gathered}$ | $\begin{gathered} 63 \\ (17.0) \end{gathered}$ | $\begin{gathered} 76 \\ (25.2) \end{gathered}$ | $\begin{gathered} 663 \\ (18.7) \end{gathered}$ |
| Less frequent (weekly or less often) | $\begin{gathered} 1126 \\ (52.8) \end{gathered}$ | $\begin{gathered} 261 \\ (46.0) \end{gathered}$ | $\begin{gathered} 188 \\ (51.5) \end{gathered}$ | $\begin{gathered} 128 \\ (41.4) \end{gathered}$ | $\begin{gathered} 1703 \\ (51.9) \end{gathered}$ |
| None | $\begin{gathered} 600 \\ (28.8) \end{gathered}$ | $\begin{gathered} 171 \\ (33.0) \end{gathered}$ | $\begin{gathered} 103 \\ (31.4) \end{gathered}$ | $\begin{gathered} 93 \\ (33.4) \end{gathered}$ | $\begin{gathered} 967 \\ (29.3) \end{gathered}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 2132 \\ & 2326 \end{aligned}$ | $\begin{aligned} & 550 \\ & 569 \end{aligned}$ | $\begin{aligned} & 354 \\ & 413 \end{aligned}$ | $\begin{aligned} & 297 \\ & 322 \end{aligned}$ | $\begin{aligned} & 3333 \\ & 3630 \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.008$ |
| Maintenance payments |  |  |  |  |  |
| Regular | $\begin{gathered} 833 \\ (40.1) \end{gathered}$ | $\begin{gathered} 193 \\ (34.7) \end{gathered}$ | $\begin{gathered} 152 \\ (38.6) \end{gathered}$ | $\begin{gathered} 92 \\ (30.6) \end{gathered}$ | $\begin{gathered} 1270 \\ (39.2) \end{gathered}$ |
| Irregular | $\begin{gathered} 174 \\ (8.5) \end{gathered}$ | $\begin{gathered} 37 \\ (6.5) \end{gathered}$ | $\begin{gathered} 23 \\ (6.0) \end{gathered}$ | $\begin{gathered} 25 \\ (8.1) \end{gathered}$ | $\begin{aligned} & 259 \\ & (8.2) \end{aligned}$ |
| None | $\begin{gathered} 1116 \\ (51.5) \end{gathered}$ | $\begin{gathered} 318 \\ (58.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 180 \\ (55.4) \\ \hline \end{array}$ | $\begin{array}{r} 180 \\ (61.3) \\ \hline \end{array}$ | $\begin{gathered} 1794 \\ (52.6) \end{gathered}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 2123 \\ & 2317 \end{aligned}$ | $\begin{aligned} & 548 \\ & 566 \end{aligned}$ | $\begin{aligned} & 355 \\ & 414 \end{aligned}$ | $\begin{aligned} & 297 \\ & 322 \end{aligned}$ | $\begin{aligned} & 3323 \\ & 3619 \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.035$ |

Sample: Lone natural mother families and lone natural mother and stepfather families. 143 observations are excluded due to missing data on contact and 153 due to missing data on maintenance. Table displays unweighted observations and weighted percentages (country totals using dovwt1 and UK total using dovwt2). Weighted total observations are in italics.

Table 3.19 (and Figure 3.2) shows the association between maintenance payments and contact. Substantial proportions of non-resident natural fathers who are in contact with their children do not pay any maintenance. Over a third ( $36 \%$ ) of nonresident fathers who are in frequent contact and four in ten (40\%) who are in less frequent contact do not pay maintenance. While the vast majority ( $85 \%$ ) of nonresident parents who are not in contact do not pay maintenance, around one in seven ( $15 \%$ ) of these non-resident fathers support their children financially.

Figure 3.2: Maintenance payments by non-resident natural father by contact at MCS4


| Maintenance payments by non-resident natural father | Frequent (three or more times a week) | Less frequent (weekly or less often) | None | Total |
| :---: | :---: | :---: | :---: | :---: |
| Regular | $\begin{gathered} 334 \\ (51.4) \end{gathered}$ | $\begin{gathered} 834 \\ (50.5) \end{gathered}$ | $\begin{gathered} 100 \\ (11.3) \end{gathered}$ | $\begin{gathered} 1268 \\ (39.2) \end{gathered}$ |
| Irregular | $\begin{gathered} 77 \\ (12.4) \end{gathered}$ | $\begin{aligned} & 148 \\ & (9.1) \end{aligned}$ | $\begin{gathered} 34 \\ (3.7) \end{gathered}$ | $\begin{aligned} & 259 \\ & (8.2) \end{aligned}$ |
| None | $\begin{array}{r} 251 \\ (36.2) \\ \hline \end{array}$ | $\begin{gathered} 714 \\ (40.3) \\ \hline \end{gathered}$ | $\begin{gathered} 829 \\ (85.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 1794 \\ (52.7) \\ \hline \end{array}$ |
| Total percentage | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 662 \\ & 679 \end{aligned}$ | $\begin{aligned} & 1696 \\ & 1877 \end{aligned}$ | $\begin{aligned} & 963 \\ & 1060 \end{aligned}$ | $\begin{aligned} & 3321 \\ & 3616 \end{aligned}$ |
| Sign. |  |  |  | $\mathrm{P}=0.000$ |

Sample: Lone natural mother families and lone natural mother and stepfather families. 155 observations are excluded due to missing data on contact and maintenance. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics.

Table 3.20 tabulates contact and maintenance payments by non-resident natural fathers by natural mother's age. ${ }^{7}$ Overall, children of younger mothers were less likely to be in contact with their non-resident natural fathers than children of older mothers. The relationship between mother's age and maintenance payments was similar.

Table 3.20: Contact and maintenance payments by non-resident natural father by natural mother's age at MCS4

[^6]| Contact and maintenance payments by non-resident natural father | Under 30 | 30-34 | 35-39 | 40 plus | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Contact |  |  |  |  |  |
| Frequent (three or more times a week) | $\begin{gathered} 188 \\ (16.4) \end{gathered}$ | $\begin{gathered} 159 \\ (17.4) \end{gathered}$ | $\begin{gathered} 167 \\ (20.3) \end{gathered}$ | $\begin{gathered} 149 \\ (23.6) \end{gathered}$ | $\begin{gathered} 663 \\ (18.7) \end{gathered}$ |
| Less frequent (weekly or less often) | $\begin{gathered} 484 \\ (44.5) \end{gathered}$ | $\begin{gathered} 422 \\ (52.9) \end{gathered}$ | $\begin{gathered} 451 \\ (58.8) \end{gathered}$ | $\begin{gathered} 346 \\ (57.3) \end{gathered}$ | $\begin{gathered} 1703 \\ (51.9) \end{gathered}$ |
| None | $\begin{gathered} 443 \\ (39.1) \end{gathered}$ | $\begin{gathered} 233 \\ (29.7) \\ \hline \end{gathered}$ | $\begin{gathered} 162 \\ (20.9) \end{gathered}$ | $\begin{gathered} 129 \\ (19.1) \end{gathered}$ | $\begin{gathered} 967 \\ (29.3) \\ \hline \end{gathered}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 1115 \\ & 1315 \end{aligned}$ | $\begin{aligned} & 814 \\ & 885 \end{aligned}$ | $\begin{array}{r} 780 \\ 816 \end{array}$ | $\begin{aligned} & 624 \\ & 615 \end{aligned}$ | $\begin{aligned} & 3333 \\ & 3630 \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |
| Maintenance payments |  |  |  |  |  |
| Regular | $\begin{gathered} 311 \\ (27.9) \end{gathered}$ | $\begin{gathered} 329 \\ (43.1) \\ \hline \end{gathered}$ | $\begin{gathered} 368 \\ (49.6) \end{gathered}$ | $\begin{gathered} 262 \\ (44.0) \end{gathered}$ | $\begin{gathered} 1270 \\ (39.2) \\ \hline \end{gathered}$ |
| Irregular | $\begin{gathered} 74 \\ (7.7) \end{gathered}$ | $\begin{gathered} 63 \\ (7.6) \end{gathered}$ | $\begin{gathered} 70 \\ (8.9) \end{gathered}$ | $\begin{gathered} 52 \\ (8.9) \end{gathered}$ | $\begin{aligned} & 259 \\ & (8.2) \end{aligned}$ |
| None | $\begin{gathered} 726 \\ (64.4) \\ \hline \end{gathered}$ | $\begin{gathered} 420 \\ (49.2) \\ \hline \end{gathered}$ | $\begin{gathered} 340 \\ (41.5) \\ \hline \end{gathered}$ | $\begin{gathered} 308 \\ (47.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 1794 \\ (52.6) \\ \hline \end{array}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 1111 \\ & 1306 \end{aligned}$ | $\begin{aligned} & 812 \\ & 884 \end{aligned}$ | $\begin{aligned} & 778 \\ & 815 \end{aligned}$ | $\begin{aligned} & 622 \\ & 614 \end{aligned}$ | $\begin{aligned} & 3323 \\ & 3619 \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |

Sample: Lone natural mother families and lone natural mother and stepfather families. 143 observations are excluded due to missing data on contact and 153 due to missing data on maintenance. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics.

There is evidence in the literature that the current partnership status of the natural mother and the non-resident natural father can have a big impact on frequency of contact between the non-resident parent and the child (Cooksey and Craig, 1998). For this reason, the MCS questionnaire includes questions in the self-completion section of the interview designed to collect more detailed information about the relationship statuses of lone mothers and of non-resident fathers. Lone mothers were asked whether they were in a relationship with someone who did not live in the household and, if they were, whether this person was the natural father of the cohort child. The question about whether the non-cohabiting partner was the child's father was only asked if the lone mother had said earlier in the interview that she was on friendly terms with the non-resident natural father. If the lone mother was in contact with the non-resident natural father, and if she had not already said that she was in a relationship with him, there was a question about whether or not the non-resident natural father had a partner. The answers to these questions were used to classify the relationship status of the natural mother and the natural father.

Table 3.21 tabulates contact and maintenance payments by non-resident natural fathers against natural mother's relationship status. Unsurprisingly, if the child's natural mother was in a relationship with the non-resident natural father, there was a high likelihood of frequent contact ( $83 \%$ ). Conversely, if the natural mother was in a relationship with someone other than the non-resident natural father, frequent contact was much less likely especially if the mother was living with this new partner. Around one in twenty (6\%) non-resident fathers saw their child frequently if the mother and
child were living with a stepfather and around one in seven (15\%) saw their child frequently if the mother was in a non-cohabiting relationship with someone else.

The link between maintenance payments and natural mother's relationship status was less strong. The main difference between the groups was that non-resident natural fathers who were in a (non co-resident) relationship with natural mothers were the most likely to be paying maintenance (68\% compared with around 47-49\% in other major groups).

| Contact and maintenance payments by non-resident natural father | $\begin{aligned} & \text { Living } \\ & \text { with step- } \\ & \text { father } \end{aligned}$ | Lone mother, in a relationship with nonresident natural father | Lone mother, in a relationship | Lone mother, not in a relationship | Lone mother, relationship status not known | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Contact |  |  |  |  |  |  |
| Frequent (three or more times a week) | $\begin{gathered} \hline 49 \\ (6.0) \end{gathered}$ | $\begin{gathered} 76 \\ (83.3) \end{gathered}$ | $\begin{gathered} 127 \\ (15.0) \end{gathered}$ | $\begin{gathered} 357 \\ (21.8) \end{gathered}$ | $\begin{gathered} 54 \\ (23.5) \end{gathered}$ | $\begin{gathered} 663 \\ (18.7) \end{gathered}$ |
| Less frequent (weekly or less often) | $\begin{gathered} 336 \\ (53.9) \end{gathered}$ | - | $\begin{gathered} \hline 454 \\ (56.0) \end{gathered}$ | $\begin{gathered} 781 \\ (52.0) \end{gathered}$ | $\begin{gathered} 113 \\ (45.6) \end{gathered}$ | $\begin{aligned} & \hline 1703 \\ & (51.9) \end{aligned}$ |
| None | $\begin{gathered} 259 \\ (40.1) \\ \hline \end{gathered}$ | - | $\begin{gathered} 224 \\ (29.0) \\ \hline \end{gathered}$ | $\begin{gathered} 416 \\ (26.3) \\ \hline \end{gathered}$ | $\begin{gathered} 68 \\ (30.9) \\ \hline \end{gathered}$ | $\begin{gathered} 967 \\ (29.3) \\ \hline \end{gathered}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 644 \\ & 751 \end{aligned}$ | $\begin{aligned} & 95 \\ & 106 \end{aligned}$ | $\begin{aligned} & 805 \\ & 903 \end{aligned}$ | $\begin{aligned} & 1554 \\ & 1640 \end{aligned}$ | $\begin{aligned} & 235 \\ & 230 \end{aligned}$ | $\begin{aligned} & 3333 \\ & 3630 \end{aligned}$ |
| Sign. |  |  |  |  |  | $\mathrm{P}=0.000$ |
| Maintenance payments |  |  |  |  |  |  |
| Regular | $\begin{gathered} 261 \\ (42.0) \end{gathered}$ | $\begin{gathered} 49 \\ (56.1) \end{gathered}$ | $\begin{gathered} 329 \\ (40.9) \end{gathered}$ | $\begin{gathered} 575 \\ (37.8) \end{gathered}$ | $\begin{gathered} 56 \\ (26.3) \end{gathered}$ | $\begin{array}{r} 1270 \\ (39.2) \end{array}$ |
| Irregular | $\begin{gathered} 50 \\ (7.5) \\ \hline \end{gathered}$ | - | $\begin{gathered} 49 \\ (6.6) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (8.8) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (10.3) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 259 \\ & (8.2) \\ & \hline \end{aligned}$ |
| None | $\begin{gathered} 331 \\ (50.6) \end{gathered}$ | $\begin{gathered} 36 \\ (32.2) \end{gathered}$ | $\begin{gathered} 425 \\ (52.6) \\ \hline \end{gathered}$ | $\begin{gathered} 848 \\ (53.4) \end{gathered}$ | $\begin{gathered} 154 \\ (63.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 1794 \\ (52.6) \\ \hline \end{array}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 642 \\ & 748 \end{aligned}$ | $\begin{aligned} & 95 \\ & 106 \end{aligned}$ | $\begin{aligned} & 803 \\ & 900 \end{aligned}$ | $\begin{aligned} & 1550 \\ & 1639 \end{aligned}$ | $\begin{aligned} & 233 \\ & 226 \end{aligned}$ | $\begin{aligned} & 3323 \\ & 3619 \end{aligned}$ |
| Sign. |  |  |  |  |  | $\mathrm{P}=0.005$ |

Sample: Lone natural mother families and lone natural mother and stepfather families. 143 observations are excluded due to missing data on contact and 153 due to missing data on maintenance. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with '-'.

Table 3.22 tabulated contact and maintenance payments by non-resident natural fathers against the father's relationship status. Non-resident fathers who are in a relationship with the lone natural mother, also shown in Table 3.21, are those with most frequent contact and maintenance. Non-resident natural fathers who are in a relationship with someone else are less likely to be in frequent contact than those who are not in a relationship ( $16 \%$ compared with $36 \%$ ).

As with natural mother's relationship, non-resident natural father's relationship is less strongly related to maintenance payments than contact. There is very little difference in the proportion paying maintenance between non-resident natural fathers who are in a relationship with someone other than the natural mother and non-resident natural fathers who are not in a relationship ( $63 \%$ compared with 61\%).

| Contact and maintenance payments by nonresident natural father | In a relationship with lone natural mother | In a relationship | Not in a relationship | Relationship status not known | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Contact |  |  |  |  |  |
| Frequent (three or more times a week) | $\begin{gathered} 76 \\ (83.3) \end{gathered}$ | $\begin{gathered} \hline 183 \\ (15.7) \end{gathered}$ | $\begin{gathered} \hline 303 \\ (36.0) \end{gathered}$ | $\begin{aligned} & \hline 101 \\ & (7.5) \end{aligned}$ | $\begin{gathered} 663 \\ (18.7) \end{gathered}$ |
| Less frequent (weekly or less often) | - | $\begin{gathered} 890 \\ (84.3) \end{gathered}$ | $\begin{gathered} 470 \\ (64.0) \end{gathered}$ | $\begin{gathered} 324 \\ (22.8) \end{gathered}$ | $\begin{gathered} 1703 \\ (51.9) \end{gathered}$ |
| None | - | - | - | $\begin{gathered} 967 \\ (69.7) \end{gathered}$ | $\begin{gathered} 967 \\ (29.3) \end{gathered}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{gathered} 95 \\ 106 \end{gathered}$ | $\begin{aligned} & 1073 \\ & 1193 \end{aligned}$ | $\begin{aligned} & \hline 773 \\ & 803 \end{aligned}$ | $\begin{aligned} & 1392 \\ & 1529 \end{aligned}$ | $\begin{aligned} & 3333 \\ & 3630 \end{aligned}$ |
| Sign. | $\mathrm{P}=0.000$ |  |  |  |  |
| Maintenance payments |  |  |  |  |  |
| Regular | $\begin{gathered} 49 \\ (56.1) \end{gathered}$ | $\begin{gathered} \hline 603 \\ (56.2) \end{gathered}$ | $\begin{gathered} \hline 362 \\ (49.0) \end{gathered}$ | $\begin{gathered} 256 \\ (19.6) \end{gathered}$ | $\begin{array}{r} 1270 \\ (39.2) \\ \hline \end{array}$ |
| Irregular | - | $\begin{gathered} 82 \\ (7.3) \\ \hline \end{gathered}$ | $\begin{gathered} 82 \\ (11.6) \\ \hline \end{gathered}$ | $\begin{gathered} 85 \\ (6.7) \end{gathered}$ | $\begin{array}{r} 259 \\ (8.2) \\ \hline \end{array}$ |
| None | $\begin{gathered} 36 \\ (32.2) \end{gathered}$ | $\begin{gathered} 385 \\ (36.5) \\ \hline \end{gathered}$ | $\begin{gathered} 328 \\ (39.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 1045 \\ (73.7) \\ \hline \end{array}$ | $\begin{array}{r} 1794 \\ (52.6) \\ \hline \end{array}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 |
| Total observations | $\begin{aligned} & 95 \\ & 106 \end{aligned}$ | $\begin{aligned} & 1070 \\ & 1192 \end{aligned}$ | $\begin{aligned} & 772 \\ & 803 \end{aligned}$ | $\begin{aligned} & 1386 \\ & 1519 \end{aligned}$ | $\begin{aligned} & 3323 \\ & 3619 \end{aligned}$ |
| Sign. |  |  |  |  | $\mathrm{P}=0.000$ |

Sample: Lone natural mother families and lone natural mother and stepfather families. 143 observations are excluded due to missing data on contact and 153 due to missing data on maintenance. Table displays unweighted observations and weighted percentages (using dovwt2). Weighted total observations are in italics. Statistics for cells with fewer than 20 observations have been replaced with ' - '.

This section has shown that overall seven in ten (71\%) non-resident fathers were in contact with their child with a significant minority (19\%) in contact three or more times a week. Overall, just less than half ( $47 \%$ ) of non-resident fathers paid child maintenance. Significant proportions of non-resident fathers who were in contact with their child did not pay maintenance. Overall, there is clear evidence of continuing relationships between non-resident fathers and their seven-year-old children and some evidence of continuing relationships between lone natural mothers and nonresident natural fathers.

This chapter has shown that a significant minority of seven-year-old children are living apart from their natural father. Although the majority of children were still living with both of their natural parents (69\%), over one in five children was now living with a lone natural mother ( $22 \%$ ) and over one in twenty with a stepfather (7\%). In addition, the proportion of children living with married natural parents had fallen to just over half (55\%).

Longitudinal analysis of family change between MCS1 and MCS4 also showed a significant minority of children (21\%) had either gained or lost a parent in their household over the first seven years of life. The parents that children have lost since their first year are primarily their natural fathers. Children were more likely to have lost their natural father from their home if, at the nine month survey, their parents were cohabiting rather than being married.

Lone mothers at MCS1 were more likely to have subsequently formed a new livingtogether partnership with the child's natural father than with a stepfather. Including also those families starting out with both natural parents at MCS1, most of the parents arriving in the children's homes since nine months were stepfathers. It remains relatively uncommon for seven-year-olds to be living with a stepfather, with just over one in twenty (6\%) in this family situation. Interestingly, almost half of all seven-year-olds living with a stepfather had a younger half-sibling as a result their mother's relationship with their stepfather.

Children whose mothers were under 30 at MCS4 were almost twice as likely than average to have experienced family change and this was particularly likely to have involved the acquisition of a stepfather.

The experience of family change or living apart from natural fathers can be associated with poverty and other negative outcomes for children. As these experiences are particularly concentrated among children of young mothers, these findings imply support for policies aimed at reducing teenage pregnancy in the UK. They also imply that families with young parents may benefit from further additional targeted support from government policy.

This chapter also provided evidence of the continuing relationships between seven-year-old children and their non-resident natural fathers. In the context of policy towards non-resident fathers, these results show that in the majority of families contact is taking place, often very frequently, but that far fewer non-resident fathers pay child maintenance. However, this finding should be interpreted with caution as there is no evidence here about the reasons for non-payment of maintenance or the ability of non-resident fathers to do so. In addition, it should be noted that the evidence presented here is the mother's report of receiving child maintenance which may be different from the father's report about making payments.

Finally, it should be noted that the associations described in this chapter are all bivariate and as such should be interpreted with caution. This evidence does not take account of the causal pathways between the different factors considered in this
chapter nor does it consider the influence of other variables, collected in other parts and waves of the survey.

## References

Amato, P. R. and Gilbreth, J. G. (1999) Non-resident Fathers and Children's WellBeing: a Meta-Analysis. Journal of Marriage and the Family, 61(3): 557-573.

Bradshaw, J., Skinner, C., Stimson, C. and Williams, J. (1999) Absent Fathers? London: Routledge.

Calderwood, L. (2008) Family Demographics. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Third Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, University of London.

Clarke, L. and Burghes, L. (1997) Fathers and Fatherhood Today. London: Family Policy Studies Centre.

Cooksey, E. C. and Craig, P.H. (1998) Parenting from a Distance: The Effects of Paternal Characteristics on Contact between Non-residential Fathers and Their Children. Demography, 35(2, Men in Families): 187-200.

Dunn, J. (2003) Contact and Children's perspectives on Parental Relationships. In A. Bainham, B. Lindley, M. Richards and L. Trinder (eds) Children and their families: Contact, rights and welfare.Oxford: Hart.

DWP (2010) Households below average income: 1994/5-2008/9. London: Department for Work and Pensions.

Kiernan, K. (2004) Unmarried Cohabitation in Britain and Europe. Journal of Law and Policy, 26(1): 33-55.

ONS (2007) Social Trends, No.37. Office for National Statistics/Palgrave Macmillan.
ONS (2009) ‘Social Trends, No.40. Office for National Statistics/Palgrave Macmillan.
Welsh, E., Buchanan, A., Flouri, E. and Lewis, J. (2004) 'Involved' fathering and child well-being: Fathers' involvement with secondary school age children. National Children's Bureau/The Joseph Rowntree Foundation.

## Chapter 4

## PARENTING

## Kate Smith

## Chapter overview

This chapter looks at various aspects of parenting such as:

- Time spent with child
- Family activities
- Discipline
- Parenting competence
- Bedtime regularity
- Child's involvement with household chores


## Introduction

The Millennium Cohort Study includes data on various aspects of parenting such as discipline, practices and activities. Parenting is of great interest to those in research and policy because of its potential to have strong and lasting effects and because it mediates or moderates external influences on children.

Many aspects of parenting are known to be related to child outcomes, both during childhood and later in life. Parenting and disciplinary style have been found to be associated with child and adolescent behaviour (Amato and Fowler, 2002; Sandstrom, 2007; Simons and Conger, 2007) and school grades (Amato and Fowler, 2002; Dornbusch et al., 1987).

Parental literacy-related beliefs and activities (such as shared book reading) have been related to children's early literacy development (Bennett et al., 2002; Bingham, 2007; Richman and Colombo, 2007). Bingham (2007) showed that mothers' education and beliefs about literacy development were related to the emotional and instructional quality of their book-reading interactions with their children.

Though research has found associations between parenting behaviours and values and child outcomes, it is important to note that the causality of these relationships is not clear and that it is very difficult to untangle the effects of a given parental variable from the effects of other, co-related parental and family variables.

This chapter describes the parenting items in MCS4 and presents the responses to the questions. Main respondents were asked about their discipline approaches, activities with the cohort child, feelings about time spent with the child, and parenting attitudes. Partner respondents were asked a subset of these questions. Answers are reported separately for main and partner respondents. Responses to questions are
shown for main respondents who are natural, adoptive, foster, or stepmothers of the cohort children, including families where no one responded to the partner interview. Responses to questions directed at the partner respondents are reported for those who are resident natural, adoptive, foster, or stepfathers of the cohort children. Hence, there are more responses from mothers than fathers in these tables.

## Time spent with child

Both main and partner respondents were asked, in the self-completion section of the interview, to report how they felt about the amount of time they were able to spend with their children at age 7 . Overall, mothers were more likely to be happy with the time available (43\%) or to feel they spent more than enough or too much time with their children ( $26 \%$ ) than fathers ( $35 \%$ and $9 \%$ ). Conversely, over half of fathers ( $56 \%$ ) did not feel they had quite enough or anywhere near enough time to spend with their children compared with 30 per cent of the mothers.

Mothers' and fathers' responses to this question are shown in Table 4.1 and 4.2 respectively, by a selection of key characteristics. Mothers in Northern Ireland were slightly more likely to feel they spend more than enough time with their children than mothers in other UK countries.

Table 4.1: How do you feel about the amount of time you have available to spend with your child? Mothers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Too Much | More than Enough | Just Enough | Not Quite Enough | Nowhere Near Enough |  |
| All Responding Mothers at MCS4 | $\begin{aligned} & 288 \\ & (2.1) \\ & \hline \end{aligned}$ | $\begin{array}{r} 3280 \\ (24.3) \\ \hline \end{array}$ | $\begin{gathered} 5707 \\ (43.1) \end{gathered}$ | $\begin{array}{r} 3169 \\ (23.8) \\ \hline \end{array}$ | $\begin{aligned} & 858 \\ & (6.6) \\ & \hline \end{aligned}$ | $\begin{array}{r} 13302 \\ (100.0) \\ \hline \end{array}$ |
| Country at MCS4 |  |  |  |  |  |  |
| England | $\begin{aligned} & \hline 205 \\ & (2.2) \\ & \hline \end{aligned}$ | $\begin{gathered} 2064 \\ (23.4) \end{gathered}$ | $\begin{gathered} 3679 \\ (43.5) \\ \hline \end{gathered}$ | $\begin{gathered} 1966 \\ (23.8) \end{gathered}$ | $\begin{gathered} \hline 560 \\ (7.0) \\ \hline \end{gathered}$ | $\begin{gathered} 8474 \\ (100.0) \\ \hline \end{gathered}$ |
| Wales | $\begin{gathered} 31 \\ (1.8) \end{gathered}$ | $\begin{array}{r} 486 \\ (25.5) \\ \hline \end{array}$ | $\begin{array}{r} 791 \\ (41.1) \\ \hline \end{array}$ | $\begin{gathered} 481 \\ (24.7) \\ \hline \end{gathered}$ | $\begin{gathered} 133 \\ (6.7) \end{gathered}$ | $\begin{gathered} 1922 \\ (100.0) \\ \hline \end{gathered}$ |
| Scotland | $\begin{gathered} 30 \\ (2.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 356 \\ (23.9) \\ \hline \end{array}$ | $\begin{gathered} 664 \\ (42.2) \\ \hline \end{gathered}$ | $\begin{gathered} 428 \\ (26.1) \\ \hline \end{gathered}$ | $\begin{gathered} 93 \\ (5.6) \end{gathered}$ | $\begin{gathered} 1571 \\ (100.0) \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 22 \\ (1.8) \\ \hline \end{gathered}$ | $\begin{gathered} 374 \\ (28.3) \\ \hline \end{gathered}$ | $\begin{gathered} 573 \\ (44.6) \\ \hline \end{gathered}$ | $\begin{gathered} 294 \\ (20.5) \\ \hline \end{gathered}$ | $\begin{gathered} 72 \\ (4.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 1335 \\ (100.0) \\ \hline \end{array}$ |
| Unweighted sample size Weighted observations | $\begin{array}{r} 288 \\ 279 \\ \hline \end{array}$ | $\begin{aligned} & 3280 \\ & 3236 \\ & \hline \end{aligned}$ | $\begin{aligned} & 5707 \\ & 5750 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3169 \\ & 3181 \\ & \hline \end{aligned}$ | $\begin{aligned} & 858 \\ & 876 \\ & \hline \end{aligned}$ | $\begin{aligned} & 13302 \\ & 13321 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Mother's Age at MCS4 |  |  |  |  |  |  |
| 20 to 29 | $\begin{gathered} 74 \\ (3.3) \\ \hline \end{gathered}$ | $\begin{gathered} 694 \\ (30.8) \\ \hline \end{gathered}$ | $\begin{gathered} 882 \\ (39.0) \\ \hline \end{gathered}$ | $\begin{gathered} 446 \\ (20.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 135 \\ (6.4) \\ \hline \end{array}$ | $\begin{gathered} \hline 2231 \\ (100.0) \\ \hline \end{gathered}$ |
| 30 to 39 | $\begin{array}{r} 143 \\ (1.9) \\ \hline \end{array}$ | $\begin{array}{r} 1757 \\ (23.8) \\ \hline \end{array}$ | $\begin{array}{r} 3099 \\ (43.4) \\ \hline \end{array}$ | $\begin{array}{r} 1726 \\ (24.2) \\ \hline \end{array}$ | $\begin{array}{r} 455 \\ (6.5) \\ \hline \end{array}$ | $\begin{array}{r} 7200 \\ (100.0) \\ \hline \end{array}$ |
| 40 and above | $\begin{gathered} 71 \\ (1.6) \\ \hline \end{gathered}$ | $\begin{gathered} 829 \\ (20.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1726 \\ (45.4) \\ \hline \end{array}$ | $\begin{gathered} 977 \\ (25.6) \\ \hline \end{gathered}$ | $\begin{aligned} & 268 \\ & (6.8) \end{aligned}$ | $\begin{gathered} 3871 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 288 \\ & 279 \end{aligned}$ | $\begin{aligned} & 3280 \\ & 3236 \end{aligned}$ | $\begin{aligned} & 5707 \\ & 5750 \end{aligned}$ | $\begin{aligned} & 3169 \\ & 3181 \end{aligned}$ | $\begin{aligned} & 858 \\ & 876 \end{aligned}$ | $\begin{aligned} & 13302 \\ & 13321 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |

Table 4.1: How do you feel about the amount of time you have available to spend with your child? Mothers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Too Much | More than Enough | Just Enough | Not Quite Enough | Nowhere Near Enough | Total Obs |
| Continued |  |  |  |  |  |  |
| Mother's Ethnicity () |  |  |  |  |  |  |
| White | $\begin{gathered} \hline 185 \\ (1.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 2649 \\ (23.6) \\ \hline \end{array}$ | $\begin{gathered} 4941 \\ (43.0) \\ \hline \end{gathered}$ | $\begin{gathered} 2872 \\ (24.6) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 797 \\ (6.9) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 11444 \\ (100.0) \\ \hline \end{gathered}$ |
| Mixed | $\begin{gathered} 5 \\ (4.3) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (35.1) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (32.7) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (20.4) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (7.5) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (100.0) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 11 \\ (2.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 105 \\ (27.0) \\ \hline \end{array}$ | $\begin{array}{r} 139 \\ (46.6) \\ \hline \end{array}$ | $\begin{gathered} 64 \\ (19.3) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (4.5) \end{gathered}$ | $\begin{gathered} 331 \\ (100.0) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} \hline 42 \\ (5.3) \end{gathered}$ | $\begin{gathered} 311 \\ (37.6) \\ \hline \end{gathered}$ | $\begin{gathered} 328 \\ (46.2) \\ \hline \end{gathered}$ | $\begin{gathered} 64 \\ (8.9) \end{gathered}$ | $\begin{gathered} 13 \\ (1.9) \end{gathered}$ | $\begin{gathered} 758 \\ (100.0) \end{gathered}$ |
| Black | $\begin{gathered} 26 \\ (5.8) \\ \hline \end{gathered}$ | $\begin{gathered} 118 \\ (24.0) \\ \hline \end{gathered}$ | $\begin{gathered} 179 \\ (42.7) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (23.4) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (3.8) \end{gathered}$ | $\begin{gathered} 450 \\ (100.0) \\ \hline \end{gathered}$ |
| Other | $\begin{gathered} 19 \\ (7.3) \end{gathered}$ | $\begin{gathered} 57 \\ (24.0) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (44.6) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (18.2) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (5.0) \end{gathered}$ | $\begin{gathered} 200 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 288 \\ & 279 \end{aligned}$ | $\begin{aligned} & 3280 \\ & 3236 \end{aligned}$ | $\begin{aligned} & 5706 \\ & 5749 \end{aligned}$ | $\begin{aligned} & 3168 \\ & 3180 \end{aligned}$ | $\begin{aligned} & 858 \\ & 876 \end{aligned}$ | $\begin{aligned} & 13300 \\ & 13319 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Mother's Employment Status at MCS4 |  |  |  |  |  |  |
| Not employed | $\begin{aligned} & 233 \\ & (4.5) \end{aligned}$ | $\begin{array}{r} 1879 \\ (35.9) \\ \hline \end{array}$ | $\begin{gathered} 2100 \\ (42.0) \\ \hline \end{gathered}$ | $\begin{gathered} 650 \\ (13.7) \end{gathered}$ | $\begin{aligned} & \hline 159 \\ & (3.6) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 5021 \\ (100.0) \\ \hline \end{gathered}$ |
| Employed | $\begin{gathered} 55 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1401 \\ (17.2) \\ \hline \end{array}$ | $\begin{array}{r} 3607 \\ (43.8) \\ \hline \end{array}$ | $\begin{array}{r} 2519 \\ (30.0) \\ \hline \end{array}$ | $\begin{array}{r} 699 \\ (8.4) \\ \hline \end{array}$ | $\begin{gathered} 8281 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{array}{r} 288 \\ 279 \\ \hline \end{array}$ | $\begin{aligned} & 3280 \\ & 3236 \\ & \hline \end{aligned}$ | $\begin{aligned} & 5707 \\ & 5750 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3169 \\ & 3181 \\ & \hline \end{aligned}$ | $\begin{array}{r} 858 \\ 876 \\ \hline \end{array}$ | $\begin{aligned} & 13302 \\ & 13321 \\ & \hline \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Mother's Highest Qualification at MCS4 |  |  |  |  |  |  |
| No qualifications | $\begin{gathered} 91 \\ (6.5) \\ \hline \end{gathered}$ | $\begin{gathered} 587 \\ (37.6) \\ \hline \end{gathered}$ | $\begin{gathered} 561 \\ (39.4) \\ \hline \end{gathered}$ | $\begin{gathered} 169 \\ (12.5) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (3.8) \\ \hline \end{gathered}$ | $\begin{gathered} 1455 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ1 | $\begin{gathered} 34 \\ (4.1) \end{gathered}$ | $\begin{gathered} 266 \\ (28.8) \\ \hline \end{gathered}$ | $\begin{gathered} 405 \\ (44.0) \\ \hline \end{gathered}$ | $\begin{gathered} 155 \\ (16.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 57 \\ (6.2) \\ \hline \end{array}$ | $\begin{gathered} 917 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ2 | $\begin{gathered} 58 \\ (1.5) \end{gathered}$ | $\begin{gathered} 910 \\ (25.4) \\ \hline \end{gathered}$ | $\begin{gathered} 1537 \\ (43.6) \\ \hline \end{gathered}$ | $\begin{gathered} 782 \\ (22.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 239 \\ (6.7) \\ \hline \end{array}$ | $\begin{gathered} 3526 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ3 | $\begin{gathered} 34 \\ (1.5) \end{gathered}$ | $\begin{gathered} 489 \\ (23.9) \end{gathered}$ | $\begin{gathered} 854 \\ (41.7) \end{gathered}$ | $\begin{gathered} 518 \\ (25.6) \end{gathered}$ | $\begin{array}{r} 145 \\ (7.2) \end{array}$ | $\begin{gathered} 2040 \\ (100.0) \end{gathered}$ |
| NVQ4 | $\begin{gathered} 44 \\ (0.9) \end{gathered}$ | $\begin{gathered} 775 \\ (18.9) \end{gathered}$ | $\begin{gathered} 1804 \\ (44.3) \end{gathered}$ | $\begin{gathered} 1189 \\ (28.8) \end{gathered}$ | $\begin{array}{r} 283 \\ (7.0) \end{array}$ | $\begin{gathered} 4095 \\ (100.0) \end{gathered}$ |
| NVQ5 | $\begin{gathered} 5 \\ (0.4) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (12.8) \\ \hline \end{gathered}$ | $\begin{gathered} 390 \\ (43.6) \\ \hline \end{gathered}$ | $\begin{gathered} 314 \\ (34.8) \\ \hline \end{gathered}$ | $\begin{gathered} 73 \\ (8.4) \\ \hline \end{gathered}$ | $\begin{gathered} 902 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{array}{r} 266 \\ 260 \\ \hline \end{array}$ | $\begin{aligned} & 3147 \\ & 3123 \\ & \hline \end{aligned}$ | $\begin{aligned} & 5551 \\ & 5596 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3127 \\ & 3139 \\ & \hline \end{aligned}$ | $\begin{array}{r} 844 \\ 858 \\ \hline \end{array}$ | $\begin{aligned} & 12935 \\ & 12977 \\ & \hline \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Family Type at MCS4 |  |  |  |  |  |  |
| Two-parent | $\begin{gathered} \hline 186 \\ (1.5) \\ \hline \end{gathered}$ | $\begin{aligned} & 2526 \\ & (23.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 4636 \\ & (44.4) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2536 \\ & (24.0) \end{aligned}$ | $\begin{aligned} & \hline 643 \\ & (6.2) \\ & \hline \end{aligned}$ | $\begin{gathered} 10527 \\ (100.0) \end{gathered}$ |
| Lone parent | $\begin{array}{r} 102 \\ (4.1) \\ \hline \end{array}$ | $\begin{array}{r} 754 \\ (26.1) \\ \hline \end{array}$ | $\begin{array}{r} 1071 \\ (38.5) \\ \hline \end{array}$ | $\begin{gathered} 633 \\ (23.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 215 \\ (7.9) \\ \hline \end{array}$ | $\begin{gathered} 2775 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{array}{r} 288 \\ 279 \\ \hline \end{array}$ | $\begin{aligned} & 3280 \\ & 3236 \\ & \hline \end{aligned}$ | $\begin{aligned} & 5707 \\ & 5750 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3169 \\ & 3181 \\ & \hline \end{aligned}$ | $\begin{array}{r} 858 \\ 876 \\ \hline \end{array}$ | $\begin{aligned} & 13302 \\ & 13321 \\ & \hline \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |

Sample includes all mothers responding to question. Sixteen responses of 'not sure' have been excluded. Table
displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.2: How do you feel about the amount of time you have available to spend with your child? Fathers at MCS4


Table 4.2: How do you feel about the amount of time you have available to spend with your child? Fathers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Too Much | More than Enough | Just Enough | Not Quite Enough | Nowhere Near Enough |  |
| Continued |  |  |  |  |  |  |
| NVQ1 | $\begin{gathered} 6 \\ (1.3) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (12.3) \\ \hline \end{gathered}$ | $\begin{gathered} 143 \\ (33.0) \\ \hline \end{gathered}$ | $\begin{gathered} 162 \\ (36.1) \\ \hline \end{gathered}$ | $\begin{gathered} 77 \\ (17.3) \\ \hline \end{gathered}$ | $\begin{gathered} 764 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ2 | $\begin{gathered} 10 \\ (0.5) \end{gathered}$ | $\begin{gathered} 193 \\ (8.7) \end{gathered}$ | $\begin{gathered} 704 \\ (34.6) \end{gathered}$ | $\begin{gathered} 772 \\ (39.2) \end{gathered}$ | $\begin{gathered} 337 \\ (16.8) \end{gathered}$ | $\begin{gathered} 764 \\ (100.0) \end{gathered}$ |
| NVQ3 | $\begin{gathered} 4 \\ (0.3) \end{gathered}$ | $\begin{array}{r} 103 \\ (7.7) \end{array}$ | $\begin{gathered} 446 \\ (35.1) \end{gathered}$ | $\begin{gathered} 488 \\ (39.4) \end{gathered}$ | $\begin{gathered} 215 \\ (17.5) \end{gathered}$ | $\begin{gathered} 764 \\ (100.0) \end{gathered}$ |
| NVQ4 | $\begin{gathered} 8 \\ (0.3) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 151 \\ & (5.6) \end{aligned}$ | $\begin{gathered} 890 \\ (34.4) \end{gathered}$ | $\begin{gathered} 1103 \\ (43.7) \end{gathered}$ | $\begin{gathered} 395 \\ (15.9) \\ \hline \end{gathered}$ | $\begin{gathered} 764 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ5 | $\begin{gathered} 3 \\ (0.2) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (4.9) \end{gathered}$ | $\begin{gathered} 311 \\ (34.1) \\ \hline \end{gathered}$ | $\begin{gathered} 433 \\ (47.1) \\ \hline \end{gathered}$ | $\begin{gathered} 131 \\ (13.7) \end{gathered}$ | $\begin{gathered} 764 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 47 \\ & 47 \\ & \hline \end{aligned}$ | $\begin{array}{r} 728 \\ 652 \\ \hline \end{array}$ | $\begin{array}{r} 2815 \\ 2716 \\ \hline \end{array}$ | $\begin{aligned} & 3144 \\ & 3110 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1226 \\ & 1216 \\ & \hline \end{aligned}$ | $\begin{aligned} & 7960 \\ & 7741 \\ & \hline \end{aligned}$ |
| $\mathrm{p}=0.000$ |  |  |  |  |  |  |

Sample includes all fathers responding to question. Nine responses of 'not sure' have been excluded. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Figure 4.1: How fathers felt about the time available to spend with the cohort child, by country, at MCS4


Younger mothers (those aged 20-29 at the time of the interview) were slightly more likely than those aged 30 or over to report they had enough time with their child. Conversely, as the age of the mother increased, the proportions feeling that they had not quite or nowhere near enough time with their children at age 7 increased slightly too.

Pakistani and Bangladeshi mothers reported the highest levels of satisfaction with the time they had with their children ( $89 \%$ having enough or more than enough time). White mothers felt they had the least time with nearly a third reporting not enough or nowhere near enough.

Employed mothers were much less happy with the amount of time they had than mothers who were not working. Twice as many employed mothers did not feel they had enough time with their children (38\%) compared with those who were not in work at the time of the interview (17\%), showing that even as the cohort children are getting older, the issue of work-life balance is still very pertinent to mothers. There was also a tendency for mothers with higher qualifications to be less satisfied with the amount of time they had with their children; this could partly be due to their greater likelihood of being employed outside the home. Over half ( $57 \%$ ) of mothers with postgraduate level qualifications (NVQ5) felt they did not have enough time compared with 16 per cent of those with no qualifications. There was very little variation between mothers in lone or two-parent households.

Fathers' responses to the question of how they felt about the amount of time they were able to spend with their children are shown in Table 4.2. Their responses overall followed a similar pattern to those given by mothers. The vast majority of fathers at MCS4 were in employment and an even greater proportion of these working fathers felt that they did not have enough time with their children ( $60 \%$ ) than did working mothers. It is well documented that UK men work the longest hours in Europe and these answers show that work-life balance is also an issue for the fathers of this cohort of children. While overall there was little variation between fathers in different UK countries, fathers in Northern Ireland were almost half as likely as those in England to say they had nowhere near enough time with their children ( $9 \%$ compared to $17 \%$ ). The proportions of both mothers and fathers feeling they did not have enough time with the child were similar though slightly lower than those reported when the child was aged 5 . However, when the child was aged 3 , mothers' were considerably less likely to say that they did not have enough time with the child ( $19 \%$ at 3 versus $30 \%$ at 7 ).

## Family activities

Both parents were asked how often they engaged in a number of activities with their children. A selection of their responses is shown in Tables 4.3 to 4.10. The full list of the activities that both main and partner respondents were asked about were reading to or with their child; telling stories not from a book; doing musical activities; drawing, painting, or making things; playing sports or physically active games; playing with toys or games indoors; and going to a park or outdoor playground with their children. Mothers reading to the child every day had fallen from 62 per cent at age 3 , via 53 per cent at age 5 to 42 per cent at age 7 , which may well reflect the child's increased time at school and the development of their own ability to read. The transition to school ages was also reflected in the frequency of fathers reading daily to the child, with $23 \%$ doing so at age 3 , falling to 16 per cent at ages 5 and 7 .

Table 4.3: How often do you read to your child? Mothers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Several Times a Week | One or Two Times |  |  |  |  |
|  | Every Day |  | A Week | A Month | Less Often | Not at All |  |
| All Responding Mothers at MCS4 | $\begin{array}{r} 5516 \\ (41.6) \\ \hline \end{array}$ | $\begin{array}{r} 3551 \\ (27.0) \\ \hline \end{array}$ | $\begin{array}{r} 2855 \\ (21.4) \\ \hline \end{array}$ | $\begin{array}{r} \hline 640 \\ (4.8) \end{array}$ | $\begin{array}{r} 366 \\ (2.6) \\ \hline \end{array}$ | $\begin{array}{r} 406 \\ (2.7) \\ \hline \end{array}$ | $\begin{gathered} 13334 \\ (100.0) \end{gathered}$ |


| Country at MCS4 |
| :---: |
| England |
| Wales |
| Scotland |
| Northern Ireland |
| Unweighted sample size <br> Weighted observations |
| Mother's Age at MCS4 |


| 20 to 29 | $\begin{gathered} 772 \\ (34.4) \\ \hline \end{gathered}$ | $\begin{gathered} 670 \\ (29.6) \\ \hline \end{gathered}$ | $\begin{gathered} 539 \\ (24.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 113 \\ (5.2) \end{array}$ | $\begin{gathered} 69 \\ (2.9) \\ \hline \end{gathered}$ | $\begin{gathered} 77 \\ (3.2) \\ \hline \end{gathered}$ | $\begin{gathered} 2240 \\ (100.0) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 to 39 | $\begin{array}{r} 2969 \\ (41.4) \\ \hline \end{array}$ | $\begin{array}{r} 1913 \\ (26.9) \\ \hline \end{array}$ | $\begin{array}{r} 1551 \\ (21.3) \\ \hline \end{array}$ | $\begin{array}{r} 358 \\ (5.0) \end{array}$ | $\begin{array}{r} 213 \\ (2.9) \\ \hline \end{array}$ | $\begin{array}{r} 215 \\ (2.6) \\ \hline \end{array}$ | $\begin{array}{r} 7219 \\ (100.0) \\ \hline \end{array}$ |
| 40 and above | $\begin{gathered} 1775 \\ (46.7) \\ \hline \end{gathered}$ | $\begin{gathered} 968 \\ (25.4) \\ \hline \end{gathered}$ | $\begin{gathered} 765 \\ (19.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 169 \\ (4.1) \\ \hline \end{array}$ | $\begin{gathered} 84 \\ (1.8) \\ \hline \end{gathered}$ | $\begin{gathered} 114 \\ (2.6) \\ \hline \end{gathered}$ | $\begin{gathered} 3875 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{array}{r} 5516 \\ 5539 \\ \hline \end{array}$ | $\begin{array}{r} 3551 \\ 3593 \\ \hline \end{array}$ | $\begin{array}{r} 2855 \\ 2845 \\ \hline \end{array}$ | $\begin{array}{r} 640 \\ 635 \\ \hline \end{array}$ | $\begin{array}{r} 366 \\ 345 \\ \hline \end{array}$ | $\begin{array}{r} 406 \\ 358 \\ \hline \end{array}$ | $\begin{aligned} & 13334 \\ & 13315 \\ & \hline \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Mother's Ethnicity |  |  |  |  |  |  |  |
| White | $\begin{aligned} & \hline 4965 \\ & (43.2) \end{aligned}$ | $\begin{gathered} 3050 \\ (26.8) \end{gathered}$ | $\begin{aligned} & 2352 \\ & (20.7) \end{aligned}$ | $\begin{aligned} & \hline 554 \\ & (4.8) \end{aligned}$ | $\begin{aligned} & \hline 289 \\ & (2.4) \end{aligned}$ | $\begin{aligned} & 259 \\ & (2.0) \end{aligned}$ | $\begin{array}{r} \hline 11469 \\ (100.0) \end{array}$ |
| Mixed | $\begin{gathered} 31 \\ (26.4) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (44.7) \end{gathered}$ | $\begin{gathered} 23 \\ (20.0) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (3.1) \end{gathered}$ | $\begin{gathered} 6 \\ (2.6) \end{gathered}$ | $\begin{gathered} 6 \\ (3.3) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (100.0) \end{gathered}$ |
| Indian | $\begin{gathered} 109 \\ (31.9) \\ \hline \end{gathered}$ | $\begin{gathered} 87 \\ (25.6) \\ \hline \end{gathered}$ | $\begin{gathered} 97 \\ (29.8) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (5.3) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (3.5) \end{gathered}$ | $\begin{gathered} 10 \\ (3.9) \\ \hline \end{gathered}$ | $\begin{gathered} 332 \\ (100.0) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{array}{r} 198 \\ (26.5) \\ \hline \end{array}$ | $\begin{gathered} 195 \\ (26.4) \end{gathered}$ | $\begin{gathered} 211 \\ (27.2) \end{gathered}$ | $\begin{gathered} 30 \\ (4.1) \end{gathered}$ | $\begin{gathered} 39 \\ (4.7) \end{gathered}$ | $\begin{gathered} 87 \\ (11.1) \end{gathered}$ | $\begin{gathered} 760 \\ (100.0) \\ \hline \end{gathered}$ |
| Black | $\begin{gathered} 143 \\ (31.0) \\ \hline \end{gathered}$ | $\begin{gathered} 126 \\ (30.6) \\ \hline \end{gathered}$ | $\begin{gathered} 123 \\ (26.3) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (4.9) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (3.2) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (3.9) \\ \hline \end{gathered}$ | $\begin{gathered} 453 \\ (100.0) \\ \hline \end{gathered}$ |
| Other | $\begin{gathered} 70 \\ (35.0) \end{gathered}$ | $\begin{gathered} 44 \\ (21.6) \end{gathered}$ | $\begin{gathered} 49 \\ (21.5) \end{gathered}$ | $\begin{gathered} 12 \\ (5.9) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (2.8) \end{gathered}$ | $\begin{gathered} 22 \\ (13.2) \end{gathered}$ | $\begin{gathered} 201 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 5516 \\ & 5539 \end{aligned}$ | $\begin{aligned} & 3549 \\ & 3591 \end{aligned}$ | $\begin{aligned} & 2855 \\ & 2845 \end{aligned}$ | $\begin{aligned} & 640 \\ & 635 \end{aligned}$ | $\begin{array}{r} 366 \\ 345 \\ \hline \end{array}$ | $\begin{aligned} & 406 \\ & 358 \end{aligned}$ | $\begin{aligned} & 13332 \\ & 13313 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Mother's Employment Status at MCS4 |  |  |  |  |  |  |  |
| Not employed | $\begin{array}{r} 1927 \\ (38.8) \\ \hline \end{array}$ | $\begin{array}{r} 1317 \\ (26.4) \\ \hline \end{array}$ | $\begin{aligned} & 1121 \\ & (22.2) \\ & \hline \end{aligned}$ | $\begin{array}{r} 249 \\ (4.9) \\ \hline \end{array}$ | $\begin{gathered} 183 \\ (3.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 245 \\ (4.1) \\ \hline \end{array}$ | $\begin{gathered} 5042 \\ (100.0) \\ \hline \end{gathered}$ |
| Employed | $\begin{gathered} 3589 \\ (43.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 2234 \\ (27.3) \end{array}$ | $\begin{array}{r} 1734 \\ (20.9) \\ \hline \end{array}$ | $\begin{aligned} & \hline 391 \\ & (4.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 183 \\ & (2.0) \end{aligned}$ | $\begin{gathered} 161 \\ (1.8) \end{gathered}$ | $\begin{gathered} 8292 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 5516 \\ & 5539 \end{aligned}$ | $\begin{aligned} & 3551 \\ & 3593 \end{aligned}$ | $\begin{aligned} & 2855 \\ & 2845 \end{aligned}$ | $\begin{aligned} & 640 \\ & 635 \end{aligned}$ | $\begin{aligned} & 640 \\ & 635 \end{aligned}$ | $\begin{aligned} & 640 \\ & 635 \end{aligned}$ | $\begin{aligned} & 13334 \\ & 13315 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |

Mother's Highest Qualification at MCS4

|  | 424 | 341 | 375 | 84 | 73 | 168 | 1465 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No qualifications | $(29.9)$ | $(21.9)$ | $(27.6)$ | $(5.6)$ | $(4.6)$ | $(10.3)$ | $(100.0)$ |
|  | 325 | 253 | 230 | 55 | 34 | 22 | 919 |
| NVQ1 | $(34.6)$ | $(30.0)$ | $(24.0)$ | $(6.6)$ | $(3.5)$ | $(1.4)$ | $(100.0)$ |
|  | 1342 | 1015 | 810 | 190 | 91 | 84 | 3532 |
| NVQ2 | $(38.5)$ | $(29.1)$ | $(22.6)$ | $(5.4)$ | $(2.4)$ | $(2.1)$ | $(100.0)$ |

Table 4.3: How often do you read to your child? Mothers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Every } \\ \text { Day } \\ \hline \end{gathered}$ | Several Times a Week | One or Two Times |  | Less Often | Not at All |  |
|  |  |  | A Week | A Month |  |  |  |
| Continued |  |  |  |  |  |  |  |
| NVQ3 | $\begin{gathered} 860 \\ (42.6) \\ \hline \end{gathered}$ | $\begin{gathered} 572 \\ (28.4) \\ \hline \end{gathered}$ | $\begin{gathered} 442 \\ (21.1) \\ \hline \end{gathered}$ | $\begin{gathered} 88 \\ (4.3) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (2.0) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (1.5) \\ \hline \end{gathered}$ | $\begin{gathered} 2043 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ4 | $\begin{array}{r} 2012 \\ (49.5) \\ \hline \end{array}$ | $\begin{array}{r} 1051 \\ (26.0) \\ \hline \end{array}$ | $\begin{array}{r} 732 \\ (17.6) \\ \hline \end{array}$ | $\begin{array}{r} 167 \\ (3.9) \\ \hline \end{array}$ | $\begin{gathered} 80 \\ (1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (1.4) \\ \hline \end{gathered}$ | $\begin{gathered} 4104 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ5 | $\begin{gathered} 445 \\ (50.4) \end{gathered}$ | $\begin{gathered} 229 \\ (24.9) \end{gathered}$ | $\begin{gathered} 164 \\ (18.4) \end{gathered}$ | $\begin{gathered} 35 \\ (3.2) \end{gathered}$ | $\begin{gathered} 17 \\ (2.0) \end{gathered}$ | $\begin{gathered} 12 \\ (1.2) \end{gathered}$ | $\begin{gathered} 902 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 5408 \\ & 5426 \end{aligned}$ | $\begin{aligned} & 3461 \\ & 3496 \end{aligned}$ | $\begin{aligned} & 2753 \\ & 2753 \end{aligned}$ | $\begin{aligned} & 619 \\ & 612 \end{aligned}$ | $\begin{aligned} & 343 \\ & 315 \end{aligned}$ | $\begin{aligned} & 381 \\ & 338 \end{aligned}$ | $\begin{aligned} & 12965 \\ & 12940 \end{aligned}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Family Type at MCS4 |  |  |  |  |  |  |  |
| Two-parent | $\begin{array}{r} 4442 \\ (42.4) \\ \hline \end{array}$ | $\begin{array}{r} 2804 \\ (26.9) \\ \hline \end{array}$ | $\begin{array}{r} 2252 \\ (21.4) \\ \hline \end{array}$ | $\begin{array}{r} 494 \\ (4.6) \\ \hline \end{array}$ | $\begin{array}{r} 267 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 288 \\ (2.4) \\ \hline \end{array}$ | $\begin{array}{r} 10547 \\ (100.0) \\ \hline \end{array}$ |
| Lone parent | $\begin{array}{r} 1074 \\ (38.9) \\ \hline \end{array}$ | $\begin{gathered} 747 \\ (27.2) \\ \hline \end{gathered}$ | $\begin{gathered} 603 \\ (21.3) \end{gathered}$ | $\begin{aligned} & 146 \\ & (5.3) \end{aligned}$ | $\begin{gathered} 99 \\ (3.5) \end{gathered}$ | $\begin{aligned} & 118 \\ & (3.7) \end{aligned}$ | $\begin{gathered} 2787 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size | 5516 | 3551 | 2855 | 640 | 366 | 406 | 13334 |
| Weighted observations | 5539 | 3593 | 2845 | 635 | 345 | 358 | 13315 |

Sample includes all mothers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.4: How often do you read to your child? Fathers at MCS4


Father's Age at MCS4

|  | 36 | 67 | 150 | 59 | 27 | 32 | 371 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 to 29 | $(11.1)$ | $(16.2)$ | $(43.2)$ | $(15.9)$ | $(5.6)$ | $(8.0)$ | $(100.0)$ |
|  | 603 | 925 | 1298 | 547 | 263 | 172 | 3808 |
| 30 to 39 | $(15.2)$ | $(24.6)$ | $(34.3)$ | $(15.1)$ | $(6.6)$ | $(4.2)$ | $(100.0)$ |
|  | 669 | 1066 | 1328 | 551 | 278 | 213 | 4105 |
| 40 and above | $(16.4)$ | $(25.3)$ | $(33.0)$ | $(13.9)$ | $(6.9)$ | $(4.6)$ | $(100.0)$ |
| Unweighted sample size | 1308 | 2058 | 2776 | 1157 | 568 | 417 | 8284 |
| Weighted observations | 1254 | 1974 | 2743 | 1168 | 541 | 369 | 8050 |
|  |  |  |  |  |  |  |  |

Table 4.4: How often do you read to your child? Fathers at MCS4


Sample includes all fathers responding to question. Table displays unweighted observations and weighted
percentages (country means using weight1, UK means using weight2).

Figure 4.2: How often father reads to child


Table 4.5: How often do you do musical activities with your child? Mothers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Every Day | Several <br> Times a Week | One or Two Times |  | Less Often | Not at All |  |
|  |  |  | A Week | A Month |  |  |  |
| All Responding Mothers at MCS4 | $\begin{array}{r} 4106 \\ (32.1) \\ \hline \end{array}$ | $\begin{aligned} & 3183 \\ & (24.0) \\ & \hline \end{aligned}$ | $\begin{array}{r} 2969 \\ (22.0) \\ \hline \end{array}$ | $\begin{array}{r} 1417 \\ (10.5) \\ \hline \end{array}$ | $\begin{array}{r} 732 \\ (5.3) \\ \hline \end{array}$ | $\begin{gathered} 925 \\ (6.1) \end{gathered}$ | $\begin{array}{r} 13332 \\ (100.0) \end{array}$ |
| Country at MCS4 |  |  |  |  |  |  |  |
| England | $\begin{array}{r} 2483 \\ (30.9) \\ \hline \end{array}$ | $\begin{array}{r} 2027 \\ (24.1) \\ \hline \end{array}$ | $\begin{array}{r} 1908 \\ (22.0) \\ \hline \end{array}$ | $\begin{gathered} 905 \\ (10.7) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 509 \\ (5.7) \\ \hline \end{gathered}$ | $\begin{gathered} 659 \\ (6.5) \\ \hline \end{gathered}$ | $\begin{gathered} 8491 \\ (100.0) \\ \hline \end{gathered}$ |
| Wales | $\begin{gathered} 685 \\ (36.4) \end{gathered}$ | $\begin{gathered} 466 \\ (24.4) \end{gathered}$ | $\begin{gathered} 399 \\ (20.0) \end{gathered}$ | $\begin{gathered} 187 \\ (10.1) \end{gathered}$ | $\begin{gathered} 75 \\ (3.5) \end{gathered}$ | $\begin{aligned} & 116 \\ & (5.6) \end{aligned}$ | $\begin{gathered} 1928 \\ (100.0) \end{gathered}$ |
| Scotland | $\begin{gathered} 506 \\ (33.1) \end{gathered}$ | $\begin{gathered} 392 \\ (24.6) \end{gathered}$ | $\begin{gathered} 359 \\ (23.1) \end{gathered}$ | $\begin{gathered} 181 \\ (10.1) \end{gathered}$ | $\begin{gathered} 79 \\ (5.1) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (4.0) \end{gathered}$ | $\begin{gathered} 1577 \\ (100.0) \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 432 \\ (32.9) \\ \hline \end{gathered}$ | $\begin{array}{r} 298 \\ (21.8) \\ \hline \end{array}$ | $\begin{gathered} 303 \\ (23.4) \\ \hline \end{gathered}$ | $\begin{gathered} 144 \\ (10.5) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (5.2) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (6.3) \\ \hline \end{gathered}$ | $\begin{gathered} 1336 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 4106 \\ & 4291 \end{aligned}$ | $\begin{aligned} & 3183 \\ & 3201 \end{aligned}$ | $\begin{aligned} & 2969 \\ & 2935 \end{aligned}$ | $\begin{aligned} & 1417 \\ & 1409 \end{aligned}$ | $\begin{aligned} & 732 \\ & 705 \end{aligned}$ | $\begin{aligned} & 925 \\ & 813 \end{aligned}$ | $\begin{aligned} & 13332 \\ & 13354 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Mother's Age at MCS4 |  |  |  |  |  |  |  |
| 20 to 29 | $\begin{gathered} 914 \\ (41.5) \\ \hline \end{gathered}$ | $\begin{gathered} 542 \\ (25.2) \\ \hline \end{gathered}$ | $\begin{gathered} 451 \\ (19.8) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 128 \\ (5.7) \\ \hline \end{array}$ | $\begin{gathered} 73 \\ (2.8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 132 \\ (5.0) \\ \hline \end{gathered}$ | $\begin{gathered} 2240 \\ (100.0) \\ \hline \end{gathered}$ |
| 30 to 39 | $\begin{array}{r} 2238 \\ (31.2) \\ \hline \end{array}$ | $\begin{array}{r} 1721 \\ (24.0) \\ \hline \end{array}$ | $\begin{array}{r} 1645 \\ (22.6) \\ \hline \end{array}$ | $\begin{gathered} 762 \\ (10.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 368 \\ (5.3) \\ \hline \end{array}$ | $\begin{aligned} & 484 \\ & (6.2) \end{aligned}$ | $\begin{gathered} 7218 \\ (100.0) \\ \hline \end{gathered}$ |
| 40 and above | $\begin{gathered} 954 \\ (24.7) \\ \hline \end{gathered}$ | $\begin{gathered} 920 \\ (23.8) \\ \hline \end{gathered}$ | $\begin{gathered} 873 \\ (22.5) \\ \hline \end{gathered}$ | $\begin{gathered} 527 \\ (13.6) \\ \hline \end{gathered}$ | $\begin{aligned} & 291 \\ & (7.9) \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline 309 \\ (7.5) \\ \hline \end{array}$ | $\begin{gathered} 3874 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 4106 \\ & 4168 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3183 \\ & 3212 \end{aligned}$ | $\begin{array}{r} 2969 \\ 2939 \\ \hline \end{array}$ | $\begin{aligned} & 1417 \\ & 1415 \end{aligned}$ | $\begin{aligned} & 732 \\ & 738 \\ & \hline \end{aligned}$ | $\begin{aligned} & 925 \\ & 841 \end{aligned}$ | $\begin{aligned} & 13332 \\ & 13312 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Mother's Ethnicity |  |  |  |  |  |  |  |
| White | $\begin{array}{r} 3742 \\ (32.8) \\ \hline \end{array}$ | $\begin{array}{r} 2803 \\ (24.3) \\ \hline \end{array}$ | $\begin{array}{r} 2554 \\ (22.1) \\ \hline \end{array}$ | $\begin{array}{r} 1221 \\ (10.7) \\ \hline \end{array}$ | $\begin{aligned} & 580 \\ & (5.3) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 567 \\ (4.7) \\ \hline \end{gathered}$ | $\begin{gathered} 11467 \\ (100.0) \\ \hline \end{gathered}$ |



Sample includes all mothers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.6: How often do you play sports or physically active games with your child? Mothers at MCS4


Table 4.6: How often do you play sports or physically active games with your child? Mothers at MCS4


Sample includes all mothers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.7: How often do you play sports or physically active games with your child? Fathers at CMS4


Table 4.7: How often do you play sports or physically active games with your child? Fathers at CMS4


Sample includes all fathers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.8: How often do you play with toys or games indoors with your child? Fathers at MCS4


## Father's Ethnicity

|  | 751 | 1903 | 2774 | 1122 | 396 | 215 | 7161 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White | $(10.2)$ | $(26.1)$ | $(39.5)$ | $(16.1)$ | $(5.5)$ | $(2.7)$ | $(100.0)$ |
|  | 5 | 18 | 17 | 5 | 6 | 3 | 54 |
| Mixed | $(8.1)$ | $(31.0)$ | $(35.0)$ | $(8.4)$ | $(12.3)$ | $(5.2)$ | $(100.0)$ |
|  | 28 | 56 | 101 | 38 | 10 | 13 | 246 |
| Indian | $(9.5)$ | $(23.5)$ | $(39.0)$ | $(19.1)$ | $(4.1)$ | $(4.9)$ | $(100.0)$ |
| Pakistani or | 42 | 87 | 143 | 76 | 45 | 60 | 453 |
| Bangladeshi | $(9.3)$ | $(18.9)$ | $(33.8)$ | $(15.6)$ | $(11.2)$ | $(11.2)$ | $(100.0)$ |
|  | 17 | 37 | 59 | 39 | 24 | 16 | 192 |
| Black | $(11.8)$ | $(17.9)$ | $(30.4)$ | $(20.6)$ | $(11.6)$ | $(7.6)$ | $(100.0)$ |
|  | 11 | 22 | 65 | 16 | 11 | 15 | 140 |
| Other | $(5.5)$ | $(14.2)$ | $(48.5)$ | $(11.9)$ | $(9.2)$ | $(10.7)$ | $(100.0)$ |
| Unweighted sample size | 854 | 2123 | 3159 | 1296 | 492 | 322 | 8246 |
| Weighted observations | 811 | 2040 | 3141 | 1295 | 477 | 267 | 8032 |
|  |  |  |  |  |  |  |  |

Father's Employment Status at MCS4

|  | 108 | 153 | 182 | 84 | 47 | 69 | 643 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not employed | $(19.3)$ | $(22.5)$ | $(29.1)$ | $(12.1)$ | $(7.6)$ | $(9.4)$ | $(100.0)$ |
|  | 751 | 1978 | 2995 | 1217 | 446 | 253 | 7640 |
| Employed | $(9.4)$ | $(25.6)$ | $(39.9)$ | $(16.5)$ | $(5.8)$ | $(2.8)$ | $(100.0)$ |
| Unweighted sample size | 859 | 2131 | 3177 | 1301 | 493 | 322 | 8283 |
| Weighted observations | 814 | 2043 | 3147 | 1299 | 478 | 267 | 8049 |
|  |  |  |  |  |  |  |  |

Father's Highest Qualification at MCS4

|  | 78 | 167 | 264 | 103 | 70 | 85 | 767 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No qualifications | $(11.8)$ | $(20.8)$ | $(35.2)$ | $(13.7)$ | $(8.3)$ | $(10.1)$ | $(100.0)$ |
|  | 58 | 107 | 158 | 68 | 32 | 27 | 450 |
| NVQ1 | $(14.3)$ | $(24.5)$ | $(35.5)$ | $(14.7)$ | $(6.7)$ | $(4.3)$ | $(100.0)$ |
|  | 216 | 528 | 747 | 320 | 136 | 72 | 2019 |
| NVQ2 | $(10.1)$ | $(25.5)$ | $(37.2)$ | $(16.8)$ | $(7.0)$ | $(3.5)$ | $(100.0)$ |

Table 4.8: How often do you play with toys or games indoors with your child? Fathers at MCS4


Sample includes all fathers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.9: How often do you take your child to the park or an outdoor playground? Mothers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Every <br> Day | Several Times a Week | One or Two Times |  | Less Often | Not at All |  |
|  |  |  | A Week | A Month |  |  |  |
| All Responding Mothers At MCS4 | $\begin{array}{r} 453 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 1453 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 4990 \\ (37.1) \\ \hline \end{array}$ | $\begin{gathered} 4077 \\ (30.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 1541 \\ (11.9) \\ \hline \end{array}$ | $\begin{gathered} 817 \\ (6.0) \end{gathered}$ | $\begin{gathered} 13331 \\ (100.0) \\ \hline \end{gathered}$ |
| Country at MCS4 |  |  |  |  |  |  |  |
| England | $\begin{aligned} & \hline 273 \\ & (3.2) \end{aligned}$ | $\begin{gathered} 927 \\ (11.0) \end{gathered}$ | $\begin{gathered} 3188 \\ (36.9) \end{gathered}$ | $\begin{gathered} 484 \\ (37.9) \end{gathered}$ | $\begin{gathered} 1007 \\ (12.0) \end{gathered}$ | $\begin{gathered} \hline 513 \\ (5.9) \end{gathered}$ | $\begin{gathered} 8490 \\ (100.0) \end{gathered}$ |
| Wales | $\begin{gathered} 77 \\ (4.4) \end{gathered}$ | $\begin{gathered} 223 \\ (11.9) \end{gathered}$ | $\begin{array}{r} 738 \\ (36.5) \\ \hline \end{array}$ | $\begin{gathered} 578 \\ (30.1) \end{gathered}$ | $\begin{gathered} 190 \\ (10.3) \end{gathered}$ | $\begin{array}{r} 122 \\ (6.8) \end{array}$ | $\begin{gathered} 1928 \\ (100.0) \end{gathered}$ |
| Scotland | $\begin{gathered} 58 \\ (3.8) \\ \hline \end{gathered}$ | $\begin{gathered} 173 \\ (11.1) \end{gathered}$ | $\begin{gathered} 580 \\ (37.4) \\ \hline \end{gathered}$ | $\begin{gathered} 504 \\ (31.0) \end{gathered}$ | $\begin{gathered} 174 \\ (10.9) \end{gathered}$ | $\begin{gathered} \hline 88 \\ (5.8) \end{gathered}$ | $\begin{gathered} 1577 \\ (100.0) \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 45 \\ (3.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 130 \\ (9.8) \\ \hline \end{array}$ | $\begin{gathered} 484 \\ (37.9) \\ \hline \end{gathered}$ | $\begin{gathered} 413 \\ (29.0) \end{gathered}$ | $\begin{gathered} 170 \\ (12.7) \\ \hline \end{gathered}$ | $\begin{gathered} 94 \\ (7.0) \\ \hline \end{gathered}$ | $\begin{gathered} 1336 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 453 \\ & 466 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1453 \\ & 1473 \\ & \hline \end{aligned}$ | $\begin{array}{r} 4990 \\ 4943 \\ \hline \end{array}$ | $\begin{aligned} & 4077 \\ & 4092 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1541 \\ & 1561 \end{aligned}$ | $\begin{aligned} & 817 \\ & 819 \end{aligned}$ | $\begin{aligned} & 13331 \\ & 13352 \end{aligned}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.5$ |  |
| Mother's Age at MCS4 |  |  |  |  |  |  |  |
| 20 to 29 | $\begin{gathered} 96 \\ (4.0) \end{gathered}$ | $\begin{gathered} 300 \\ (13.5) \end{gathered}$ | $\begin{gathered} 901 \\ (40.1) \end{gathered}$ | $\begin{gathered} 619 \\ (27.8) \end{gathered}$ | $\begin{gathered} 191 \\ (8.6) \end{gathered}$ | $\begin{gathered} 132 \\ (6.0) \end{gathered}$ | $\begin{gathered} 2239 \\ (100.0) \end{gathered}$ |
| 30 to 39 | $\begin{array}{r} 219 \\ (3.1) \\ \hline \end{array}$ | $\begin{array}{r} 784 \\ (10.9) \\ \hline \end{array}$ | $\begin{array}{r} 2779 \\ (38.2) \\ \hline \end{array}$ | $\begin{array}{r} 2216 \\ (30.8) \\ \hline \end{array}$ | $\begin{gathered} 800 \\ (11.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 419 \\ (5.7) \\ \hline \end{array}$ | $\begin{gathered} 7217 \\ (100.0) \\ \hline \end{gathered}$ |
| 40 and above | $\begin{array}{r} 138 \\ (3.4) \end{array}$ | $\begin{array}{r} 369 \\ (9.5) \end{array}$ | $\begin{gathered} 1310 \\ (33.0) \end{gathered}$ | $\begin{gathered} 1242 \\ (32.6) \end{gathered}$ | $\begin{gathered} 550 \\ (15.1) \end{gathered}$ | $\begin{aligned} & 266 \\ & (6.4) \end{aligned}$ | $\begin{gathered} 3875 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{array}{r} 453 \\ 446 \end{array}$ | $\begin{aligned} & 1453 \\ & 1463 \end{aligned}$ | $\begin{aligned} & 4990 \\ & 4937 \end{aligned}$ | $\begin{aligned} & 4077 \\ & 4092 \end{aligned}$ | $\begin{aligned} & 1541 \\ & 1579 \end{aligned}$ | $\begin{aligned} & 817 \\ & 793 \end{aligned}$ | $\begin{aligned} & 13331 \\ & 13310 \end{aligned}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Mother's Ethnicity |  |  |  |  |  |  |  |
| White | $\begin{gathered} \hline 377 \\ (3.3) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 1226 \\ & (10.8) \end{aligned}$ | $\begin{array}{r} 4219 \\ (36.5) \\ \hline \end{array}$ | $\begin{gathered} 3616 \\ (31.6) \end{gathered}$ | $\begin{gathered} 1337 \\ (11.9) \end{gathered}$ | $\begin{gathered} \hline 690 \\ (5.9) \\ \hline \end{gathered}$ | $\begin{gathered} 11465 \\ (100.0) \\ \hline \end{gathered}$ |
| Mixed | $\begin{gathered} 4 \\ (1.4) \end{gathered}$ | $\begin{gathered} 17 \\ (15.2) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (31.3) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (38.8) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (11.7) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (100.0) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 13 \\ (3.5) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (7.1) \\ \hline \end{gathered}$ | $\begin{gathered} 119 \\ (33.7) \\ \hline \end{gathered}$ | $\begin{gathered} 107 \\ (33.5) \end{gathered}$ | $\begin{gathered} 39 \\ (12.2) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (10.0) \\ \hline \end{gathered}$ | $\begin{gathered} 332 \\ (100.0) \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 33 \\ (4.3) \end{gathered}$ | $\begin{gathered} 103 \\ (13.0) \end{gathered}$ | $\begin{gathered} 336 \\ (45.3) \end{gathered}$ | $\begin{gathered} 163 \\ (20.3) \end{gathered}$ | $\begin{gathered} 73 \\ (10.2) \end{gathered}$ | $\begin{gathered} 53 \\ (6.9) \end{gathered}$ | $\begin{gathered} 761 \\ (100.0) \end{gathered}$ |
| Black | $\begin{gathered} 15 \\ (3.3) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (13.9) \end{gathered}$ | $\begin{gathered} 179 \\ (38.9) \end{gathered}$ | $\begin{array}{r} 106 \\ (23.1) \\ \hline \end{array}$ | $\begin{gathered} 61 \\ (14.8) \end{gathered}$ | $\begin{gathered} 30 \\ (6.0) \end{gathered}$ | $\begin{gathered} 453 \\ (100.0) \end{gathered}$ |

Table 4.9: How often do you take your child to the park or an outdoor playground? Mothers at MCS4


Sample includes all mothers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.10: How often do you take your child to the park or an outdoor playground? Fathers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Several Times a Week | One or Two Times |  |  |  |  |
|  | Every Day |  | A Week | A Month | Less Often | Not at All |  |
| All Responding Fathers at MCS4 | $\begin{array}{r} 122 \\ (1.4) \\ \hline \end{array}$ | $\begin{aligned} & \hline 655 \\ & (7.8) \end{aligned}$ | $\begin{gathered} 3022 \\ (36.1) \end{gathered}$ | $\begin{array}{r} 2850 \\ (34.8) \end{array}$ | $\begin{gathered} 1172 \\ (14.3) \end{gathered}$ | $\begin{array}{r} \hline 459 \\ (5.7) \end{array}$ | $\begin{gathered} 8280 \\ (100.0) \end{gathered}$ |

## Country at MCS4

|  | 69 | 409 | 1967 | 1845 | 741 | 279 | 5310 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England | $(1.2)$ | $(7.2)$ | $(36.4)$ | $(35.4)$ | $(14.4)$ | $(5.3)$ | $(100.0)$ |
|  | 23 | 92 | 424 | 379 | 180 | 66 | 1164 |
| Wales | $(1.8)$ | $(8.4)$ | $(36.0)$ | $(32.2)$ | $(15.6)$ | $(6.0)$ | $(100.0)$ |
|  | 20 | 86 | 387 | 339 | 133 | 44 | 1009 |
| Scotland | $(2.2)$ | $(8.9)$ | $(37.7)$ | $(33.8)$ | $(12.3)$ | $(5.2)$ | $(100.0)$ |
|  | 10 | 68 | 244 | 287 | 118 | 70 | 797 |
| Northern Ireland | $(1.2)$ | $(9.3)$ | $(31.4)$ | $(35.4)$ | $(14.3)$ | $(8.5)$ | $(100.0)$ |
| Unweighted sample size | 122 | 655 | 3022 | 2850 | 1172 | 1172 | 8280 |
| Weighted observations | 113 | 622 | 2888 | 2786 | 1146 | 1146 | 8010 |
|  |  |  |  |  |  |  |  |

Father's Age at MCS4

|  | 8 | 38 | 125 | 110 | 57 | 33 | 371 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 to 29 | $(2.4)$ | $(12.6)$ | $(30.3)$ | $(30.3)$ | $(15.6)$ | $(8.9)$ | $(100.0)$ |
|  | 55 | 313 | 1443 | 1355 | 457 | 183 | 3806 |
| 30 to 39 | $(1.4)$ | $(7.5)$ | $(38.3)$ | $(36.1)$ | $(12.0)$ | $(4.7)$ | $(100.0)$ |
|  | 59 | 304 | 1454 | 1385 | 658 | 243 | 4103 |
| 40 and above | $(1.2)$ | $(7.0)$ | $(35.1)$ | $(34.7)$ | $(16.2)$ | $(5.8)$ | $(100.0)$ |
| Unweighted sample size | 122 | 655 | 3022 | 2850 | 1172 | 459 | 8280 |
| Weighted observations | 110 | 603 | 2925 | 2824 | 1146 | 438 | 8047 |
|  |  |  |  |  |  |  |  |
| $\mathrm{p}=0.000$ |  |  |  |  |  |  |  |

Father's Ethnicity

| White | $\begin{gathered} \hline 96 \\ (1.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 539 \\ (7.3) \\ \hline \end{array}$ | $\begin{array}{r} 2569 \\ (36.0) \\ \hline \end{array}$ | $\begin{aligned} & \hline 2521 \\ & (35.6) \\ & \hline \end{aligned}$ | $\begin{array}{r} 1039 \\ (14.4) \\ \hline \end{array}$ | $\begin{array}{r} \hline 395 \\ (5.4) \\ \hline \end{array}$ | $\begin{gathered} 7159 \\ (100.0) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mixed | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ | $\begin{gathered} 10 \\ (18.0) \end{gathered}$ | $\begin{gathered} 20 \\ (33.9) \end{gathered}$ | $\begin{gathered} 21 \\ (43.1) \end{gathered}$ | $\begin{gathered} 2 \\ (4.5) \end{gathered}$ | $\begin{gathered} 1 \\ (0.6) \end{gathered}$ | $\begin{gathered} 54 \\ (100.0) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 3 \\ (0.8) \end{gathered}$ | $\begin{gathered} 21 \\ (7.7) \end{gathered}$ | $\begin{gathered} 96 \\ (38.2) \end{gathered}$ | $\begin{gathered} 76 \\ (33.2) \end{gathered}$ | $\begin{gathered} 31 \\ (13.2) \end{gathered}$ | $\begin{gathered} 19 \\ (7.0) \end{gathered}$ | $\begin{gathered} 246 \\ (100.0) \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 13 \\ (3.2) \end{gathered}$ | $\begin{gathered} 53 \\ (10.0) \end{gathered}$ | $\begin{gathered} 189 \\ (43.5) \end{gathered}$ | $\begin{gathered} 124 \\ (26.9) \end{gathered}$ | $\begin{gathered} 46 \\ (9.9) \end{gathered}$ | $\begin{gathered} 27 \\ (6.4) \end{gathered}$ | $\begin{gathered} 452 \\ (100.0) \end{gathered}$ |
| Black | $\begin{gathered} 5 \\ (2.7) \end{gathered}$ | $\begin{gathered} 16 \\ (6.7) \end{gathered}$ | $\begin{gathered} 66 \\ (31.7) \end{gathered}$ | $\begin{gathered} 66 \\ (36.0) \end{gathered}$ | $\begin{gathered} 31 \\ (18.4) \end{gathered}$ | $\begin{gathered} 8 \\ (4.3) \end{gathered}$ | $\begin{gathered} 192 \\ (100.0) \end{gathered}$ |
| Other | $\begin{gathered} 5 \\ (2.1) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (8.8) \end{gathered}$ | $\begin{gathered} 65 \\ (44.5) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (26.0) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (13.9) \end{gathered}$ | $\begin{gathered} 7 \\ (4.8) \end{gathered}$ | $\begin{gathered} 140 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 122 \\ & 110 \end{aligned}$ | $\begin{aligned} & 651 \\ & 602 \end{aligned}$ | $\begin{aligned} & 3005 \\ & 2919 \end{aligned}$ | $\begin{aligned} & 2841 \\ & 2820 \end{aligned}$ | $\begin{aligned} & 1167 \\ & 1142 \end{aligned}$ | $\begin{aligned} & 457 \\ & 437 \end{aligned}$ | $\begin{aligned} & 8243 \\ & 8031 \end{aligned}$ |
|  | $\mathrm{p}=0.024$ |  |  |  |  |  |  |

Father's Employment Status at MCS4

| Not employed | $\begin{gathered} 32 \\ (4.6) \end{gathered}$ | $\begin{gathered} 81 \\ (12.3) \end{gathered}$ | $\begin{gathered} 214 \\ (32.9) \end{gathered}$ | $\begin{gathered} 153 \\ (23.1) \end{gathered}$ | $\begin{gathered} 81 \\ (13.9) \end{gathered}$ | $\begin{gathered} 82 \\ (13.1) \end{gathered}$ | $\begin{gathered} 643 \\ (100.0) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employed | $\begin{gathered} 90 \\ (1.1) \end{gathered}$ | $\begin{array}{r} 574 \\ (7.1) \\ \hline \end{array}$ | $\begin{array}{r} 2808 \\ (36.6) \\ \hline \end{array}$ | $\begin{array}{r} 2697 \\ (36.1) \\ \hline \end{array}$ | $\begin{array}{r} 1091 \\ (14.3) \\ \hline \end{array}$ | $\begin{array}{r} 377 \\ (4.8) \\ \hline \end{array}$ | $\begin{gathered} 7637 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 122 \\ & 110 \end{aligned}$ | $\begin{aligned} & 655 \\ & 603 \end{aligned}$ | $\begin{aligned} & 3022 \\ & 2925 \end{aligned}$ | $\begin{aligned} & 2850 \\ & 2824 \end{aligned}$ | $\begin{aligned} & 1172 \\ & 1146 \\ & \hline \end{aligned}$ | $\begin{aligned} & 459 \\ & 438 \end{aligned}$ | $\begin{aligned} & 8280 \\ & 8047 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Father's Highest Qualification at MCS4 |  |  |  |  |  |  |  |
| No qualifications | $\begin{gathered} 16 \\ (2.8) \\ \hline \end{gathered}$ | $\begin{gathered} 75 \\ (10.5) \\ \hline \end{gathered}$ | $\begin{gathered} 282 \\ (38.0) \\ \hline \end{gathered}$ | $\begin{gathered} 206 \\ (25.3) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 104 \\ (12.8) \\ \hline \end{gathered}$ | $\begin{gathered} 83 \\ (10.6) \\ \hline \end{gathered}$ | $\begin{gathered} 766 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ1 | $\begin{gathered} 7 \\ (1.6) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (6.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 146 \\ (32.4) \\ \hline \end{array}$ | $\begin{array}{r} 146 \\ (33.0) \\ \hline \end{array}$ | $\begin{gathered} 68 \\ (15.7) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (10.7) \\ \hline \end{gathered}$ | $\begin{gathered} 449 \\ (100.0) \\ \hline \end{gathered}$ |

[^7]Table 4.10: How often do you take your child to the park or an outdoor playground? Fathers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Every Day | Several <br> Times a Week | One or Two Times |  | Less Often | Not at All |  |
|  |  |  | A Week | A Month |  |  |  |
| NVQ2 | $$ | $\begin{aligned} & \hline 157 \\ & (7.6) \end{aligned}$ | $\begin{gathered} 710 \\ (34.9) \end{gathered}$ | $\begin{gathered} 704 \\ (35.6) \\ \hline \end{gathered}$ | $\begin{gathered} 285 \\ (14.2) \end{gathered}$ | $\begin{aligned} & \hline 137 \\ & (6.9) \end{aligned}$ | $\begin{gathered} \hline 2020 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ3 | $\begin{gathered} 23 \\ (2.0) \end{gathered}$ | $\begin{gathered} 98 \\ (6.9) \end{gathered}$ | $\begin{gathered} 472 \\ (36.7) \end{gathered}$ | $\begin{gathered} 415 \\ (35.5) \end{gathered}$ | $\begin{array}{r} 197 \\ (15.2) \end{array}$ | $\begin{gathered} 52 \\ (3.8) \end{gathered}$ | $\begin{gathered} 1257 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ4 | $\begin{gathered} \hline 29 \\ (1.2) \end{gathered}$ | $\begin{array}{r} 204 \\ (7.6) \end{array}$ | $\begin{gathered} 981 \\ (37.9) \end{gathered}$ | $\begin{gathered} 902 \\ (36.0) \end{gathered}$ | $\begin{array}{r} 343 \\ (13.8) \\ \hline \end{array}$ | $\begin{gathered} \hline 89 \\ (3.4) \end{gathered}$ | $\begin{gathered} \hline 2548 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ5 | $\begin{gathered} 10 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (5.8) \\ \hline \end{gathered}$ | $\begin{gathered} 329 \\ (36.8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 374 \\ (39.8) \\ \hline \end{gathered}$ | $\begin{gathered} 126 \\ (14.2) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (2.8) \\ \hline \end{gathered}$ | $\begin{gathered} 926 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 112 \\ & 102 \\ & \hline \end{aligned}$ | $\begin{aligned} & 630 \\ & 582 \end{aligned}$ | $\begin{aligned} & 2920 \\ & 2835 \end{aligned}$ | $\begin{aligned} & 2747 \\ & 2729 \end{aligned}$ | $\begin{aligned} & 1123 \\ & 1103 \end{aligned}$ | $\begin{aligned} & 434 \\ & 418 \end{aligned}$ | $\begin{aligned} & 7966 \\ & 7770 \end{aligned}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.000$ |  |

Sample includes all fathers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

As with the amount of time they have with their children, the extent to which parents engage in activities may be influenced by a number of factors including whether or not they work, how much time they have at home to spend with their children, how many other children they have, and also what resources are available to them. The list of activities included in the interview is not exhaustive and obviously parents may spend time with their children in activities that were not asked about. For instance there may be culture-specific activities that were not included in the questionnaire.

Overall, mothers engaged in all the activities asked about more often than fathers, with the exception of playing sports or physically active games. Mothers reported reading to their children more frequently than any of the other activities, with 42 per cent doing so every day.

Some similar patterns emerged across the various activities reported in Tables 4.3 to 4.10 for both mothers and fathers. However, there was no consistent pattern of variation across the different countries. For instance, mothers in Northern Ireland and England read to their children most frequently, while for fathers, it was those in Scotland and Northern Ireland who were the most regular readers. The question on how often parents took their children to the park showed that it was mothers in Wales and fathers in Scotland who did this most often.

A clearer pattern emerged when looking at the age of parents at the time of the interview. Other than reading, the youngest parents (aged 20-29 at the interview) were consistently involved in activities more frequently than their older counterparts.

Overall, Pakistani and Bangladeshi parents tended to engage in activities less frequently than other parents.

Differences by parental employment status were not consistent. Parents who were not working were more likely to be clustered at each end of the response options; for most activities, a higher percentage of parents who were not working reported
engaging in the activity every day and a higher percentage also reported never engaging in the activity. An exception to this was reading, with more mothers and fathers in employment reading with or to their child every day. Other than this, there were few consistent differences.

Differences across qualification levels were, however, highly consistent. For almost every activity, parents with higher qualification levels reported engaging in the activity more often than did parents with lower qualification levels. The exceptions were musical activities and visits to a park or playground (and helping with homework, see Chapter 5).

For both mothers and fathers, rates of employment rise in step with increasing levels of qualification. This may account for some of the inconsistent patterns seen for employment status. Parents who were not working were more likely to have low qualifications. Because those with lower qualification levels engaged less frequently in activities with their children, it could be predicted that non-working parents would similarly engage in these activities less frequently. At the same time, parents who are not working may be expected to engage in activities more frequently with their children because they may have more free time. These contradictory expectations may explain why higher rates both of engaging in activities every day and of never engaging in them were seen for parents who were not working.

There was generally very little variation between lone and partnered mothers in the frequency of doing the various activities. One exception to this once again concerned reading. Mothers with a resident partner were slightly more likely to read with or to their child every day than those on their own. However, mothers with no partner were considerably more likely to engage in musical activities every day (40\% compared to $29 \%$ for partnered mothers).

Two questions were asked only of fathers about how often they put their children to bed and how often they looked after their children on their own. Responses are shown in Tables 4.11 and 4.12. Overall, more than a quarter (26\%) of fathers were involved in putting their child to bed every day and around 85 per cent managed to do this at least once a week. Fathers in Wales did bedtimes most frequently and fathers in Northern Ireland least. As with other activities, the youngest fathers were most involved at bedtime ( $30 \%$ doing so every day) but conversely they were also most likely not to do this at all (9\%). A similar pattern emerged according to whether a father worked or not. Nearly a third (32\%) of fathers not in employment were involved in bedtime every day compared to a quarter of those in work, but 16 per cent of non-employed fathers were never involved compared to just 5 per cent of employed fathers.

Around 70 per cent of fathers looked after their child on their own at least once a week. Fathers in Northern Ireland were the most likely to do this with 80 per cent compared to 69 per cent in England. As with other activities, Pakistani and Bangladeshi fathers looked after their children on their own least frequently. Perhaps unsurprisingly, fathers who did not work were much more likely to look after their
child every day than those in employment (22\% compared to 8\%). The responses on father involvement were similar at age 5.

Table 4.11: How often do you get your child ready for bed or put your child to bed? Fathers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Every Day | Several Times a Week | One or Two Times |  | Less Often | Not at All |  |
|  |  |  | A Week | A Month |  |  |  |
| All Responding Fathers at MCS4 | $\begin{aligned} & 2065 \\ & (25.9) \end{aligned}$ | $\begin{gathered} 3087 \\ (38.0) \end{gathered}$ | $\begin{aligned} & 1819 \\ & (21.6) \end{aligned}$ | $\begin{aligned} & 428 \\ & (5.1) \end{aligned}$ | $\begin{array}{r} 327 \\ (3.6) \end{array}$ | $\begin{gathered} 556 \\ (5.8) \end{gathered}$ | $\begin{gathered} 8282 \\ (100.0) \end{gathered}$ |
| Country at MCS4 |  |  |  |  |  |  |  |
| England | $\begin{array}{r} 1303 \\ (25.8) \\ \hline \end{array}$ | $\begin{array}{r} 1877 \\ (36.6) \\ \hline \end{array}$ | $\begin{array}{r} 1180 \\ (21.8) \\ \hline \end{array}$ | $\begin{array}{r} 293 \\ (5.4) \\ \hline \end{array}$ | $\begin{array}{r} 230 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} \hline 426 \\ (6.5) \\ \hline \end{array}$ | $\begin{array}{r} 5309 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{gathered} 313 \\ (27.4) \\ \hline \end{gathered}$ | $\begin{gathered} 432 \\ (37.0) \\ \hline \end{gathered}$ | $\begin{gathered} 252 \\ (21.6) \\ \hline \end{gathered}$ | $\begin{gathered} 58 \\ (4.9) \end{gathered}$ | $\begin{gathered} 44 \\ (3.6) \end{gathered}$ | $\begin{gathered} \hline 66 \\ (5.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1165 \\ (100.0) \end{array}$ |
| Scotland | $\begin{gathered} 263 \\ (26.7) \\ \hline \end{gathered}$ | $\begin{gathered} 444 \\ (43.5) \end{gathered}$ | $\begin{gathered} 218 \\ (20.4) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 32 \\ (3.4) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (2.2) \end{gathered}$ | $\begin{gathered} 32 \\ (3.8) \end{gathered}$ | $\begin{gathered} 1011 \\ (100.0) \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 186 \\ (22.8) \end{gathered}$ | $\begin{gathered} 334 \\ (42.6) \end{gathered}$ | $\begin{gathered} 169 \\ (21.1) \end{gathered}$ | $\begin{gathered} 45 \\ (5.5) \end{gathered}$ | $\begin{gathered} 31 \\ (3.8) \end{gathered}$ | $\begin{gathered} 32 \\ (4.2) \end{gathered}$ | $\begin{gathered} 797 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | 2065 | 3087 | 1819 | 428 | 327 | 556 | 8282 |
|  | 2072 | 3048 | 1728 | 410 | 286 | 469 | 8013 |
|  | $\mathrm{P}<0.005$ |  |  |  |  |  |  |

## Father's Age at MCS4

| 20 to 29 | $\begin{gathered} 106 \\ (30.3) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (31.9) \\ \hline \end{gathered}$ | $\begin{gathered} 78 \\ (18.9) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (5.8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 15 \\ (3.9) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (9.1) \\ \hline \end{gathered}$ | $\begin{gathered} 371 \\ (100.0) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 to 39 | $\begin{array}{r} 1018 \\ (28.3) \\ \hline \end{array}$ | $\begin{array}{r} 1427 \\ (37.3) \\ \hline \end{array}$ | $\begin{gathered} 805 \\ (20.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 159 \\ (4.3) \end{array}$ | $\begin{array}{r} 150 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 248 \\ (5.8) \\ \hline \end{array}$ | $\begin{gathered} 3807 \\ (100.0) \\ \hline \end{gathered}$ |
| 40 and above | $\begin{gathered} 941 \\ (23.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 1540 \\ (38.1) \\ \hline \end{array}$ | $\begin{gathered} 936 \\ (22.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 252 \\ (6.0) \\ \hline \end{array}$ | $\begin{aligned} & 162 \\ & (3.8) \end{aligned}$ | $\begin{aligned} & 273 \\ & (6.3) \end{aligned}$ | $\begin{gathered} 4104 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 2065 \\ & 2083 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3087 \\ & 3014 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1819 \\ & 1742 \end{aligned}$ | $\begin{aligned} & 428 \\ & 420 \end{aligned}$ | $\begin{aligned} & 327 \\ & 291 \end{aligned}$ | $\begin{aligned} & 556 \\ & 500 \end{aligned}$ | $\begin{aligned} & 8282 \\ & 8049 \\ & \hline \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Father's Ethnicity |  |  |  |  |  |  |  |
| White | $\begin{gathered} 1877 \\ (26.8) \end{gathered}$ | $\begin{gathered} 2830 \\ (39.0) \end{gathered}$ | $\begin{gathered} 1553 \\ (21.5) \end{gathered}$ | $\begin{gathered} 350 \\ (5.0) \end{gathered}$ | $\begin{aligned} & 223 \\ & (3.0) \end{aligned}$ | $\begin{aligned} & \hline 328 \\ & (4.7) \end{aligned}$ | $\begin{gathered} 7161 \\ (100.0) \end{gathered}$ |
| Mixed | $\begin{gathered} 9 \\ (16.6) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (39.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 1553 \\ (21.5) \\ \hline \end{array}$ | $\begin{gathered} 4 \\ (4.9) \end{gathered}$ | $\begin{gathered} 2 \\ (5.0) \end{gathered}$ | $\begin{gathered} 2 \\ 2 \\ (2.9) \\ \hline \end{gathered}$ | $\begin{gathered} 54 \\ (100.0) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 51 \\ (20.3) \end{gathered}$ | $\begin{gathered} 66 \\ (27.7) \end{gathered}$ | $\begin{gathered} 57 \\ (23.8) \end{gathered}$ | $\begin{gathered} \hline 15 \\ (6.7) \end{gathered}$ | $\begin{gathered} 2 \\ (5.0) \end{gathered}$ | $\begin{gathered} 38 \\ (13.4) \end{gathered}$ | $\begin{gathered} 246 \\ (100.0) \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 49 \\ (11.2) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (19.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 107 \\ (22.2) \\ \hline \end{array}$ | $\begin{gathered} 34 \\ (6.1) \end{gathered}$ | $\begin{gathered} 57 \\ (11.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 136 \\ (29.3) \\ \hline \end{array}$ | $\begin{gathered} 452 \\ (100.0) \\ \hline \end{gathered}$ |
| Black | $\begin{gathered} 50 \\ (30.9) \end{gathered}$ | $\begin{gathered} 50 \\ (24.5) \end{gathered}$ | $\begin{gathered} 44 \\ (19.0) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (8.2) \end{gathered}$ | $\begin{gathered} 15 \\ (7.8) \end{gathered}$ | $\begin{gathered} 21 \\ (9.6) \end{gathered}$ | $\begin{gathered} 192 \\ (100.0) \\ \hline \end{gathered}$ |
| Other | $\begin{gathered} 24 \\ (17.2) \end{gathered}$ | $\begin{gathered} 38 \\ (29.2) \end{gathered}$ | $\begin{gathered} 32 \\ (23.7) \end{gathered}$ | $\begin{gathered} 12 \\ (8.0) \end{gathered}$ | $\begin{gathered} 7 \\ (4.4) \end{gathered}$ | $\begin{gathered} 27 \\ (17.5) \end{gathered}$ | $\begin{gathered} 140 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 2060 \\ & 2081 \end{aligned}$ | $\begin{aligned} & 3074 \\ & 3005 \end{aligned}$ | $\begin{aligned} & 1809 \\ & 1738 \end{aligned}$ | $\begin{aligned} & 427 \\ & 419 \end{aligned}$ | $\begin{aligned} & 323 \\ & 289 \end{aligned}$ | $\begin{aligned} & 552 \\ & 499 \end{aligned}$ | $\begin{aligned} & 8245 \\ & 8033 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Father's Employment Status at MCS4 |  |  |  |  |  |  |  |
| Not employed | $\begin{gathered} 197 \\ (32.2) \\ \hline \end{gathered}$ | $\begin{gathered} 160 \\ (24.5) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (16.3) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (5.3) \end{gathered}$ | $\begin{gathered} \hline 42 \\ (5.8) \\ \hline \end{gathered}$ | $\begin{gathered} 106 \\ (15.9) \\ \hline \end{gathered}$ | $\begin{gathered} 642 \\ (100.0) \\ \hline \end{gathered}$ |
| Employed | $\begin{array}{r} 1868 \\ (25.4) \\ \hline \end{array}$ | $\begin{gathered} 2927 \\ (38.5) \\ \hline \end{gathered}$ | $\begin{gathered} 1714 \\ (22.1) \end{gathered}$ | $\begin{array}{r} 396 \\ (5.2) \\ \hline \end{array}$ | $\begin{array}{r} 285 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 450 \\ (5.4) \\ \hline \end{array}$ | $\begin{gathered} 7640 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 2065 \\ & 2083 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3087 \\ & 3014 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1819 \\ & 1742 \\ & \hline \end{aligned}$ | $\begin{array}{r} 428 \\ 420 \\ \hline \end{array}$ | $\begin{aligned} & 327 \\ & 291 \end{aligned}$ | $\begin{array}{r} 556 \\ 500 \\ \hline \end{array}$ | $\begin{aligned} & 8282 \\ & 8049 \\ & \hline \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Father's Highest Qualification at MCS4 |  |  |  |  |  |  |  |
| No qualifications | $\begin{gathered} 146 \\ (22.0) \\ \hline \end{gathered}$ | $\begin{gathered} 202 \\ (26.9) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (19.7) \\ \hline \end{gathered}$ | $\begin{gathered} 54 \\ (6.1) \\ \hline \end{gathered}$ | $\begin{gathered} 61 \\ (7.2) \\ \hline \end{gathered}$ | $\begin{gathered} 145 \\ (18.1) \end{gathered}$ | $\begin{gathered} 767 \\ (100.0) \\ \hline \end{gathered}$ |

Table 4.11: How often do you get your child ready for bed or put your child to bed? Fathers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Every Day | Several Times a Week | One or Two Times |  | Less Often | Not at All |  |
|  |  |  | A Week | A Month |  |  |  |
| Continued |  |  |  |  |  |  |  |
| NVQ1 | $\begin{gathered} 127 \\ (30.6) \end{gathered}$ | $\begin{gathered} 136 \\ (30.9) \end{gathered}$ | $\begin{gathered} 94 \\ (20.8) \end{gathered}$ | $\begin{gathered} \hline 25 \\ (5.2) \end{gathered}$ | $\begin{gathered} \hline 22 \\ (4.1) \end{gathered}$ | $\begin{gathered} \hline 46 \\ (8.4) \end{gathered}$ | $\begin{gathered} 450 \\ (100.0) \end{gathered}$ |
| NVQ2 | $\begin{gathered} 530 \\ (26.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 703 \\ (35.1) \\ \hline \end{array}$ | $\begin{array}{r} 460 \\ (22.2) \\ \hline \end{array}$ | $\begin{array}{r} 120 \\ (6.1) \\ \hline \end{array}$ | $\begin{gathered} 76 \\ (3.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 130 \\ (6.6) \\ \hline \end{array}$ | $\begin{array}{r} 2019 \\ (100.0) \\ \hline \end{array}$ |
| NVQ3 | $\begin{gathered} 334 \\ (28.3) \end{gathered}$ | $\begin{gathered} 496 \\ (39.6) \end{gathered}$ | $\begin{gathered} 264 \\ (20.3) \end{gathered}$ | $\begin{gathered} 45 \\ (3.5) \end{gathered}$ | $\begin{gathered} \hline 44 \\ (3.1) \end{gathered}$ | $\begin{gathered} \hline 74 \\ (5.3) \end{gathered}$ | $\begin{gathered} 1257 \\ (100.0) \end{gathered}$ |
| NVQ4 | $\begin{array}{r} 629 \\ (25.2) \\ \hline \end{array}$ | $\begin{array}{r} 496 \\ (39.6) \\ \hline \end{array}$ | $\begin{gathered} 566 \\ (22.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 117 \\ (4.8) \end{array}$ | $\begin{gathered} 75 \\ (2.8) \\ \hline \end{gathered}$ | $\begin{gathered} 80 \\ (3.0) \end{gathered}$ | $\begin{array}{r} 2548 \\ (100.0) \\ \hline \end{array}$ |
| NVQ5 | $\begin{gathered} 227 \\ (24.9) \\ \hline \end{gathered}$ | $\begin{gathered} 390 \\ (41.8) \\ \hline \end{gathered}$ | $\begin{gathered} 205 \\ (22.6) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 47 \\ (5.3) \end{gathered}$ | $\begin{gathered} 26 \\ (2.0) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (3.4) \\ \hline \end{gathered}$ | $\begin{gathered} 927 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 1993 \\ & 2019 \end{aligned}$ | $\begin{aligned} & 3008 \\ & 2941 \end{aligned}$ | $\begin{aligned} & 1748 \\ & 1681 \end{aligned}$ | $\begin{aligned} & 408 \\ & 398 \end{aligned}$ | $\begin{aligned} & 304 \\ & 268 \end{aligned}$ | $\begin{aligned} & 507 \\ & 464 \end{aligned}$ | $\begin{aligned} & 7968 \\ & 7772 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |

Sample includes all fathers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

Table 4.12: How often do you look after your child on your own? Fathers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Several Times a Week | One or Two Times |  |  |  |  |
|  | Every Day |  | A Week | A Month | Less Often | Not at All |  |
| All Responding Fathers at MCS4 | $\begin{gathered} \hline 817 \\ (9.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 2273 \\ (28.0) \\ \hline \end{array}$ | $\begin{gathered} 280 \\ (34.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 1426 \\ (17.4) \\ \hline \end{array}$ | $\begin{array}{r} \hline 693 \\ (8.3) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (2.4) \\ \hline \end{array}$ | $\begin{gathered} 8280 \\ (100.0) \\ \hline \end{gathered}$ |

Country at MCS4

| England | $\begin{gathered} \hline 509 \\ (9.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 1303 \\ (25.4) \\ \hline \end{array}$ | $\begin{array}{r} 1828 \\ (34.7) \\ \hline \end{array}$ | $\begin{gathered} 983 \\ (18.9) \\ \hline \end{gathered}$ | $\begin{gathered} 505 \\ (9.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 179 \\ (2.8) \\ \hline \end{array}$ | $\begin{gathered} 5307 \\ (100.0) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wales | $\begin{gathered} 135 \\ (11.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 336 \\ (28.6) \\ \hline \end{array}$ | $\begin{gathered} 395 \\ (35.1) \end{gathered}$ | $\begin{gathered} 193 \\ (16.1) \\ \hline \end{gathered}$ | $\begin{gathered} 75 \\ (6.6) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (2.6) \\ \hline \end{gathered}$ | $\begin{gathered} 1165 \\ (100.0) \\ \hline \end{gathered}$ |
| Scotland | $\begin{gathered} 89 \\ (9.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 344 \\ (35.0) \\ \hline \end{array}$ | $\begin{gathered} 333 \\ (32.8) \\ \hline \end{gathered}$ | $\begin{gathered} 163 \\ (15.4) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 69 \\ (6.9) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (0.9) \\ \hline \end{gathered}$ | $\begin{gathered} 1011 \\ (100.0) \\ \hline \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 84 \\ (10.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 290 \\ (36.2) \\ \hline \end{array}$ | $\begin{array}{r} 280 \\ (34.3) \\ \hline \end{array}$ | $\begin{gathered} 87 \\ (11.5) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (6.3) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (1.5) \\ \hline \end{gathered}$ | $\begin{gathered} 797 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 817 \\ & 755 \\ & \hline \end{aligned}$ | $\begin{array}{r} 2273 \\ 2242 \\ \hline \end{array}$ | $\begin{aligned} & 2836 \\ & 2765 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1426 \\ & 1392 \\ & \hline \end{aligned}$ | $\begin{aligned} & 693 \\ & 662 \\ & \hline \end{aligned}$ | $\begin{aligned} & 235 \\ & 195 \\ & \hline \end{aligned}$ | $\begin{aligned} & 8280 \\ & 8011 \\ & \hline \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Father's Age at MCS4 |  |  |  |  |  |  |  |
| 20 to 29 | $\begin{gathered} 36 \\ (9.9) \\ \hline \end{gathered}$ | $\begin{gathered} 114 \\ (31.0) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (31.4) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (16.5) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (7.7) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (3.6) \\ \hline \end{gathered}$ | $\begin{gathered} 371 \\ (100.0) \\ \hline \end{gathered}$ |
| 30 to 39 | $\begin{aligned} & \hline 343 \\ & (8.7) \\ & \hline \end{aligned}$ | $\begin{array}{r} 1070 \\ (26.9) \end{array}$ | $\begin{array}{r} 1322 \\ (35.4) \\ \hline \end{array}$ | $\begin{gathered} 60 \\ (16.5) \end{gathered}$ | $\begin{aligned} & 294 \\ & (8.1) \end{aligned}$ | $\begin{aligned} & 125 \\ & (3.0) \end{aligned}$ | $\begin{gathered} 3806 \\ (100.0) \\ \hline \end{gathered}$ |
| 40 and above | $\begin{array}{r} 438 \\ (9.6) \end{array}$ | $\begin{array}{r} 1089 \\ (26.4) \\ \hline \end{array}$ | $\begin{array}{r} 1397 \\ (34.2) \end{array}$ | $\begin{gathered} 714 \\ (18.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 369 \\ (9.4) \end{array}$ | $\begin{gathered} 96 \\ (2.1) \end{gathered}$ | $\begin{gathered} 4103 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 817 \\ & 742 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2273 \\ & 2161 \end{aligned}$ | $\begin{aligned} & 2836 \\ & 2784 \end{aligned}$ | $\begin{aligned} & 1426 \\ & 1449 \end{aligned}$ | $\begin{aligned} & 693 \\ & 703 \end{aligned}$ | $\begin{aligned} & 235 \\ & 209 \end{aligned}$ | $\begin{aligned} & 8280 \\ & 8046 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |  |
| Father's Ethnicity |  |  |  |  |  |  |  |
| White | $\begin{aligned} & \hline 685 \\ & (9.0) \end{aligned}$ | $\begin{gathered} 2088 \\ (28.0) \end{gathered}$ | $\begin{array}{r} 2503 \\ (35.3) \\ \hline \end{array}$ | $\begin{gathered} 1240 \\ (18.1) \end{gathered}$ | $\begin{gathered} \hline 519 \\ (7.8) \\ \hline \end{gathered}$ | $\begin{gathered} 125 \\ (1.9) \end{gathered}$ | $\begin{gathered} \hline 7160 \\ (100.0) \\ \hline \end{gathered}$ |
| Mixed | $\begin{gathered} 3 \\ (5.8) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (19.6) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (36.2) \end{gathered}$ | $\begin{gathered} 10 \\ (18.8) \end{gathered}$ | $\begin{gathered} 7 \\ (14.2) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (5.4) \\ \hline \end{gathered}$ | $\begin{gathered} 54 \\ (100.0) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 3 \\ (5.8) \\ \hline \end{gathered}$ | $\begin{gathered} 43 \\ (17.0) \\ \hline \end{gathered}$ | $\begin{gathered} 72 \\ (30.6) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (18.9) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (13.8) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (6.1) \\ \hline \end{gathered}$ | $\begin{gathered} 246 \\ (100.0) \\ \hline \end{gathered}$ |

Table 4.12: How often do you look after your child on your own? Fathers at MCS4


Sample includes all fathers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

## Discipline

In the self-completion questionnaire, mothers were asked how frequently they used specific methods of discipline when their children were naughty. This included ignoring them, smacking them, shouting at them, sending them to their room or the naughty chair, taking treats away, telling them off, and bribing them (e.g. with treats or sweets). A selection of responses appears in Tables 4.13 to 4.15.

Unsurprisingly, mothers used a variety of methods and some more frequently than others. It should be noted that the questions do not ask how often the children were naughty, so mothers with children who are naughty more often are likely to report higher use of some forms of discipline.
What was perhaps surprising was that, overall, there was little systematic variation in the frequency with which mothers used the different methods of discipline asked
about, according to the characteristics tabulated here. Where differences did emerge, they were greatest between older (those aged 30and over) and younger mothers (those aged under 30) and between those with higher qualifications and those with few or no qualifications. As there is a strong relationship between age and qualification level, these are likely to be the same mothers.

## Ignoring child when naughty

Mothers were asked how often they ignored their children when they were naughty (Table 4.13). Ignoring bad behaviour has been suggested as a tool to combat a situation where a child seeks any attention (even negative). As at the age 5 survey, around half of all mothers did this rarely or never and about a third ignored bad behaviour only sometimes. Younger mothers (those under 30) were slightly more likely to do this often or daily than mothers over the age of 40 at the time of interview ( $18 \%$ compared to $11 \%$ ).

There was also a small variation between how frequently mothers with a tertiary-level qualification level ignored behaviour compared to mothers with fewer qualifications. Around 12 per cent of mothers with NVQ4 or 5 said they ignored bad behaviour often or daily compared to 16 per cent of those with NVQ1 or no qualifications.

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Often | Daily |  |
| All Responding Mothers At MCS4 | $\begin{array}{r} 3305 \\ (25.8) \\ \hline \end{array}$ | $\begin{gathered} 393 \\ (29.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 3875 \\ (31.0) \\ \hline \end{array}$ | $\begin{array}{r} 1417 \\ (11.6) \\ \hline \end{array}$ | $\begin{array}{r} 211 \\ (1.7) \\ \hline \end{array}$ | $\begin{array}{r} 12563 \\ (100.0) \\ \hline \end{array}$ |
| Country at MCS4 |  |  |  |  |  |  |
| England | $\begin{gathered} 2014 \\ (25.1) \end{gathered}$ | $\begin{gathered} 2351 \\ (30.2) \end{gathered}$ | $\begin{gathered} 2436 \\ (30.9) \\ \hline \end{gathered}$ | $\begin{gathered} 920 \\ (12.0) \end{gathered}$ | $\begin{array}{r} \hline 137 \\ (1.7) \end{array}$ | $\begin{gathered} \hline 7858 \\ (100.0) \end{gathered}$ |
| Wales | $\begin{gathered} 506 \\ (25.9) \\ \hline \end{gathered}$ | $\begin{gathered} 544 \\ (29.1) \end{gathered}$ | $\begin{gathered} 573 \\ (31.1) \end{gathered}$ | $\begin{gathered} 227 \\ (12.4) \end{gathered}$ | $\begin{gathered} 29 \\ (1.6) \end{gathered}$ | $\begin{gathered} 1879 \\ (100.0) \end{gathered}$ |
| Scotland | $\begin{gathered} 418 \\ (26.8) \\ \hline \end{gathered}$ | $\begin{gathered} 467 \\ (30.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 485 \\ (31.8) \\ \hline \end{array}$ | $\begin{array}{r} 146 \\ (9.7) \\ \hline \end{array}$ | $\begin{gathered} 25 \\ (1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 1541 \\ (100.0) \\ \hline \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 367 \\ (28.9) \\ \hline \end{gathered}$ | $\begin{gathered} 393 \\ (29.7) \\ \hline \end{gathered}$ | $\begin{gathered} 381 \\ (30.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 124 \\ (9.7) \\ \hline \end{array}$ | $\begin{gathered} 20 \\ (1.6) \end{gathered}$ | $\begin{gathered} 1285 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 3305 \\ & 3285 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3755 \\ & 3815 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3875 \\ & 3942 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1417 \\ & 1474 \\ & \hline \end{aligned}$ | $\begin{aligned} & 211 \\ & 216 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12563 \\ & 12732 \\ & \hline \end{aligned}$ |
|  | $\mathrm{p}=0.261$ |  |  |  |  |  |
| Mother's Age at MCS4 |  |  |  |  |  |  |
| Under 30 | $\begin{gathered} 494 \\ (22.4) \\ \hline \end{gathered}$ | $\begin{gathered} 605 \\ (29.7) \\ \hline \end{gathered}$ | $\begin{gathered} 625 \\ (29.8) \\ \hline \end{gathered}$ | $\begin{gathered} 310 \\ (14.9) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (3.2) \\ \hline \end{gathered}$ | $\begin{gathered} 2103 \\ (100.0) \\ \hline \end{gathered}$ |
| 30 to 39 | $\begin{aligned} & 1769 \\ & (25.2) \end{aligned}$ | $\begin{array}{r} 2012 \\ (29.8) \\ \hline \end{array}$ | $\begin{gathered} 2141 \\ (31.9) \\ \hline \end{gathered}$ | $\begin{gathered} 766 \\ (11.7) \end{gathered}$ | $\begin{array}{r} 102 \\ (1.5) \end{array}$ | $\begin{gathered} 6790 \\ (100.0) \end{gathered}$ |
| 40 and above | $\begin{array}{r} 1042 \\ (28.0) \\ \hline \end{array}$ | $\begin{array}{r} 1138 \\ (30.6) \\ \hline \end{array}$ | $\begin{array}{r} 1109 \\ (30.3) \\ \hline \end{array}$ | $\begin{array}{r} 341 \\ (9.9) \\ \hline \end{array}$ | $\begin{gathered} 40 \\ (1.2) \\ \hline \end{gathered}$ | $\begin{gathered} 3670 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 3305 \\ & 3217 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3755 \\ & 3787 \\ & \hline \end{aligned}$ | $\begin{aligned} & 3875 \\ & 3922 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1417 \\ & 1488 \end{aligned}$ | $\begin{aligned} & 211 \\ & 217 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12563 \\ & 12630 \\ & \hline \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |

Table 4.13: How often mother ignores child when naughty at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Often | Daily |  |
| Continued |  |  |  |  |  |  |
| Mother's Ethnicity |  |  |  |  |  |  |
| White | $\begin{gathered} 2921 \\ (25.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 3356 \\ (30.2) \\ \hline \end{array}$ | $\begin{array}{r} 3413 \\ (30.8) \\ \hline \end{array}$ | $\begin{array}{r} 1289 \\ (12.0) \\ \hline \end{array}$ | $\begin{array}{r} 172 \\ (1.6) \\ \hline \end{array}$ | $\begin{array}{r} 11151 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{gathered} 20 \\ (14.8) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (27.8) \\ \hline \end{gathered}$ | $\begin{gathered} 37 \\ (38.6) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (15.7) \end{gathered}$ | $\begin{gathered} 4 \\ (3.2) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (100.0) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 77 \\ (24.4) \end{gathered}$ | $\begin{gathered} 75 \\ (28.7) \end{gathered}$ | $\begin{gathered} 98 \\ (34.9) \end{gathered}$ | $\begin{gathered} 27 \\ (9.8) \end{gathered}$ | $\begin{gathered} 6 \\ (2.2) \end{gathered}$ | $\begin{gathered} 283 \\ (100.0) \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 127 \\ (23.9) \end{gathered}$ | $\begin{gathered} 143 \\ (27.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 168 \\ (35.4) \end{array}$ | $\begin{gathered} 45 \\ (9.9) \end{gathered}$ | $\begin{gathered} 16 \\ (3.1) \end{gathered}$ | $\begin{gathered} 499 \\ (100.0) \end{gathered}$ |
| Black | $\begin{gathered} 108 \\ (30.8) \end{gathered}$ | $\begin{gathered} 111 \\ (28.1) \end{gathered}$ | $\begin{gathered} 114 \\ (28.4) \end{gathered}$ | $\begin{gathered} 30 \\ (10.0) \end{gathered}$ | $\begin{gathered} 10 \\ (2.6) \end{gathered}$ | $\begin{gathered} 373 \\ (100.0) \end{gathered}$ |
| Other | $\begin{gathered} 51 \\ (34.7) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (25.5) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (31.3) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (7.4) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.0) \\ \hline \end{gathered}$ | $\begin{gathered} 150 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{array}{r} 3304 \\ 3216 \\ \hline \end{array}$ | $\begin{aligned} & 3755 \\ & 3787 \\ & \hline \end{aligned}$ | $\begin{array}{r} 3874 \\ 3921 \\ \hline \end{array}$ | $\begin{aligned} & 1417 \\ & 1488 \\ & \hline \end{aligned}$ | $\begin{aligned} & 211 \\ & 217 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12561 \\ & 12628 \end{aligned}$ |
|  | $\mathrm{p}=0.157$ |  |  |  |  |  |

Mother's Employment Status at MCS4

|  | 1169 | 1322 | 1319 | 564 | 114 | 4488 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not employed | $(25.1)$ | $(30.5)$ | $(28.9)$ | $(13.0)$ | $(2.5)$ | $(100.0)$ |
|  | 2136 | 2433 | 2556 | 853 | 97 | 8075 |
| Employed | $(25.7)$ | $(29.7)$ | $(32.3)$ | $(11.1)$ | $(1.3)$ | $(100.0)$ |
| Unweighted sample size | 3305 | 3755 | 3875 | 1417 | 211 | 12563 |
| Weighted observations | 3217 | 3787 | 3922 | 1488 | 217 | 12630 |
|  |  |  |  |  |  |  |
| $\mathrm{p}=0.000$ |  |  |  |  |  |  |

Mother's Highest Qualification at MCS4

| No qualifications | $\begin{gathered} 302 \\ (26.0) \end{gathered}$ | $\begin{gathered} 355 \\ (30.8) \end{gathered}$ | $\begin{gathered} 301 \\ (26.8) \end{gathered}$ | $\begin{gathered} 129 \\ (13.1) \end{gathered}$ | $\begin{gathered} 40 \\ (3.4) \end{gathered}$ | $\begin{gathered} 1127 \\ (100.0) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NVQ1 | $\begin{array}{r} 236 \\ (25.5) \\ \hline \end{array}$ | $\begin{array}{r} 254 \\ (30.2) \\ \hline \end{array}$ | $\begin{array}{r} 257 \\ (28.6) \\ \hline \end{array}$ | $\begin{array}{r} 109 \\ (13.3) \\ \hline \end{array}$ | $\begin{gathered} 18 \\ (2.4) \\ \hline \end{gathered}$ | $\begin{gathered} 874 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ2 | $\begin{gathered} 936 \\ (25.9) \\ \hline \end{gathered}$ | $\begin{gathered} 995 \\ (30.4) \\ \hline \end{gathered}$ | $\begin{gathered} 1015 \\ (30.0) \\ \hline \end{gathered}$ | $\begin{gathered} 403 \\ (12.1) \end{gathered}$ | $\begin{gathered} 57 \\ (1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 3406 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ3 | $\begin{gathered} 519 \\ (25.8) \end{gathered}$ | $\begin{gathered} 579 \\ (29.3) \end{gathered}$ | $\begin{gathered} 630 \\ (32.4) \end{gathered}$ | $\begin{gathered} 213 \\ (11.4) \end{gathered}$ | $\begin{gathered} 26 \\ (1.2) \end{gathered}$ | $\begin{gathered} 1967 \\ (100.0) \end{gathered}$ |
| NVQ4 | $\begin{gathered} 1028 \\ (25.2) \end{gathered}$ | $\begin{array}{r} 1212 \\ (29.4) \end{array}$ | $\begin{gathered} 1296 \\ (33.3) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 425 \\ (10.9) \end{gathered}$ | $\begin{gathered} \hline 53 \\ (1.4) \end{gathered}$ | $\begin{gathered} 4014 \\ (100.0) \end{gathered}$ |
| NVQ5 | $\begin{array}{r} 196 \\ (22.1) \\ \hline \end{array}$ | $\begin{array}{r} 282 \\ (33.0) \end{array}$ | $\begin{gathered} 293 \\ (32.5) \end{gathered}$ | $\begin{array}{r} 106 \\ (12.1) \end{array}$ | $\begin{gathered} 4 \\ (0.3) \end{gathered}$ | $\begin{gathered} 881 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 3217 \\ & 3126 \end{aligned}$ | $\begin{aligned} & 3677 \\ & 3708 \end{aligned}$ | $\begin{aligned} & 3792 \\ & 3836 \end{aligned}$ | $\begin{aligned} & 1385 \\ & 1451 \end{aligned}$ | 198 200 | $\begin{aligned} & 12269 \\ & 12322 \end{aligned}$ |
|  | $\mathrm{p}<0.005$ |  |  |  |  |  |
| Family Type at MCS4 |  |  |  |  |  |  |
| Two-parent | $\begin{gathered} 2654 \\ (26.0) \end{gathered}$ | $\begin{gathered} 3006 \\ (30.5) \\ \hline \end{gathered}$ | $\begin{gathered} 3098 \\ (31.0) \\ \hline \end{gathered}$ | $\begin{gathered} 1045 \\ (11.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 138 \\ (1.4) \\ \hline \end{array}$ | $\begin{gathered} 9941 \\ (100.0) \end{gathered}$ |
| Lone parent | $\begin{gathered} 651 \\ (23.7) \\ \hline \end{gathered}$ | $\begin{gathered} 749 \\ (28.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 777 \\ (31.1) \\ \hline \end{array}$ | $\begin{gathered} 372 \\ (14.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 73 \\ (2.9) \\ \hline \end{array}$ | $\begin{gathered} 2622 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted observations | $\begin{aligned} & 3305 \\ & 3217 \end{aligned}$ | $\begin{aligned} & 3755 \\ & 3787 \end{aligned}$ | $\begin{aligned} & 3875 \\ & 3922 \end{aligned}$ | $\begin{aligned} & 1417 \\ & 1488 \end{aligned}$ | 211 | $\begin{aligned} & 12563 \\ & 12630 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |

Sample includes all mothers completing self-completion instrument and responding to the question. Excludes 241 responding 'can't say'. Table displays unweighted observations and weighted percentages (country totals using weight 1 , UK totals using weight2).

## Smacking

Smacking the child was not a common form of punishment (Table 4.14). Over 90 per cent of all mothers did this rarely or never. However, those in Northern Ireland were a little more likely to report smacking than mothers in the other UK countries. Fortyseven per cent of mothers in Northern Ireland said they never smacked their child compared to 56 per cent of mothers in Wales. Overall, 53 per cent of mothers said they never smacked the child when naughty. At the age 5 survey, this percentage was 45 .

Table 4.14: How often mother smacks child when naughty at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Often |  | Obs |
| All Responding Mothers | 6662 | 5040 | 892 | 114 | 7 | 12715 |
| at MCS4 | $(52.6)$ | $(39.8)$ | $(6.6)$ | $(0.9)$ | $(0.1)$ | $(100.0)$ |

Country at MCS4

|  | 4184 | 3120 | 591 | 70 | 6 | 7971 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England | $(52.7)$ | $(39.6)$ | $(6.8)$ | $(0.9)$ | $(0.1)$ | $(100.0)$ |
|  | 1080 | 695 | 106 | 19 | 0 | 1900 |
| Wales | $(55.8)$ | $(37.6)$ | $(5.6)$ | $(1.0)$ | $(0.0)$ | $(100.0)$ |
|  | 814 | 655 | 74 | 11 | 1 | 1555 |
| Scotland | $(52.4)$ | $(42.0)$ | $(4.8)$ | $(0.8)$ | $(0.1)$ | $(100.0)$ |
|  | 584 | 570 | 121 | 14 | 0 | 1289 |
| Northern Ireland | $(47.5)$ | $(42.0)$ | $(9.2)$ | $(1.3)$ | $(0.0)$ | $(100.0)$ |
| Unweighted sample size | 6662 | 5040 | 892 | 114 | 7 | 12715 |
| Weighted Observations | 6780 | 5137 | 853 | 116 | 7 | 12893 |
|  |  |  |  |  |  |  |

Mother's Age at MCS4

| Under 30 | $\begin{gathered} 1143 \\ (52.9) \end{gathered}$ | $\begin{gathered} 809 \\ (38.3) \end{gathered}$ | $\begin{aligned} & \hline 149 \\ & (7.2) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 29 \\ (1.4) \end{gathered}$ | $\begin{gathered} \hline 4 \\ (0.2) \end{gathered}$ | $\begin{gathered} 2134 \\ (100.0) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 to 39 | $\begin{gathered} 3489 \\ (50.9) \end{gathered}$ | $\begin{gathered} 2801 \\ (41.4) \end{gathered}$ | $\begin{array}{r} 526 \\ (7.0) \end{array}$ | $\begin{gathered} 57 \\ (0.8) \end{gathered}$ | $\begin{gathered} 1 \\ (0.0) \end{gathered}$ | $\begin{gathered} 6874 \\ (100.0) \end{gathered}$ |
| 40 and above | $\begin{gathered} 2030 \\ (55.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 1430 \\ (37.9) \\ \hline \end{array}$ | $\begin{aligned} & \hline 217 \\ & (5.6) \\ & \hline \end{aligned}$ | $\begin{gathered} 28 \\ (0.7) \end{gathered}$ | $\begin{gathered} 2 \\ (0.1) \end{gathered}$ | $\begin{gathered} 3707 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 6662 \\ & 6730 \\ & \hline \end{aligned}$ | $\begin{aligned} & 5040 \\ & 5097 \\ & \hline \end{aligned}$ | $\begin{array}{r} 892 \\ 848 \\ \hline \end{array}$ | $\begin{aligned} & 114 \\ & 110 \\ & \hline \end{aligned}$ | $\begin{aligned} & 7 \\ & 8 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12715 \\ & 12793 \\ & \hline \end{aligned}$ |
|  |  |  |  | $\mathrm{p}=0.005$ |  |  |
| Mother's Ethnicity |  |  |  |  |  |  |
| White | $\begin{gathered} 5983 \\ (53.2) \\ \hline \end{gathered}$ | $\begin{aligned} & 4523 \\ & (40.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 677 \\ & (5.7) \end{aligned}$ | $\begin{gathered} 94 \\ (0.8) \end{gathered}$ | $\begin{gathered} 4 \\ (0.1) \end{gathered}$ | $\begin{gathered} 11281 \\ (100.0) \end{gathered}$ |
| Mixed | $\begin{gathered} 46 \\ (44.8) \end{gathered}$ | $\begin{gathered} 46 \\ (43.1) \end{gathered}$ | $\begin{gathered} 11 \\ (11.5) \end{gathered}$ | $\begin{gathered} 1 \\ (0.5) \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ | $\begin{gathered} 104 \\ (100.0) \end{gathered}$ |
| Indian | $\begin{gathered} 152 \\ (51.6) \\ \hline \end{gathered}$ | $\begin{gathered} 91 \\ (31.6) \\ \hline \end{gathered}$ | $\begin{gathered} 43 \\ (15.4) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (1.4) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 290 \\ (100.0) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 277 \\ (53.0) \end{gathered}$ | $\begin{gathered} 155 \\ (30.2) \end{gathered}$ | $\begin{gathered} 77 \\ (14.7) \end{gathered}$ | $\begin{gathered} 6 \\ \hline(1.6) \end{gathered}$ | $\begin{gathered} 2 \\ \hline(0.4) \end{gathered}$ | $\begin{gathered} 517 \\ (100.0) \end{gathered}$ |
| Black | $\begin{gathered} 131 \\ (37.0) \\ \hline \end{gathered}$ | $\begin{gathered} 175 \\ (45.2) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (17.1) \end{gathered}$ | $\begin{gathered} 3 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1) \end{gathered}$ | $\begin{gathered} 370 \\ (100.0) \\ \hline \end{gathered}$ |
| Other | $\begin{gathered} 71 \\ (49.4) \end{gathered}$ | $\begin{gathered} 50 \\ (33.2) \end{gathered}$ | $\begin{gathered} 24 \\ (13.1) \end{gathered}$ | $\begin{gathered} 6 \\ (4.3) \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ | $\begin{gathered} 151 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 6660 \\ & 6728 \end{aligned}$ | $\begin{aligned} & 5040 \\ & 5097 \end{aligned}$ | $\begin{aligned} & 892 \\ & 848 \\ & \hline \end{aligned}$ | $\begin{array}{r} 114 \\ 110 \\ \hline \end{array}$ | $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | $\begin{aligned} & 12713 \\ & 12791 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |

Table 4.14: How often mother smacks child when naughty at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Often | Daily |  |
| Continued |  |  |  |  |  |  |
| Mother's Employment Status at MCS4 |  |  |  |  |  |  |
| Not employed | $\begin{gathered} 2372 \\ (52.0) \\ \hline \end{gathered}$ | $\begin{gathered} 1771 \\ (39.4) \end{gathered}$ | $\begin{gathered} 370 \\ (7.4) \end{gathered}$ | $\begin{gathered} 55 \\ (1.1) \end{gathered}$ | $\begin{gathered} 6 \\ (0.1) \\ \hline \end{gathered}$ | $\begin{gathered} 4574 \\ (100.0) \\ \hline \end{gathered}$ |
| Employed | $\begin{gathered} 4290 \\ (53.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 3269 \\ (40.1) \\ \hline \end{array}$ | $\begin{array}{r} 522 \\ (6.2) \\ \hline \end{array}$ | $\begin{gathered} 59 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 8141 \\ (100.0) \\ \hline \end{gathered}$ |
| Continued |  |  |  |  |  |  |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 6662 \\ & 6730 \end{aligned}$ | $\begin{aligned} & 5040 \\ & 5097 \end{aligned}$ | $\begin{aligned} & 892 \\ & 848 \end{aligned}$ | $\begin{aligned} & 114 \\ & 110 \end{aligned}$ | $\begin{aligned} & 7 \\ & 8 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 12715 \\ & 12793 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.02$ |  |
| Mother's Highest Qualification at MCS4 |  |  |  |  |  |  |
| No qualifications | $\begin{gathered} 648 \\ (55.6) \\ \hline \end{gathered}$ | $\begin{gathered} 404 \\ (35.4) \\ \hline \end{gathered}$ | $\begin{gathered} 86 \\ (6.9) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.4) \\ \hline \end{gathered}$ | $\begin{gathered} 1161 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ1 | $\begin{gathered} 427 \\ (48.3) \\ \hline \end{gathered}$ | $\begin{gathered} 368 \\ (41.5) \\ \hline \end{gathered}$ | $\begin{gathered} 78 \\ (9.2) \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.3) \end{gathered}$ | $\begin{gathered} 883 \\ (100.0) \end{gathered}$ |
| NVQ2 | $\begin{gathered} 1727 \\ (50.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 1426 \\ (42.3) \\ \hline \end{array}$ | $\begin{array}{r} 260 \\ (6.9) \\ \hline \end{array}$ | $\begin{gathered} 29 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 3442 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ3 | $\begin{array}{r} 1029 \\ (50.5) \\ \hline \end{array}$ | $\begin{gathered} 828 \\ (43.3) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (5.5) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 1993 \\ (100.0) \\ \hline \end{array}$ |
| NVQ4 | $\begin{aligned} & 2158 \\ & (54.4) \end{aligned}$ | $\begin{gathered} 1610 \\ (39.1) \end{gathered}$ | $\begin{aligned} & 257 \\ & (5.9) \end{aligned}$ | $\begin{gathered} 25 \\ (0.6) \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ | $\begin{gathered} 4050 \\ (100.0) \end{gathered}$ |
| NVQ5 | $\begin{gathered} 529 \\ (62.2) \\ \hline \end{gathered}$ | $\begin{gathered} 302 \\ (31.0) \\ \hline \end{gathered}$ | $\begin{gathered} 46 \\ (5.2) \end{gathered}$ | $\begin{gathered} 12 \\ (1.6) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 889 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 6518 \\ & 6578 \end{aligned}$ | $\begin{aligned} & 4938 \\ & 4989 \end{aligned}$ | $\begin{aligned} & 847 \\ & 804 \end{aligned}$ | $\begin{aligned} & 108 \\ & 102 \\ & \hline \end{aligned}$ | $\begin{aligned} & 7 \\ & 8 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12418 \\ & 12481 \end{aligned}$ |
|  |  |  |  |  | $p=0.00$ |  |
| Family Type at MCS4 |  |  |  |  |  |  |
| Two-parent | $\begin{gathered} 5234 \\ (52.3) \\ \hline \end{gathered}$ | $\begin{gathered} 4029 \\ (40.2) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 709 \\ (6.7) \\ \hline \end{array}$ | $\begin{gathered} 80 \\ (0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.0) \end{gathered}$ | $\begin{array}{r} 10056 \\ (100.0) \\ \hline \end{array}$ |
| Lone parent | $\begin{array}{r} 1428 \\ (53.7) \\ \hline \end{array}$ | $\begin{array}{r} 1011 \\ (38.6) \\ \hline \end{array}$ | $\begin{aligned} & 709 \\ & (6.7) \\ & \hline \end{aligned}$ | $\begin{gathered} 34 \\ (1.2) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.1) \\ \hline \end{gathered}$ | $\begin{gathered} 2659 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 6662 \\ & 6730 \end{aligned}$ | $\begin{aligned} & 5040 \\ & 5097 \end{aligned}$ | $\begin{aligned} & 892 \\ & 848 \end{aligned}$ | $\begin{aligned} & 114 \\ & 110 \end{aligned}$ | $\begin{aligned} & 7 \\ & 8 \end{aligned}$ | $\begin{aligned} & 12715 \\ & 12793 \end{aligned}$ |
|  | $\mathrm{p}=0.241$ |  |  |  |  |  |

Sample includes all mothers completing self-completion instrument and responding to the question. Eighty-nine observations excluded because respondents answered 'can't say' to question. Table displays unweighted observations and weighted percentages (country totals using weight1, UK totals using weight2).

## Shouting at child

Very few mothers (3\%) reported that they never shouted at their child when they were naughty. (Table not shown). While most mothers reported that they used shouting as a form of discipline, it was fairly evenly spread in frequency, with around 25 per cent of mothers doing so 'rarely', 38 per cent 'sometimes' and 30 per cent 'often'.

There was generally very little variation between mothers in different circumstances. However, even though the difference was small, mothers under 30 were twice as likely as those aged 40 and over to report using this form of discipline every day ( $8 \%$ compared to $3 \%$ ).

While mothers with no qualifications were twice as likely as mothers with the highest qualifications to never shout, they were also twice as likely to use this as a discipline method every day.

## Sending child to their bedroom or naughty chair

Sending a child to their bedroom or the naughty chair was another form of discipline commonly used by all mothers, with 60 per cent of them reporting using this form at least sometimes. (Table not shown). Younger mothers were much more likely than older ones to report sending their children to their bedroom or using a naughty chair often or daily. Twice as many mothers under 30 ( $30 \%$ ) did this often or daily, compared to those aged 40 and over (12\%).

Overall 12 per cent of all mothers never used 'time out' with their children. Mothers in Scotland were even less likely than mothers in the other UK countries to report never using this method of 'time out' with their children. Eight per cent never did this compared to 14 per cent in Northern Ireland.

## Taking treats away

Taking treats away was another tactic that most mothers (63\%) used at least sometimes. (Table not shown). However, mothers under 30 were twice as likely to take treats away in response to naughty behaviour as were mothers aged 40 and over, with 26 per cent doing this often or daily compared to 12 per cent of the oldest mothers.

## Telling child off/Reasoning with a naughty child

Virtually all mothers reported telling their child off when they were naughty and over a half did this often or daily (Table 4.15). As with other forms of discipline, there were some differences between how frequently older and younger mothers used this method with their children. Mothers aged 40-plus were half as likely as those under 30 to tell their child off daily ( $6 \%$ compared with $12 \%$ ).

Mothers who did not work outside the home were a little more likely than employed mothers to report telling their child off every day ( $12 \%$ compared to $7 \%$ ).

There was some variation between how often higher qualified mothers, and those with few or no qualifications, told their child off. Over half ( $55 \%$ ) of mothers with degrees (NVQ4 or 5) reported telling their child off often compared to 43 per cent of those with no qualifications.

Over half of mothers said that they usually reasoned with their child (often or daily) when he or she was naughty. (Table not shown). There were differentials by education of mother, with over two-thirds (70\%) of those with the highest qualifications (NVQ5) giving this response compared to less than half (47\%) of those with no qualifications.

Table 4.15: How often mother tells child off when naughty at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Often | Daily |  |
| All Responding Mothers At MCS4 | $\begin{gathered} 104 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1624 \\ (12.8) \\ \hline \end{array}$ | $\begin{array}{r} 4546 \\ (35.6) \\ \hline \end{array}$ | $\begin{gathered} 5328 \\ (42.0) \\ \hline \end{gathered}$ | $\begin{aligned} & 1137 \\ & (9.0) \\ & \hline \end{aligned}$ | $\begin{array}{r} 12739 \\ (100.0) \\ \hline \end{array}$ |
| Country at MCS4 |  |  |  |  |  |  |
| England | $\begin{gathered} \hline 86 \\ (0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 1004 \\ (12.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 2888 \\ (35.8) \\ \hline \end{array}$ | $\begin{gathered} 3315 \\ (42.2) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 680 \\ & (8.6) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 7973 \\ (100.0) \\ \hline \end{gathered}$ |
| Wales | $\begin{gathered} 7 \\ (0.3) \\ \hline \end{gathered}$ | $\begin{gathered} 292 \\ (15.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 718 \\ (38.1) \\ \hline \end{array}$ | $\begin{array}{r} 719 \\ (37.4) \\ \hline \end{array}$ | $\begin{array}{r} 172 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 1908 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{gathered} 3 \\ (0.2) \end{gathered}$ | $\begin{gathered} 170 \\ (11.6) \end{gathered}$ | $\begin{gathered} 497 \\ (32.4) \end{gathered}$ | $\begin{gathered} 727 \\ (45.8) \end{gathered}$ | $\begin{gathered} 161 \\ (10.1) \end{gathered}$ | $\begin{gathered} 1558 \\ (100.0) \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 8 \\ (0.5) \\ \hline \end{gathered}$ | $\begin{gathered} 158 \\ (12.3) \\ \hline \end{gathered}$ | $\begin{gathered} 443 \\ (34.0) \\ \hline \end{gathered}$ | $\begin{gathered} 567 \\ (42.8) \end{gathered}$ | $\begin{gathered} 124 \\ (10.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 1300 \\ (100.0) \\ \hline \end{array}$ |
| Unweighted sample size Weighted Observations | $\begin{gathered} 104 \\ 79 \end{gathered}$ | $\begin{aligned} & 1624 \\ & 1658 \end{aligned}$ | $\begin{aligned} & 4546 \\ & 4593 \end{aligned}$ | $\begin{aligned} & 5328 \\ & 5426 \end{aligned}$ | $\begin{aligned} & 1137 \\ & 1161 \end{aligned}$ | $\begin{aligned} & 12739 \\ & 12916 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.0$ |  |
| Mother's Age at MCS4 |  |  |  |  |  |  |
| Under 30 | $\begin{gathered} 16 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{gathered} 344 \\ (16.0) \\ \hline \end{gathered}$ | $\begin{gathered} 697 \\ (32.1) \end{gathered}$ | $\begin{gathered} 816 \\ (38.8) \\ \hline \end{gathered}$ | $\begin{gathered} 264 \\ (12.5) \\ \hline \end{gathered}$ | $\begin{gathered} 2137 \\ (100.0) \\ \hline \end{gathered}$ |
| 30 to 39 | $\begin{gathered} 59 \\ (0.8) \end{gathered}$ | $\begin{gathered} 848 \\ (12.2) \end{gathered}$ | $\begin{gathered} 2429 \\ (34.9) \end{gathered}$ | $\begin{aligned} & 2906 \\ & (43.0) \end{aligned}$ | $\begin{aligned} & 638 \\ & (9.1) \end{aligned}$ | $\begin{gathered} 6880 \\ (100.0) \end{gathered}$ |
| 40 and above | $\begin{gathered} 29 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{gathered} 432 \\ (11.4) \end{gathered}$ | $\begin{array}{r} 1420 \\ (38.5) \end{array}$ | $\begin{array}{r} 1606 \\ (43.6) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (5.9) \\ \hline \end{array}$ | $\begin{gathered} 3722 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{gathered} 104 \\ 89 \\ \hline \end{gathered}$ | $\begin{aligned} & 1624 \\ & 1625 \\ & \hline \end{aligned}$ | $\begin{array}{r} 4546 \\ 4534 \\ \hline \end{array}$ | $\begin{array}{r} 5328 \\ 5429 \\ \hline \end{array}$ | $\begin{aligned} & 1137 \\ & 1129 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12739 \\ & 12806 \\ & \hline \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.0$ |  |
| Mother's Ethnicity |  |  |  |  |  |  |
| White | $\begin{gathered} \hline 46 \\ (0.4) \end{gathered}$ | $\begin{aligned} & 1386 \\ & (12.4) \end{aligned}$ | $\begin{gathered} 3989 \\ (35.0) \end{gathered}$ | $\begin{gathered} \hline 4869 \\ (43.4) \end{gathered}$ | $\begin{gathered} 999 \\ (8.8) \end{gathered}$ | $\begin{array}{r} 11289 \\ (100.0) \end{array}$ |
| Mixed | $\begin{gathered} 4 \\ (4.5) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (10.8) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (37.8) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (37.9) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (9.0) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \\ (100.0) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 6 \\ (1.1) \end{gathered}$ | $\begin{gathered} 53 \\ (16.4) \end{gathered}$ | $\begin{gathered} 115 \\ (43.0) \end{gathered}$ | $\begin{gathered} 96 \\ (33.3) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (6.2) \end{gathered}$ | $\begin{gathered} 292 \\ (100.0) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 29 \\ (4.9) \end{gathered}$ | $\begin{gathered} 85 \\ (14.2) \end{gathered}$ | $\begin{gathered} 203 \\ (39.7) \end{gathered}$ | $\begin{gathered} 146 \\ (29.4) \end{gathered}$ | $\begin{gathered} 58 \\ (11.8) \end{gathered}$ | $\begin{gathered} 521 \\ (100.0) \end{gathered}$ |
| Black | $\begin{gathered} 11 \\ (3.0) \\ \hline \end{gathered}$ | $\begin{gathered} 61 \\ (16.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 150 \\ (37.8) \\ \hline \end{array}$ | $\begin{gathered} 130 \\ (34.8) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (7.7) \\ \hline \end{gathered}$ | $\begin{gathered} 382 \\ (100.0) \\ \hline \end{gathered}$ |
| Other | $\begin{gathered} 8 \\ (4.9) \end{gathered}$ | $\begin{gathered} 25 \\ (15.9) \end{gathered}$ | $\begin{gathered} 51 \\ (36.0) \end{gathered}$ | $\begin{gathered} 49 \\ (34.9) \end{gathered}$ | $\begin{gathered} 16 \\ (8.4) \end{gathered}$ | $\begin{gathered} 149 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{gathered} 104 \\ 89 \end{gathered}$ | $\begin{aligned} & 1624 \\ & 1625 \end{aligned}$ | $\begin{aligned} & 4544 \\ & 4531 \end{aligned}$ | $\begin{aligned} & 5328 \\ & 5429 \end{aligned}$ | $\begin{aligned} & 1137 \\ & 1129 \end{aligned}$ | $\begin{aligned} & 12737 \\ & 12804 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.0$ |  |
| Mother's Employment Status at MCS4 |  |  |  |  |  |  |
| Not employed | $\begin{gathered} \hline 58 \\ (1.1) \\ \hline \end{gathered}$ | $\begin{gathered} 673 \\ (14.9) \\ \hline \end{gathered}$ | $\begin{gathered} 1563 \\ (33.6) \end{gathered}$ | $\begin{gathered} 1769 \\ (38.7) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 534 \\ (11.7) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4597 \\ (100.0) \\ \hline \end{gathered}$ |
| Employed | $\begin{gathered} 46 \\ (0.5) \\ \hline \end{gathered}$ | $\begin{gathered} 951 \\ (11.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 2983 \\ (36.4) \\ \hline \end{array}$ | $\begin{array}{r} 3559 \\ (44.6) \\ \hline \end{array}$ | $\begin{gathered} 603 \\ (7.1) \\ \hline \end{gathered}$ | $\begin{gathered} 8142 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{gathered} 104 \\ 89 \\ \hline \end{gathered}$ | $\begin{aligned} & 1624 \\ & 1625 \\ & \hline \end{aligned}$ | $\begin{array}{r} 4546 \\ 4534 \\ \hline \end{array}$ | $\begin{aligned} & 5328 \\ & 5429 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1137 \\ & 1129 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12739 \\ & 12806 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.0$ |  |
| Mother's Highest Qualification at MCS4 |  |  |  |  |  |  |
| No qualifications | $\begin{gathered} \hline 30 \\ (2.3) \end{gathered}$ | $\begin{gathered} 236 \\ (19.8) \end{gathered}$ | $\begin{gathered} 406 \\ (35.0) \end{gathered}$ | $\begin{gathered} 356 \\ (30.9) \end{gathered}$ | $\begin{gathered} \hline 140 \\ (12.0) \end{gathered}$ | $\begin{gathered} \hline 1168 \\ (100.0) \end{gathered}$ |
| NVQ1 | $\begin{gathered} 4 \\ (0.4) \\ \hline \end{gathered}$ | $\begin{gathered} 139 \\ (15.5) \\ \hline \end{gathered}$ | $\begin{gathered} 322 \\ (34.7) \\ \hline \end{gathered}$ | $\begin{gathered} 332 \\ (37.9) \\ \hline \end{gathered}$ | $\begin{gathered} 92 \\ (11.5) \\ \hline \end{gathered}$ | $\begin{gathered} 889 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ2 | $\begin{gathered} 24 \\ (0.6) \end{gathered}$ | $\begin{gathered} 468 \\ (13.0) \end{gathered}$ | $\begin{array}{r} 1243 \\ (36.5) \end{array}$ | $\begin{gathered} 1406 \\ (41.6) \end{gathered}$ | $\begin{aligned} & 309 \\ & (8.3) \end{aligned}$ | $\begin{gathered} 3450 \\ (100.0) \end{gathered}$ |
| NVQ3 | $\begin{gathered} 15 \\ (0.5) \\ \hline \end{gathered}$ | $\begin{gathered} 259 \\ (12.3) \\ \hline \end{gathered}$ | $\begin{gathered} 664 \\ (32.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 868 \\ (45.2) \\ \hline \end{array}$ | $\begin{array}{r} 185 \\ (9.3) \\ \hline \end{array}$ | $\begin{gathered} 1991 \\ (100.0) \\ \hline \end{gathered}$ |

Table 4.15: How often mother tells child off when naughty at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Rarely | Sometimes | Often | Daily |  |
| Continued |  |  |  |  |  |  |
| NVQ4 | $\begin{gathered} 18 \\ (0.5) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 393 \\ (9.9) \\ \hline \end{gathered}$ | $\begin{array}{r} 1476 \\ (35.6) \\ \hline \end{array}$ | $\begin{array}{r} 1853 \\ (46.6) \\ \hline \end{array}$ | $\begin{gathered} \hline 311 \\ (7.5) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4051 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ5 | $\begin{gathered} 6 \\ (0.7) \end{gathered}$ | $\begin{gathered} 75 \\ (10.0) \end{gathered}$ | $\begin{gathered} 327 \\ (36.8) \end{gathered}$ | $\begin{gathered} 414 \\ (45.2) \end{gathered}$ | $\begin{gathered} 69 \\ (7.4) \end{gathered}$ | $\begin{gathered} 891 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 97 \\ & 85 \end{aligned}$ | $\begin{aligned} & 1570 \\ & 1574 \end{aligned}$ | $\begin{aligned} & 4438 \\ & 4418 \end{aligned}$ | $\begin{aligned} & 5229 \\ & 5320 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1106 \\ & 1097 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12440 \\ & 12494 \end{aligned}$ |
|  | $\mathrm{p}=0.000$ |  |  |  |  |  |
| Family Type at MCS4 |  |  |  |  |  |  |
| Two-parent | $\begin{gathered} 80 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1224 \\ (12.1) \\ \hline \end{array}$ | $\begin{array}{r} 3625 \\ (35.6) \\ \hline \end{array}$ | $\begin{gathered} 4259 \\ (43.0) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 884 \\ & (8.6) \\ & \hline \end{aligned}$ | $\begin{array}{r} 10072 \\ (100.0) \\ \hline \end{array}$ |
| Lone parent | $\begin{gathered} 24 \\ (0.9) \end{gathered}$ | $\begin{aligned} & 1224 \\ & (12.1) \end{aligned}$ | $\begin{gathered} 921 \\ (34.7) \end{gathered}$ | $\begin{gathered} 1069 \\ (40.3) \end{gathered}$ | $\begin{aligned} & 253 \\ & (9.4) \end{aligned}$ | $\begin{gathered} 2667 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{gathered} 104 \\ 89 \end{gathered}$ | $\begin{aligned} & 1624 \\ & 1625 \end{aligned}$ | $\begin{aligned} & 4546 \\ & 4534 \end{aligned}$ | $\begin{aligned} & 5328 \\ & 5429 \end{aligned}$ | $\begin{aligned} & 1137 \\ & 1129 \end{aligned}$ | $\begin{aligned} & 12739 \\ & 12806 \end{aligned}$ |
|  | $\mathrm{p}=0.014$ |  |  |  |  |  |

Sample includes all mothers completing self-completion instrument and responding to the question. 65 observations excluded who responded 'can't say' to question. Table displays unweighted observations and weighted percentages (country totals using weight1, UK totals using weight2).

## Bribing child with sweets or a treat

While three-quarters of mothers reported that they never or rarely resorted to bribing children when they were naughty, those with qualifications at or above A level (NVQ3 or above) were slightly more likely than those with fewer or no qualifications to report sometimes using this tactic to combat bad behaviour. (Table not shown).

## Parenting competence

Mothers were asked to rate how they felt about being a parent. The majority of them thought they were better than average or very good parents (Table 4.16). This suggests a small improvement in parents' confidence across the surveys since age 3 . At that survey 30 per cent of mothers rated themselves very good, at age 5,31 per cent and at 7,35 per cent ${ }^{8}$.

Younger mothers (under 30) felt a little less confident than did older parents in their parenting competence. Fifty-five per cent of those under 30 felt they were better than average or very good compared to around 64 per cent of those over 30. Indian, Pakistani, Bangladeshi and black mothers were more likely to feel they were very good parents than were white mothers.

Mothers with the highest qualifications (NVQ4 or above) were more likely to feel they were better than average or very good parents than were those with fewer qualifications. Nearly three-quarters of the highest-qualified mothers rated

[^8]themselves positively as a parent compared to around a half of mothers with no qualifications or NVQ1. However, mothers with no qualifications were more likely to rate themselves as a very good parent (41\%) than were mothers with NVQ5 (31\%).

Although employed mothers were a little more likely than those not working outside the home to report that they felt they were a better than average or very good parent ( $64 \%$ compared to $59 \%$ ), those not employed were slightly more likely to think they were a very good parent ( $37 \%$ compared to $33 \%$ ).

There was very little variation between mothers in different UK countries or between those in lone or two-parent families.

Table 4.16: How mother feels as a parent at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not Very Good Parent | Have Some Trouble | Average Parent | Better Than Average | Very Good Parent |  |
| All Responding Mothers at MCS4 | $\begin{gathered} 55 \\ (0.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 345 \\ (3.1) \\ \hline \end{array}$ | $\begin{array}{r} 4283 \\ (34.5) \\ \hline \end{array}$ | $\begin{array}{r} 3469 \\ (27.1) \\ \hline \end{array}$ | $\begin{array}{r} 4577 \\ (34.9) \\ \hline \end{array}$ | $\begin{array}{r} 12729 \\ (100.0) \\ \hline \end{array}$ |
| Country at MCS4 |  |  |  |  |  |  |
| England | $\begin{gathered} \hline 34 \\ (0.4) \end{gathered}$ | $\begin{array}{r} 238 \\ (3.4) \end{array}$ | $\begin{gathered} 2620 \\ (34.1) \end{gathered}$ | $\begin{gathered} 2204 \\ (27.8) \end{gathered}$ | $\begin{gathered} 2881 \\ (34.3) \end{gathered}$ | $\begin{gathered} \hline 7977 \\ (100.0) \end{gathered}$ |
| Wales | $\begin{gathered} \hline 6 \\ (0.2) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 43 \\ (2.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 686 \\ (36.1) \\ \hline \end{array}$ | $\begin{gathered} 449 \\ (23.8) \\ \hline \end{gathered}$ | $\begin{gathered} 716 \\ (37.3) \\ \hline \end{gathered}$ | $\begin{gathered} 1900 \\ (100.0) \\ \hline \end{gathered}$ |
| Scotland | $\begin{gathered} 8 \\ (0.7) \end{gathered}$ | $\begin{gathered} \hline 43 \\ (2.9) \end{gathered}$ | $\begin{gathered} 534 \\ (35.4) \end{gathered}$ | $\begin{array}{r} 474 \\ (28.6) \\ \hline \end{array}$ | $\begin{gathered} 494 \\ (32.4) \end{gathered}$ | $\begin{gathered} 1553 \\ (100.0) \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 7 \\ (0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (2.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 443 \\ (33.3) \\ \hline \end{array}$ | $\begin{gathered} 342 \\ (25.8) \end{gathered}$ | $\begin{array}{r} 486 \\ (38.0) \\ \hline \end{array}$ | $\begin{gathered} 1299 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 55 \\ & 58 \\ & \hline \end{aligned}$ | $\begin{array}{r} 345 \\ 398 \\ \hline \end{array}$ | $\begin{array}{r} 4283 \\ 4447 \\ \hline \end{array}$ | $\begin{array}{r} 3469 \\ 3499 \\ \hline \end{array}$ | $\begin{array}{r} 4577 \\ 4497 \\ \hline \end{array}$ | $\begin{aligned} & 12729 \\ & 12899 \\ & \hline \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.007$ |  |
| Mother's Age at MCS4 |  |  |  |  |  |  |
| Under 30 | $\begin{gathered} \hline 11 \\ (0.6) \end{gathered}$ | $\begin{gathered} 91 \\ (5.2) \end{gathered}$ | $\begin{gathered} 819 \\ (38.7) \end{gathered}$ | $\begin{gathered} 464 \\ (21.6) \end{gathered}$ | $\begin{gathered} 743 \\ (33.8) \end{gathered}$ | $\begin{gathered} 2128 \\ (100.0) \end{gathered}$ |
| 30 to 39 | $\begin{gathered} 28 \\ (0.4) \\ \hline \end{gathered}$ | $\begin{aligned} & 176 \\ & (2.7) \\ & \hline \end{aligned}$ | $\begin{gathered} 2260 \\ (33.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 1912 \\ (27.7) \\ \hline \end{array}$ | $\begin{array}{r} 2504 \\ (35.3) \\ \hline \end{array}$ | $\begin{gathered} 6880 \\ (100.0) \\ \hline \end{gathered}$ |
| 40 and above | $\begin{gathered} 16 \\ (0.3) \end{gathered}$ | $\begin{gathered} 78 \\ (2.3) \end{gathered}$ | $\begin{array}{r} 1204 \\ (32.8) \end{array}$ | $\begin{array}{r} 1093 \\ (29.9) \\ \hline \end{array}$ | $\begin{array}{r} 1330 \\ (34.6) \\ \hline \end{array}$ | $\begin{gathered} 3721 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 55 \\ & 58 \\ & \hline \end{aligned}$ | $\begin{aligned} & 345 \\ & 398 \end{aligned}$ | $\begin{aligned} & 4283 \\ & 4447 \end{aligned}$ | $\begin{aligned} & 3469 \\ & 3499 \end{aligned}$ | $\begin{aligned} & 4577 \\ & 4497 \end{aligned}$ | $\begin{aligned} & 12729 \\ & 12899 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Mother's Ethnicity |  |  |  |  |  |  |
| White | $\begin{gathered} \hline 42 \\ (0.4) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 319 \\ (3.2) \\ \hline \end{array}$ | $\begin{array}{r} 3972 \\ (35.5) \\ \hline \end{array}$ | $\begin{array}{r} 3122 \\ (27.4) \\ \hline \end{array}$ | $\begin{array}{r} 3823 \\ (33.6) \\ \hline \end{array}$ | $\begin{array}{r} \hline 11278 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{gathered} 0 \\ (0.0) \end{gathered}$ | $\begin{gathered} 1 \\ (0.6) \end{gathered}$ | $\begin{gathered} 33 \\ (28.8) \end{gathered}$ | $\begin{gathered} 32 \\ (33.6) \end{gathered}$ | $\begin{gathered} 40 \\ (37.0) \end{gathered}$ | $\begin{gathered} 106 \\ (100.0) \end{gathered}$ |
| Indian | $\begin{gathered} 1 \\ (0.1) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (2.6) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (23.9) \\ \hline \end{gathered}$ | $\begin{gathered} 71 \\ (24.7) \\ \hline \end{gathered}$ | $\begin{gathered} 148 \\ (48.7) \\ \hline \end{gathered}$ | $\begin{gathered} 291 \\ (100.0) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 3 \\ (0.8) \end{gathered}$ | $\begin{gathered} 10 \\ (1.7) \end{gathered}$ | $\begin{gathered} 113 \\ (22.3) \end{gathered}$ | $\begin{gathered} 130 \\ (26.2) \end{gathered}$ | $\begin{gathered} 263 \\ (49.0) \end{gathered}$ | $\begin{gathered} 519 \\ (100.0) \end{gathered}$ |
| Black | $\begin{gathered} 4 \\ (0.9) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (2.2) \end{gathered}$ | $\begin{gathered} 71 \\ (22.0) \\ \hline \end{gathered}$ | $\begin{gathered} 76 \\ (18.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 226 \\ (56.2) \\ \hline \end{array}$ | $\begin{gathered} 383 \\ (100.0) \\ \hline \end{gathered}$ |
| Other | $\begin{gathered} 5 \\ (3.7) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (3.3) \\ \hline \end{gathered}$ | $\begin{gathered} 27 \\ (21.5) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (26.0) \\ \hline \end{gathered}$ | $\begin{gathered} 77 \\ (45.6) \\ \hline \end{gathered}$ | $\begin{gathered} 150 \\ (100.0) \\ \hline \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 55 \\ & 58 \end{aligned}$ | $\begin{aligned} & 345 \\ & 398 \end{aligned}$ | $\begin{aligned} & 4283 \\ & 4447 \end{aligned}$ | $\begin{aligned} & 3467 \\ & 3497 \end{aligned}$ | $\begin{aligned} & 4577 \\ & 4497 \end{aligned}$ | $\begin{aligned} & 12727 \\ & 12897 \end{aligned}$ |
| $\mathrm{p}=0.000$ |  |  |  |  |  |  |

Table 4.16: How mother feels as a parent at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  | Total Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not Very <br> Good <br> Parent | Have Some Trouble | Average Parent | Better Than Average | Very Good Parent |  |
| Continued |  |  |  |  |  |  |
| Mother's Employment Status at MCS4 |  |  |  |  |  |  |
| Not employed | $\begin{gathered} 23 \\ (0.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 165 \\ (4.2) \\ \hline \end{array}$ | $\begin{array}{r} 1580 \\ (36.3) \\ \hline \end{array}$ | $\begin{array}{r} 1009 \\ (21.6) \\ \hline \end{array}$ | $\begin{array}{r} 1801 \\ (37.4) \\ \hline \end{array}$ | $\begin{gathered} 4578 \\ (100.0) \end{gathered}$ |
| Employed | $\begin{gathered} 32 \\ (0.4) \end{gathered}$ | $\begin{aligned} & 180 \\ & (2.4) \end{aligned}$ | $\begin{gathered} 2703 \\ (33.4) \end{gathered}$ | $\begin{gathered} 2460 \\ (30.3) \end{gathered}$ | $\begin{gathered} 2776 \\ (33.4) \end{gathered}$ | $\begin{gathered} 8151 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 55 \\ & 58 \end{aligned}$ | $\begin{aligned} & 345 \\ & 398 \end{aligned}$ | $\begin{aligned} & 4283 \\ & 4447 \end{aligned}$ | $\begin{aligned} & 3469 \\ & 3499 \end{aligned}$ | $\begin{aligned} & 4577 \\ & 4497 \end{aligned}$ | $\begin{aligned} & 12729 \\ & 12899 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Mother's Highest Qualification at MCS4 |  |  |  |  |  |  |
| No qualifications | $\begin{gathered} 8 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 45 \\ (4.6) \\ \hline \end{gathered}$ | $\begin{gathered} 419 \\ (38.5) \\ \hline \end{gathered}$ | $\begin{gathered} 172 \\ (14.9) \end{gathered}$ | $\begin{gathered} 516 \\ (41.4) \\ \hline \end{gathered}$ | $\begin{gathered} 1160 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ1 | $\begin{gathered} 3 \\ (0.5) \end{gathered}$ | $\begin{gathered} \hline 36 \\ (4.8) \end{gathered}$ | $\begin{gathered} 341 \\ (38.7) \end{gathered}$ | $\begin{gathered} 175 \\ (19.2) \end{gathered}$ | $\begin{array}{r} 334 \\ (36.8) \\ \hline \end{array}$ | $\begin{gathered} 889 \\ (100.0) \end{gathered}$ |
| NVQ2 | $\begin{gathered} 18 \\ (0.5) \end{gathered}$ | $\begin{gathered} 99 \\ (3.1) \end{gathered}$ | $\begin{aligned} & 1288 \\ & (37.9) \end{aligned}$ | $\begin{gathered} 790 \\ (23.1) \end{gathered}$ | $\begin{array}{r} 1254 \\ (35.3) \end{array}$ | $\begin{gathered} 3449 \\ (100.0) \end{gathered}$ |
| NVQ3 | $\begin{gathered} 14 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (3.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 657 \\ (34.1) \\ \hline \end{array}$ | $\begin{array}{r} 575 \\ (28.9) \\ \hline \end{array}$ | $\begin{gathered} 687 \\ (33.0) \\ \hline \end{gathered}$ | $\begin{gathered} 1993 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ4 | $\begin{gathered} 11 \\ (0.2) \\ \hline \end{gathered}$ | $\begin{gathered} 73 \\ (2.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 1232 \\ (30.7) \\ \hline \end{array}$ | $\begin{array}{r} 1367 \\ (33.9) \\ \hline \end{array}$ | $\begin{array}{r} 1370 \\ (33.2) \end{array}$ | $\begin{gathered} 4053 \\ (100.0) \\ \hline \end{gathered}$ |
| NVQ5 | $\begin{gathered} 1 \\ (0.2) \end{gathered}$ | $\begin{gathered} 21 \\ (2.9) \end{gathered}$ | $\begin{gathered} 254 \\ (27.9) \end{gathered}$ | $\begin{gathered} 324 \\ (37.8) \end{gathered}$ | $\begin{gathered} 287 \\ (31.2) \end{gathered}$ | $\begin{gathered} 887 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 55 \\ & 58 \\ & 58 \end{aligned}$ | $\begin{aligned} & 334 \\ & 383 \end{aligned}$ | $\begin{aligned} & 4191 \\ & 4352 \end{aligned}$ | $\begin{aligned} & 3403 \\ & 3429 \end{aligned}$ | $\begin{aligned} & 4448 \\ & 4377 \end{aligned}$ | $\begin{aligned} & 12431 \\ & 12600 \end{aligned}$ |
|  |  |  |  |  | $\mathrm{p}=0.000$ |  |
| Family Type at MCS4 |  |  |  |  |  |  |
| Two-parent | $\begin{gathered} 32 \\ (0.3) \end{gathered}$ | $\begin{aligned} & 222 \\ & (2.5) \end{aligned}$ | $\begin{gathered} 3363 \\ (34.1) \end{gathered}$ | $\begin{gathered} 2844 \\ (28.4) \end{gathered}$ | $\begin{gathered} 3615 \\ (34.8) \end{gathered}$ | $\begin{array}{r} 10076 \\ (100.0) \end{array}$ |
| Lone parent | $\begin{gathered} 23 \\ (0.9) \\ \hline \end{gathered}$ | $\begin{aligned} & 123 \\ & (5.2) \end{aligned}$ | $\begin{gathered} 920 \\ (35.9) \end{gathered}$ | $\begin{gathered} \hline 625 \\ (22.8) \\ \hline \end{gathered}$ | $\begin{gathered} 962 \\ (35.2) \end{gathered}$ | $\begin{gathered} 2653 \\ (100.0) \end{gathered}$ |
| Unweighted sample size Weighted Observations | $\begin{aligned} & 55 \\ & 58 \end{aligned}$ | $\begin{aligned} & 345 \\ & 398 \\ & \hline \end{aligned}$ | $\begin{array}{r} 4283 \\ 4447 \\ \hline \end{array}$ | $\begin{array}{r} 3469 \\ 3499 \\ \hline \end{array}$ | $\begin{array}{r} 4577 \\ 4497 \\ \hline \end{array}$ | $\begin{aligned} & 12729 \\ & 12899 \end{aligned}$ |
|  | , $\quad \mathrm{p}=0.000$ |  |  |  |  |  |

Sample includes all mothers completing self-completion instrument and responding to the question. Seventy-six observations excluded who responded 'can't say' to question on parenting competence. Table displays unweighted observations and weighted percentages (country totals using weight1, UK totals using weight2).

## Bedtime regularity

Main respondents were asked whether their children went to bed at a regular time on weekdays during term time at age 7 (Table 4.17). Overall, 96 per cent reported that their children went to bed at a regular time. The modal weekday bedtime was 8 pm .

Mothers in Northern Ireland reported the most regular bedtimes and those in Wales the least. Nearly two-thirds of mothers under 30 always had a regular weekday bedtime for their children compared to just over a half of mothers aged 40 and over.

While overall 4 per cent of mothers reported that their children never or almost never had a regular bedtime, this rose to 8 per cent of those with no qualifications.

Table 4.17: On weekdays during term time, does your child go to bed at a regular time? Mothers at MCS4

|  | Unweighted Observations (Weighted Percentage) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Never or Almost <br> Never | Sometimes | Usually | Always | Total Obs |
|  | 521 | 764 | 4098 | 7953 | 13336 |
| MCS4 | $(3.8)$ | $(5.4)$ | $(31.0)$ | $(59.8)$ | $(100.0)$ |

## Country at MCS4



Table 4.17: On weekdays during term time, does your child go to bed at a regular time? Mothers at MCS4


Sample includes all mothers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

## Child's involvement with household chores

A new question in the age 7 survey probed the extent to which children were involved with household chores. Mothers were asked how often their seven-year-olds were expected to do tasks such as tidying up their bedroom, washing dishes or caring for pets.

As Table 4.18 shows, nearly a third of children were expected to do household chores every day. While there was generally little variation across the different countries, mothers in Northern Ireland reported both the highest rates of frequent involvement by their children in household tasks but also the highest rates of no involvement.

Similarly the youngest mothers (those under 30) were more likely than older ones to give children chores every day, but also more likely to not expect them to do any.

Mothers with no qualifications were much more likely to never give their children household tasks, with 18 per cent never doing so compared to 5 per cent of graduate mothers (NVQ4 and over).

Table 4.18: How often child is involved in household chores at MCS4


Mother's Ethnicity

|  | 3610 | 2352 | 3115 | 948 | 497 | 944 | 11466 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White | $(31.9)$ | $(20.4)$ | $(27.4)$ | $(8.0)$ | $(4.3)$ | $(7.9)$ | $(100.0)$ |
|  | 42 | 20 | 29 | 11 | 9 | 6 | 117 |
| Mixed | $(38.5)$ | $(17.3)$ | $(18.5)$ | $(11.0)$ | $(6.9)$ | $(7.8)$ | $(100.0)$ |
|  | 93 | 67 | 101 | 13 | 24 | 34 | 332 |
| Indian | $(26.9)$ | $(19.7)$ | $(27.7)$ | $(4.2)$ | $(8.3)$ | $(13.2)$ | $(100.0)$ |
| Pakistani or | 186 | 136 | 231 | 48 | 40 | 120 | 761 |
| Bangladeshi | $(24.1)$ | $(17.6)$ | $(29.3)$ | $(6.0)$ | $(5.8)$ | $(17.2)$ | $(100.0)$ |
|  | 156 | 84 | 112 | 47 | 21 | 33 | 453 |
| Black | $(34.2)$ | $(16.8)$ | $(26.1)$ | $(10.2)$ | $(4.6)$ | $(8.1)$ | $(100.0)$ |
|  | 46 | 38 | 59 | 16 | 10 | 32 | 201 |
| Other | $(20.1)$ | $(21.9)$ | $(29.0)$ | $(7.5)$ | $(5.7)$ | $(15.9)$ | $(100.0)$ |
| Unweighted sample size | 4133 | 2697 | 3647 | 1083 | 601 | 1169 | 13330 |
| Weighted observations | 4185 | 2684 | 3644 | 1062 | 603 | 1132 | 13310 |
|  |  |  |  |  |  |  |  |

Mother's Employment Status at MCS4

|  | 1643 | 941 | 1288 | 367 | 206 | 596 | 5041 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not employed | $(32.9)$ | $(18.8)$ | $(25.6)$ | $(7.1)$ | $(4.1)$ | $(11.5)$ | $(100.0)$ |
|  | 2490 | 1756 | 2361 | 716 | 395 | 573 | 8291 |
| Employed | $(30.5)$ | $(21.0)$ | $(28.5)$ | $(8.5)$ | $(4.8)$ | $(6.7)$ | $(100.0)$ |
| Unweighted sample size | 4133 | 2697 | 3649 | 1083 | 601 | 1169 | 13332 |
| Weighted observations | 4185 | 2684 | 3646 | 1062 | 603 | 1132 | 13312 |
|  |  |  |  |  |  |  |  |
| $\mathrm{p}=0.000$ |  |  |  |  |  |  |  |

## Mother's Highest Qualification at MCS4

|  | 415 | 242 | 383 | 91 | 68 | 263 | 1462 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No qualifications | $(30.6)$ | $(16.1)$ | $(24.6)$ | $(5.9)$ | $(4.4)$ | $(18.2)$ | $(100.0)$ |
|  | 304 | 146 | 243 | 68 | 44 | 114 | 919 |
| NVQ1 | $(33.6)$ | $(17.0)$ | $(25.6)$ | $(6.9)$ | $(5.4)$ | $(11.5)$ | $(100.0)$ |
|  | 1098 | 738 | 923 | 295 | 153 | 325 | 3532 |
| NVQ2 | $(30.9)$ | $(20.6)$ | $(27.1)$ | $(8.5)$ | $(4.4)$ | $(8.5)$ | $(100.0)$ |

Table 4.18: How often child is involved in household chores at MCS4


Sample includes all mothers responding to question. Table displays unweighted observations and weighted percentages (country means using weight1, UK means using weight2).

## Conclusion

This chapter has provided a description of the MCS4 parenting data, which cover a variety of aspects of behaviour and attitudes. We looked for variation by some family characteristics, including country of residence, employment, ethnicity and qualification level. There are mainly continuities in the socio-demographic patterns observed at the two previous surveys, but there are some changes in family life as the child gets older. For example, mothers were more likely to feel they had enough time with the child at age 3 than at age 7 , and less likely to read to them every day still more often than those fathers from whom we have information.

The finding that parents with lower qualification levels engaged in some home learning activities (such as reading to their children) less frequently than do parents with higher qualification levels is consistent with family literacy ideas that hold that children with parents without good literacy skills to pass on are disadvantaged (Hannon, 1999). Such views and findings are often used to support programmes to improve adult literacy and other skills.

It is important to make a note of caution about causality and the difficulty of untangling co-related family and parenting variables. For example, does reading to children itself improve children's literacy skills? Or do other factors both make reading to children more likely and lead to better literacy skills? The answer to this first question is important to policy; if the answer is yes, programmes to improve adult literacy skills and promote parental reading to children will have an effect on child literacy skills. If the answer is no, such programmes will have little or no effect.

Similar questions can be applied to other parenting behaviours and styles and other child outcomes. One important feature of the MCS data is the scope to look at the behaviours of mothers and fathers within the same families, as well as across the different ages, which would add enormously to the untangling of parenting behaviours. Further analysis would also allow classification of parenting styles e.g. authoritarian versus authoritative or boundaries versus laissez faire.

This chapter contains only descriptive data and cannot address these issues. It does provide a description of the rich data on parenting activities, beliefs and styles that, when linked to data on child outcomes, can be used to help address these questions. We have not attempted to make longitudinal links with the earlier data from ages 9 months, 3 years and 5 years to age 7 , which would help to answer some of these questions. The fact that the data are longitudinal also will allow for the analysis of how parenting at different child ages relates to outcomes.

## References

Amato, P. R. and Fowler, P. R. (2002) Parenting practices, child adjustment, and family diversity. Journal of Marriage and Family, 64, 703-716.

Bennett, K. K., Weigel, D. J. and Martin, S. S. (2002) Children's acquisition of early literacy skills: examining family contributions. Early Childhood Research Quarterly, 17(3), 295-317.

Bingham, G. E. (2007) Maternal literacy beliefs and the quality of mother-child bookreading interactions: Associations with children's early literacy development. Early Education and Development, 18(1), 23-49.

Dornbusch, A. M., Ritter, P. L., Leiderman, H., Roberts, D. F. and Fraleigh, M. J. (1987) The relation of parenting style to adolescent school performance. Child Development, 58, 1244-1257.

Hannon, P. (1999) Rhetoric and research in family literacy. British Educational Research Journal, 26(1), 121-138.

Richman, W. A. and Colombo, J. (2007) Joint book reading in the second year and vocabulary outcomes. Journal of Research in Childhood Education, 21(3), 242-253.

Sandstrom, M. J. (2007) A link between mother's disciplinary strategies and children's relational aggression. British Journal of Developmental Psychology, 25, 399-407.

Simons, L. G. and Conger, R. D. (2007) Linking mother-father differences in parenting to a typology of family parenting styles and adolescent outcomes. Journal of Family Issues, 28(2), 212-241.

## Chapter 5

## CHILD SELF-REPORT

Aleks Collingwood and Nadine Simmonds

## Chapter overview

This chapter looks at the responses of MCS children to a self-completion questionnaire and examines them in relation to their socio-demographic and socioeconomic background. The children answered questions about:

- Hobbies: listening to or playing music; reading; watching TV, videos or DVDs; using a computer or playing console games; sports and games (indoors and outdoors).
- Friends: who they were (boys, girls or a mixture), how many they had, whether they had any best friends.
- Feelings: whether and how often they felt happy, sad or worried, laughed or lost their temper; whether they liked to be alone and if they had fun with their family at weekends
- School: if and how much they liked it and certain subjects, their classroom behaviour, if they felt safe in the playground, tiredness and bullying.

The fourth survey of the Millennium Cohort Study included a new mode of data collection: the child paper self-completion questionnaire. This module was added as a response to the policy agenda of 'listening to the child's voice' (NSPCC, 2008) and to increase cohort members' sense of belonging to the survey in the future. The questionnaire aims to explore the cohort members' hobbies, who their friends are, their feelings and their attitudes to school. The questions were designed to assess the wellbeing of children from their own point of view and to identify the characteristics and the factors that are related to their wellbeing. In addition, understanding the experience of the children in schools may help schools to increase their own effectiveness.

The questionnaire uses language suitable for children aged 7 who are in their second year of schooling, and was piloted before being adopted by the MCS. The majority of the questions were adapted from existing longitudinal studies, such as the Avon Longitudinal Study of Parents and Children (ALSPAC), The Longitudinal Study of Australian Children and the Effective Provision of Pre-School Education (EPPE) project. An open-ended question - 'And finally, when you grow up, what would you like to be?' - was put to the children at the end of the questionnaire, but their answers are not covered in this chapter. The full text of the questionnaire can be found in the MCS4 area of the CLS website (www.cls.ioe.ac.uk/MCS4questionnaires) or with the documentation of MCS4 at the UK Data Archive. The questionnaire was administered in the cohort child's home, ideally whilst their parents were completing their interview.

All participating cohort children were included (i.e. twins and triplets). The reason for this inclusion is that this analysis is of a child-based sample as opposed to a familybased sample used in other chapters. Overall, 94 per cent of the cohort members participated. The total sample of children in the analysis is 13,066 . This is the unweighted total. The weighted total is 13,069 . The numbers in all tables are unweighted observations. The percentages are all weighted to give a more accurate representation of the population. The analysis applied appropriate weights to correct for attrition.

Natural, adoptive, foster or stepmothers who were main respondents were included in the analysis and categorised as 'mothers', regardless of whether they had a biological relationship with the cohort member. Main respondents who were fathers were not included in the analysis, so that the variables about parental qualifications and employment should apply unambiguously to mothers (see Table 2.9 in Chapter 2). It must be noted that throughout this chapter 'black' refers to both black and black British children.

## Existing literature

This method of interviewing young children is relatively new and therefore existing literature is limited. The EPPE project, however, published findings linking five-yearold children's perception of school to their cognitive ability. EPPE was a longitudinal study in selected areas of England (DCSF, 2008), mainly concerning the effects of pre-school provision on young children's intellectual, social and behavioural development (the latest extension to the project, Effective Pre-School, Primary and Secondary Education 16+, is following the same group of students through their final year of compulsory school and into post-school educational, training and employment). Looking at differences in their enjoyment of school, feelings of anxiety and isolation, academic and behavioural self-image, and their views of primary school, EPPE showed that attending a pre-school is associated with a child's development and that the quality of pre-school centres is directly related to a child's cognitive and behavioural development. This research also investigated the selfperceptions of younger pupils (Year 2 - the same age as the MCS children in this survey) and their relationship to later cognitive and behavioural outcomes in Year 5, as well as their progress from Year 1 to Year 5. Overall, the EPPE results suggest that children with a positive self-image (academic and behavioural) are likely to experience positive progress and development in these areas, suggesting that there is a reciprocal relationship between children's views of themselves and levels of attainment and behaviour. Positive experiences of school were also found to foster better educational outcomes and greater enjoyment of school.

## The aim of this chapter

In their own questionnaire, the MCS cohort children were asked 38 questions which were divided into four sections:

- Hobbies
- Feelings
- Friends
- Schooling

In the analysis that follows, each question is examined in turn and any statistically significant relationships with socio-demographic characteristics are reported. The main response categories in this questionnaire were mostly: ‘I like it a lot', 'I like it a bit', 'I don't like it' or 'All of the time', 'Some of the time', 'Never'. This initial analysis of the child self-completion concentrated on the 'I like it a lot' and 'All of the time' response categories. The key characteristics are gender, ethnicity, the country the child lives in, the employment status of the mother (employed or not), the mother's highest educational qualification (from no qualifications to NVQ level 5 and above), family type (lone-parent or two-parent family) and the total family income. This overview gives a first glimpse of the children's answers and provides a foundation for further exploration of the data.

## Hobbies

In the first section of the questionnaire, the children were asked about the things that they enjoy doing. These comprised listening to and playing music; watching television, videos or DVDs; drawing, painting or making things; and playing on the computer or other games.

Table 5.1 shows proportions liking each activity 'a lot' by the key socio-demographic characteristics. Girls ( $66 \%$ ) were more likely than boys ( $46 \%$ ) to like listening to, and playing, music a lot. Black, white and children of mixed ethnicity reported liking music more often than children from other ethnic groups. This might suggest that music is more important in some cultures. Children in Wales were the most likely to enjoy music a lot, followed by those in Northern Ireland, Scotland and England. The children were also asked how much they enjoyed watching television, videos and DVDs (Table 5.1). Unlike listening to music, boys were more likely to enjoy watching television than girls ( $79 \%$ and $68 \%$ respectively). With regard to ethnic group, the same pattern of responses was found for watching television as listening to music with black, white and mixed ethnicity children enjoying watching television more than children from other ethnic groups. Most other differences were so small they do not reflect any real difference in TV watching. There was no relationship between children's enjoyment and the level of parental income. Any relationships with the enjoyment of watching TV, videos and DVDs are unlikely to be about access. Most children have access to a television. Another study showed that children in poorer families were more than twice as likely as other children to have a television in their bedroom (Nairn et al., 2007). It is also possible that children who are not allowed to watch television may tend to like it more.

As for drawing and making things, girls were much more likely than boys to report liking these activities a lot $(81 \%$ and $62 \%$, see Table 5.1$)$. These activities were also more favoured by children of more educated mothers and higher income families. Boys were much more likely than girls to enjoy playing console games such as Xbox
and PlayStation, with four-fifths of boys stating that they liked console games a lot compared to only half of the girls. A significant relationship was also seen when looking at ethnicity in regard to the question about using a computer and playing computer games. Over three-quarters of black children (77\%) reported liking these activities a lot. Lower percentages were seen for other ethnic groups: Pakistani or Bangladeshi ( $68 \%$ ), white ( $67 \%$ ) and 'other' ethnicities ( $54 \%$ ). The lower the mother's level of qualification or the family income, the more the children reported enjoying console games a lot. Children in lone rather than two-parent families were also significantly more likely to report enjoying console games ( $71 \%$ and $66 \%$ respectively). Consoles were more likely to be enjoyed by children living in more disadvantaged families.

Boys were more likely than girls to enjoy sports and playing games, both inside or outside. However, overall, a higher proportion of children enjoyed playing sports and games outside (see Table 5.1). Northern Ireland had the highest proportion of children enjoying this activity a lot (77\%), followed by Wales (72\%), Scotland (72\%) and England (69\%). Children whose mothers were working were also more likely to report enjoying sports and games outside a lot ( $71 \%$ ), compared to those where she was not working ( $69 \%$ ). The difference in these percentages is very small and although significant, may not reflect any great difference in the average enjoyment of playing sports and games outside.

|  | Listening to or playing music | Watching television, videos or DVDs | Drawing, painting or making things | Using a computer or playing games | Playing sports and games outside | Playing sports and games inside |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |  |  |
| England | $\begin{aligned} & 4609 \\ & (55.3) \end{aligned}$ | $\begin{aligned} & \hline 6020 \\ & (73.2) \end{aligned}$ | $\begin{gathered} 5872 \\ (70.5) \end{gathered}$ | $\begin{gathered} 5550 \\ (67.0) \end{gathered}$ | $\begin{gathered} 5746 \\ (69.3) \end{gathered}$ | $\begin{gathered} 3876 \\ (46.7) \end{gathered}$ |
| Wales | $\begin{array}{r} 1093 \\ (60.2) \\ \hline \end{array}$ | $\begin{array}{r} 1377 \\ (75.6) \\ \hline \end{array}$ | $\begin{array}{r} 1324 \\ (72.9) \\ \hline \end{array}$ | $\begin{array}{r} 1259 \\ (69.2) \\ \hline \end{array}$ | $\begin{array}{r} 1316 \\ (71.9) \\ \hline \end{array}$ | $\begin{gathered} 906 \\ (49.5) \\ \hline \end{gathered}$ |
| Scotland | $\begin{gathered} 840 \\ (56.5) \end{gathered}$ | $\begin{array}{r} 1136 \\ (75.0) \end{array}$ | $\begin{array}{r} 1083 \\ (72.6) \end{array}$ | $\begin{gathered} 1005 \\ (67.7) \end{gathered}$ | $\begin{aligned} & 1066 \\ & (72.2) \end{aligned}$ | $\begin{gathered} 695 \\ (46.3) \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 770 \\ (58.5) \end{gathered}$ | $\begin{gathered} 969 \\ (75.2) \end{gathered}$ | $\begin{gathered} 921 \\ (72.2) \end{gathered}$ | $\begin{gathered} 902 \\ (69.6) \end{gathered}$ | $\begin{gathered} 999 \\ (77.1) \end{gathered}$ | $\begin{gathered} 655 \\ (50.4) \end{gathered}$ |
|  | $\mathrm{P}=0.007$ | $\mathrm{P}=0.159$ | $\mathrm{P}=0.167$ | $\mathrm{P}=0.244$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.010$ |
| Sex |  |  |  |  |  |  |
| Male | $\begin{array}{r} 3040 \\ (46.4) \\ \hline \end{array}$ | $\begin{gathered} 5091 \\ (78.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 4005 \\ (61.6) \\ \hline \end{array}$ | $\begin{array}{r} 5351 \\ (82.0) \\ \hline \end{array}$ | $\begin{array}{r} 4838 \\ (74.0) \\ \hline \end{array}$ | $\begin{array}{r} 3183 \\ (48.5) \\ \hline \end{array}$ |
| Female | $\begin{array}{r} 4272 \\ (65.5) \end{array}$ | $\begin{array}{r} 4411 \\ (68.2) \end{array}$ | $\begin{array}{r} 5195 \\ (80.6) \\ \hline \end{array}$ | $\begin{array}{r} 3365 \\ (52.0) \\ \hline \end{array}$ | $\begin{array}{r} 4289 \\ (65.8) \end{array}$ | $\begin{array}{r} 2949 \\ (45.4) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.009$ |
| Child's ethnicity |  |  |  |  |  |  |
| White | $\begin{gathered} 6203 \\ (56.3) \end{gathered}$ | $\begin{gathered} 8023 \\ (73.9) \end{gathered}$ | $\begin{gathered} 7690 \\ (70.9) \end{gathered}$ | $\begin{gathered} 7304 \\ (67.2) \end{gathered}$ | $\begin{gathered} 7691 \\ (70.1) \end{gathered}$ | $\begin{gathered} 5200 \\ (47.3) \end{gathered}$ |
| Mixed | $\begin{gathered} 188 \\ (54.8) \\ \hline \end{gathered}$ | $\begin{gathered} 243 \\ (73.7) \\ \hline \end{gathered}$ | $\begin{gathered} 248 \\ (71.6) \\ \hline \end{gathered}$ | $\begin{gathered} 219 \\ (64.7) \\ \hline \end{gathered}$ | $\begin{gathered} 222 \\ (66.8) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (46.1) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 173 \\ (52.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 220 \\ (66.2) \\ \hline \end{array}$ | $\begin{gathered} 234 \\ (71.2) \\ \hline \end{gathered}$ | $\begin{gathered} 209 \\ (65.0) \\ \hline \end{gathered}$ | $\begin{gathered} 225 \\ (68.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 150 \\ (45.4) \\ \hline \end{array}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 395 \\ (50.5) \\ \hline \end{gathered}$ | $\begin{gathered} 529 \\ (67.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 567 \\ (71.4) \\ \hline \end{array}$ | $\begin{array}{r} 519 \\ (68.2) \\ \hline \end{array}$ | $\begin{gathered} 531 \\ (69.5) \\ \hline \end{gathered}$ | $\begin{gathered} 325 \\ (42.5) \\ \hline \end{gathered}$ |
| Black | $\begin{gathered} 225 \\ (57.2) \\ \hline \end{gathered}$ | $\begin{gathered} 292 \\ (74.2) \\ \hline \end{gathered}$ | $\begin{gathered} 275 \\ (69.4) \end{gathered}$ | $\begin{gathered} 296 \\ (75.1) \\ \hline \end{gathered}$ | $\begin{gathered} 287 \\ (71.4) \end{gathered}$ | $\begin{gathered} 185 \\ (50.5) \\ \hline \end{gathered}$ |

Table 5.1: Hobbies - those reporting to like each activity 'a lot'

|  | Listening to or playing music | Watching television, videos or DVDs | Drawing, painting or making things | Using a computer or playing games | Playing sports and games outside | Playing sports and games inside |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |
| Other inc. Chinese | $\begin{gathered} 89 \\ (48.9) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (67.2) \\ \hline \end{gathered}$ | $\begin{gathered} 122 \\ (72.5) \\ \hline \end{gathered}$ | $\begin{gathered} 103 \\ (53.5) \\ \hline \end{gathered}$ | $\begin{gathered} 119 \\ (72.0) \\ \hline \end{gathered}$ | $\begin{gathered} 80 \\ (44.8) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.041$ | $\mathrm{P}=0.001$ | $\mathrm{P}=0.992$ | $\mathrm{P}=0.010$ | $\mathrm{P}=0.882$ | $\mathrm{P}=0.389$ |
| Mother's employment status |  |  |  |  |  |  |
| Employed/on leave | $\begin{gathered} 4391 \\ (54.9) \\ \hline \end{gathered}$ | $\begin{gathered} 5810 \\ (74.1) \end{gathered}$ | $\begin{gathered} 1928 \\ (25.3) \end{gathered}$ | $\begin{gathered} 5174 \\ (65.3) \\ \hline \end{gathered}$ | $\begin{gathered} 5624 \\ (71.2) \end{gathered}$ | $\begin{gathered} 3699 \\ (46.5) \\ \hline \end{gathered}$ |
| Not employed/on leave | $\begin{gathered} 2670 \\ (57.4) \end{gathered}$ | $\begin{gathered} 3357 \\ (72.1) \end{gathered}$ | $\begin{gathered} 1025 \\ (22.2) \end{gathered}$ | $\begin{gathered} 3230 \\ (70.6) \end{gathered}$ | $\begin{gathered} 3206 \\ (68.5) \end{gathered}$ | $\begin{gathered} 2221 \\ (47.9) \end{gathered}$ |
|  | $\mathrm{P}=0.032$ | $\mathrm{P}=0.047$ | $\mathrm{P}=0.044$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.007$ | $\mathrm{P}=0.199$ |
| Mother's highest qualification |  |  |  |  |  |  |
| No qualifications | $\begin{gathered} 773 \\ (58.1) \\ \hline \end{gathered}$ | $\begin{gathered} 955 \\ (72.9) \\ \hline \end{gathered}$ | $\begin{gathered} 262 \\ (20.3) \\ \hline \end{gathered}$ | $\begin{gathered} 926 \\ (70.4) \\ \hline \end{gathered}$ | $\begin{gathered} 912 \\ (67.7) \\ \hline \end{gathered}$ | $\begin{gathered} 623 \\ (46.1) \end{gathered}$ |
| Overseas/other qualification only | $\begin{gathered} 172 \\ (52.6) \\ \hline \end{gathered}$ | $\begin{gathered} 238 \\ (69.4) \\ \hline \end{gathered}$ | $\begin{gathered} 73 \\ (20.7) \\ \hline \end{gathered}$ | $\begin{gathered} 218 \\ (69.6) \\ \hline \end{gathered}$ | $\begin{gathered} 234 \\ (68.9) \\ \hline \end{gathered}$ | $\begin{gathered} 147 \\ (41.6) \\ \hline \end{gathered}$ |
| NVQ level 1 | $\begin{gathered} 508 \\ (58.4) \end{gathered}$ | $\begin{array}{r} 637 \\ (75.2) \\ \hline \end{array}$ | $\begin{array}{r} 190 \\ (22.9) \\ \hline \end{array}$ | $\begin{gathered} 610 \\ (71.3) \\ \hline \end{gathered}$ | $\begin{gathered} 582 \\ (69.1) \end{gathered}$ | $\begin{array}{r} 416 \\ (47.6) \\ \hline \end{array}$ |
| NVQ level 2 | $\begin{array}{r} 1939 \\ (56.9) \end{array}$ | $\begin{aligned} & 2463 \\ & (74.3) \end{aligned}$ | $\begin{gathered} 750 \\ (23.4) \end{gathered}$ | $\begin{gathered} 2304 \\ (69.4) \end{gathered}$ | $\begin{aligned} & 2355 \\ & (70.5) \end{aligned}$ | $\begin{array}{r} 1615 \\ (48.2) \end{array}$ |
| NVQ level 3 | $\begin{gathered} 1115 \\ (58.4) \end{gathered}$ | $\begin{array}{r} 1427 \\ (73.6) \end{array}$ | $\begin{gathered} 457 \\ (24.1) \end{gathered}$ | $\begin{gathered} 1315 \\ (68.0) \end{gathered}$ | $\begin{gathered} 1340 \\ (69.5) \end{gathered}$ | $\begin{gathered} 918 \\ (47.5) \end{gathered}$ |
| NVQ level 4 | $\begin{gathered} 2103 \\ (53.5) \end{gathered}$ | $\begin{array}{r} 2819 \\ (72.4) \end{array}$ | $\begin{array}{r} 1013 \\ (26.7) \end{array}$ | $\begin{gathered} 2505 \\ (63.9) \end{gathered}$ | $\begin{gathered} 2777 \\ (71.1) \end{gathered}$ | $\begin{array}{r} 1792 \\ (46.4) \end{array}$ |
| NVQ level 5 + | $\begin{gathered} 450 \\ (50.9) \end{gathered}$ | $\begin{gathered} 625 \\ (72.9) \end{gathered}$ | $\begin{gathered} 208 \\ (24.3) \end{gathered}$ | $\begin{gathered} 523 \\ (60.4) \end{gathered}$ | $\begin{gathered} 628 \\ (71.8) \end{gathered}$ | $\begin{gathered} 407 \\ (47.1) \end{gathered}$ |
|  | $\mathrm{P}=0.001$ | $\mathrm{P}=0.575$ | $\mathrm{P}=0.029$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.503$ | $\mathrm{P}=0.504$ |
| Number of Parents/carers in the household |  |  |  |  |  |  |
| Two parents/carers | $\begin{array}{r} 5743 \\ (55.3) \\ \hline \end{array}$ | $\begin{gathered} 7511 \\ (73.3) \\ \hline \end{gathered}$ | $\begin{gathered} 2476 \\ (24.7) \end{gathered}$ | $\begin{gathered} 6826 \\ (66.2) \end{gathered}$ | $\begin{aligned} & 7266 \\ & (70.2 \end{aligned}$ | $\begin{gathered} 4843 \\ (46.4) \end{gathered}$ |
| One parent/carer | $\begin{array}{r} 1569 \\ (57.4) \end{array}$ | $\begin{array}{r} 1991 \\ (74.3) \end{array}$ | $\begin{gathered} 582 \\ (22.2) \end{gathered}$ | $\begin{array}{r} 1890 \\ (71.0) \end{array}$ | $\begin{aligned} & 1861 \\ & 169.1 \end{aligned}$ | $\begin{array}{r} 1289 \\ (48.8) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.094$ | $\mathrm{P}=0.373$ | $\mathrm{P}=0.233$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.335$ | $\mathrm{P}=0.070$ |
| Total income |  |  |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 2676 \\ (57.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 3410 \\ (73.5) \\ \hline \end{array}$ | $\begin{gathered} 978 \\ (21.2) \\ \hline \end{gathered}$ | $\begin{gathered} 3261 \\ (70.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 3244 \\ (69.7) \\ \hline \end{array}$ | $\begin{array}{r} 2249 \\ (49.1) \\ \hline \end{array}$ |
| $£ 10,400$ to less than £20,800 | $\begin{array}{r} 1365 \\ (56.0) \\ \hline \end{array}$ | $\begin{array}{r} 1756 \\ (73.8) \\ \hline \end{array}$ | $\begin{gathered} 547 \\ (23.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 1630 \\ (67.9) \\ \hline \end{array}$ | $\begin{array}{r} 1658 \\ (68.1) \\ \hline \end{array}$ | $\begin{array}{r} 1109 \\ (44.4) \\ \hline \end{array}$ |
| $\begin{aligned} & £ 20,800 \text { to less than } \\ & £ 31,200 \end{aligned}$ | $\begin{array}{r} 1293 \\ (56.4) \\ \hline \end{array}$ | $\begin{array}{r} 1682 \\ (73.2) \\ \hline \end{array}$ | $\begin{gathered} \hline 556 \\ (25.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 1515 \\ (65.5) \\ \hline \end{array}$ | $\begin{array}{r} 1603 \\ (69.3) \\ \hline \end{array}$ | $\begin{array}{r} 1089 \\ (46.2) \\ \hline \end{array}$ |
| £31,200 and more | $\begin{gathered} 944 \\ (54.8) \end{gathered}$ | $\begin{array}{r} 1256 \\ (74.9) \end{array}$ | $\begin{gathered} 470 \\ (28.7) \end{gathered}$ | $\begin{gathered} 1106 \\ (66.2) \end{gathered}$ | $\begin{array}{r} 1213 \\ (72.4) \end{array}$ | $\begin{gathered} 786 \\ (46.7) \end{gathered}$ |
| $£ 41,600$ to less than £52,000 | $\begin{gathered} 468 \\ (53.1) \end{gathered}$ | $\begin{gathered} 624 \\ (73.1) \end{gathered}$ | $\begin{gathered} 237 \\ (28.1) \end{gathered}$ | $\begin{gathered} 549 \\ (63.5) \end{gathered}$ | $\begin{gathered} 626 \\ (70.7) \end{gathered}$ | $\begin{gathered} 397 \\ (45.7) \end{gathered}$ |
| Continued |  |  |  |  |  |  |
| £52,000 - £80,000 |  | $\begin{gathered} 507 \\ (71.4) \end{gathered}$ | $\begin{gathered} 184 \\ (25.7) \\ \hline \end{gathered}$ | $\begin{gathered} 436 \\ (60.7) \end{gathered}$ | $\begin{gathered} 518 \\ (72.8) \end{gathered}$ | $\begin{gathered} 319 \\ (44.8) \end{gathered}$ |
| £80,000 and more | $\begin{gathered} 371 \\ (52.4) \end{gathered}$ | $\begin{gathered} 267 \\ (72.2) \end{gathered}$ | $\begin{gathered} 86 \\ (25.8) \end{gathered}$ | $\begin{gathered} 219 \\ (59.5) \end{gathered}$ | $\begin{gathered} 265 \\ (70.9) \end{gathered}$ | $\begin{gathered} 183 \\ (48.2) \end{gathered}$ |
|  | $\mathrm{P}=0.169$ | $\mathrm{P}=0.801$ | $\mathrm{P}=0.001$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.116$ | $\mathrm{P}=0.054$ |
| All responding 'a lot ' Unweighted sample size | $\begin{gathered} 7312 \\ 12937 \\ \hline \end{gathered}$ | $\begin{gathered} 9502 \\ 12903 \\ \hline \end{gathered}$ | $\begin{gathered} 9200 \\ 12897 \\ \hline \end{gathered}$ | $\begin{gathered} 8716 \\ 12886 \\ \hline \end{gathered}$ | $\begin{gathered} 9127 \\ 12920 \\ \hline \end{gathered}$ | $\begin{gathered} 6132 \\ 12909 \\ \hline \end{gathered}$ |

Note: Other response categories, not shown, are 'a little bit' and 'don't like it'.

## Friends

This section of the questionnaire asked the children about their friends (Tables 5.2 to 5.4). More girls (68\%) reported having a lot of friends compared with boys (60\%). Children in Northern Ireland and Wales were more likely to have lots of friends than those in Scotland or England. There was also a significant relationship between ethnic group and the number of friends they reported having, with black children and white children being more likely than children from other ethnic groups to report having lots of friends. Having a lot of friends was also more common in two-parent families compared to lone-parent families (64\%:62\%), in families where the mother was employed (65\%) compared to families where she was not (61\%) and in families with higher incomes.

| Table 5.2: How many friends do you have? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Lots | Some | Not Many | Total Observations |
| Country |  |  |  |  |
| England | $\begin{gathered} 5148 \\ (62.5) \end{gathered}$ | $\begin{aligned} & 2262 \\ & (26.4) \end{aligned}$ | $\begin{gathered} 896 \\ (11.1) \end{gathered}$ | 8306 |
| Wales | $\begin{array}{r} 1244 \\ (68.1) \\ \hline \end{array}$ | $\begin{gathered} 406 \\ (22.4) \end{gathered}$ | $\begin{array}{r} 172 \\ (9.5) \\ \hline \end{array}$ | 1822 |
| Scotland | $\begin{gathered} 966 \\ (64.5) \end{gathered}$ | $\begin{gathered} 384 \\ (25.0) \end{gathered}$ | $\begin{gathered} 154 \\ (10.5) \end{gathered}$ | 1504 |
| Northern Ireland | $\begin{gathered} 882 \\ (68.0) \end{gathered}$ | $\begin{gathered} 304 \\ (22.8) \end{gathered}$ | $\begin{gathered} 121 \\ (9.2) \end{gathered}$ | 1307 |
|  |  |  |  | $\mathrm{P}=0.000$ |
| Sex |  |  |  |  |
| Male | $\begin{gathered} 3920 \\ (59.5) \end{gathered}$ | $\begin{gathered} 1850 \\ (28.8) \end{gathered}$ | $\begin{gathered} 727 \\ (11.8) \end{gathered}$ | 6497 |
| Female | $\begin{aligned} & 4320 \\ & (67.1) \end{aligned}$ | $\begin{array}{r} 1506 \\ (22.9) \\ \hline \end{array}$ | $\begin{gathered} 616 \\ (10.0) \\ \hline \end{gathered}$ | 6442 |
|  |  |  |  | $\mathrm{P}=0.000$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{gathered} 7004 \\ (63.6) \end{gathered}$ | $\begin{aligned} & 2711 \\ & (25.4) \end{aligned}$ | $\begin{aligned} & 1130 \\ & (11.0) \end{aligned}$ | 10845 |
| Mixed | $\begin{gathered} 214 \\ (62.8) \\ \hline \end{gathered}$ | $\begin{gathered} 97 \\ (28.1) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 24 \\ (9.1) \end{gathered}$ | 335 |
| Indian | $\begin{gathered} 186 \\ (58.0) \\ \hline \end{gathered}$ | $\begin{gathered} 116 \\ (33.5) \end{gathered}$ | $\begin{gathered} 28 \\ (8.5) \end{gathered}$ | 330 |
| Pakistani or Bangladeshi | $\begin{gathered} 401 \\ (52.9) \end{gathered}$ | $\begin{gathered} 272 \\ (33.3) \end{gathered}$ | $\begin{gathered} 100 \\ (13.8) \end{gathered}$ | 773 |
| Black | $\begin{gathered} 286 \\ (72.7) \end{gathered}$ | $\begin{gathered} 79 \\ (18.5) \end{gathered}$ | $\begin{gathered} \hline 33 \\ (8.7) \end{gathered}$ | 398 |
| Other inc. Chinese | $\begin{gathered} 88 \\ (56.1) \end{gathered}$ | $\begin{gathered} 59 \\ (34.3) \end{gathered}$ | $\begin{gathered} \hline 22 \\ (9.6) \end{gathered}$ | 169 |
|  |  |  |  | $\mathrm{P}=0.000$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{gathered} 5131 \\ (64.6) \end{gathered}$ | $\begin{aligned} & 2012 \\ & (25.8) \end{aligned}$ | $\begin{gathered} 724 \\ (9.6) \\ \hline \end{gathered}$ | 7867 |
| Not employed/on leave | $\begin{aligned} & 2818 \\ & (60.8) \\ & \hline \end{aligned}$ | $\begin{array}{r} 1238 \\ (26.4) \\ \hline \end{array}$ | $\begin{gathered} 570 \\ (12.8) \\ \hline \end{gathered}$ | 4626 |
|  |  |  |  | $\mathrm{P}=0.000$ |

Table 5.2: How many friends do you have?

|  | Lots | Some | Not Many | Total Observations |
| :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} \hline 783 \\ (60.7) \end{gathered}$ | $\begin{gathered} 363 \\ (26.6) \end{gathered}$ | $\begin{gathered} 170 \\ (12.7) \end{gathered}$ | 1316 |
| Overseas/other qualification only | $\begin{gathered} 178 \\ (53.4) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \\ (32.4) \end{gathered}$ | $\begin{gathered} 43 \\ (14.2) \\ \hline \end{gathered}$ | 325 |
| NVQ level 1 | $\begin{gathered} 542 \\ (61.9) \end{gathered}$ | $\begin{gathered} 208 \\ (24.5) \end{gathered}$ | $\begin{gathered} 98 \\ (13.6) \end{gathered}$ | 848 |
| NVQ level 2 | $\begin{gathered} 2113 \\ (63.1) \end{gathered}$ | $\begin{gathered} 829 \\ (25.4) \end{gathered}$ | $\begin{gathered} 375 \\ (11.5) \end{gathered}$ | 3317 |
| NVQ level 3 | $\begin{gathered} 1253 \\ (64.7) \end{gathered}$ | $\begin{gathered} 472 \\ (24.6) \\ \hline \end{gathered}$ | $\begin{gathered} 196 \\ (10.7) \\ \hline \end{gathered}$ | 1921 |
| NVQ level 4 | $\begin{gathered} 2511 \\ (63.7) \end{gathered}$ | $\begin{gathered} 1058 \\ (27.5) \end{gathered}$ | $\begin{aligned} & \hline 333 \\ & (8.9) \end{aligned}$ | 3902 |
| NVQ level 5 + | $\begin{gathered} 567 \\ (66.9) \end{gathered}$ | $\begin{gathered} 216 \\ (23.7) \end{gathered}$ | $\begin{gathered} 78 \\ (9.4) \end{gathered}$ | 861 |
|  |  |  |  | $\mathrm{P}=0.007$ |
| Number of Parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{gathered} 6550 \\ (63.5) \end{gathered}$ | $\begin{aligned} & 2699 \\ & (26.3) \end{aligned}$ | $\begin{gathered} 1021 \\ (10.2) \end{gathered}$ | 10270 |
| One parent/carer | $\begin{aligned} & 1690 \\ & (62.4) \end{aligned}$ | $\begin{gathered} 657 \\ (24.5) \end{gathered}$ | $\begin{gathered} \hline 322 \\ (13.1) \end{gathered}$ | 2669 |
|  |  |  |  | $\mathrm{P}=0.380$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 2870 \\ (61.6) \end{gathered}$ | $\begin{gathered} 1193 \\ (25.3) \end{gathered}$ | $\begin{gathered} 567 \\ (13.1) \end{gathered}$ | 4630 |
| $£ 10,400$ to less than £20,800 | $\begin{aligned} & 1489 \\ & (61.1) \end{aligned}$ | $\begin{gathered} 642 \\ (27.4) \end{gathered}$ | $\begin{gathered} 264 \\ (11.5) \end{gathered}$ | 2395 |
| £20,800 to less than £31,200 | $\begin{array}{r} 1506 \\ (65.6) \\ \hline \end{array}$ | $\begin{gathered} 572 \\ (24.9) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 212 \\ & (9.4) \\ & \hline \end{aligned}$ | 2290 |
| £31,200 and more | $\begin{gathered} 1077 \\ (64.0) \end{gathered}$ | $\begin{gathered} 445 \\ (26.6) \end{gathered}$ | $\begin{aligned} & 152 \\ & (9.4) \end{aligned}$ | 1674 |
| £41, 600 to less than £52,000 | $\begin{gathered} 571 \\ (65.7) \end{gathered}$ | $\begin{gathered} 232 \\ (26.3) \end{gathered}$ | $\begin{gathered} 61 \\ (7.9) \end{gathered}$ | 864 |
| £52,000 - £80,000 | $\begin{gathered} 482 \\ (67.6) \end{gathered}$ | $\begin{gathered} 173 \\ (24.2) \end{gathered}$ | $\begin{gathered} 62 \\ (8.2) \\ \hline \end{gathered}$ | 717 |
| £80,000 and more | $\begin{gathered} 245 \\ (64.6) \end{gathered}$ | $\begin{gathered} 99 \\ (28.6) \end{gathered}$ | $\begin{gathered} 25 \\ (6.7) \end{gathered}$ | 369 |
|  |  |  |  | $\mathrm{P}=0.003$ |
| All responding children Unweighted sample size | 8240 | 3356 | 1343 | 12,939 |

Significant patterns were also seen when looking at the gender of the reported friends (Table 5.3). Girls were more likely to be mostly friends with both boys and girls ( $47 \%$ compared to $35 \%$ ) than just with girls. Pakistani and Bangladeshi children were the least likely to have mixed gender friendships (18\%). Children were more likely to say that their friends were mostly a mixture of boys and girls if they were in a lone-parent family or if their mother's educational attainment was low.

The children were also asked whether they had any best friends - almost all did (data not shown). Neither the children's gender nor ethnic group had any bearing on the number of best friends reported. However, children whose mothers had low educational attainment (no qualifications or NVQ level 1) were slightly more likely than those with highly educated mothers (NVQ level 5) to say that they had many best friends (96\%:92\%).

The final question in this section asked children how much they enjoyed playing with their friends. Again, almost all children said that they enjoyed playing with their friends. Ninety-two per cent of girls and 89 per cent of boys rated playing with their friends as something they liked doing a lot. There was little substantial variation by social categories (data not shown).

Table 5.3: Are your friends mostly boys, mostly girls or a mixture?

|  | Mostly boys | Mostly girls | A mixture of boys and girls | Total observations |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} 2767 \\ (33.6) \end{gathered}$ | $\begin{gathered} 2245 \\ (25.8) \end{gathered}$ | $\begin{aligned} & 3285 \\ & (40.6) \end{aligned}$ | 8297 |
| Wales | $\begin{gathered} 578 \\ (32.9) \end{gathered}$ | $\begin{gathered} 443 \\ (24.1) \end{gathered}$ | $\begin{gathered} 796 \\ (43.0) \end{gathered}$ | 1817 |
| Scotland | $\begin{gathered} 496 \\ (32.2) \end{gathered}$ | $\begin{gathered} 371 \\ (24.5) \end{gathered}$ | $\begin{gathered} 636 \\ (43.3) \end{gathered}$ | 1503 |
| Northern Ireland | $\begin{gathered} 440 \\ (35.0) \\ \hline \end{gathered}$ | $\begin{gathered} 315 \\ (22.4) \end{gathered}$ | $\begin{gathered} 554 \\ (42.6) \end{gathered}$ | 1309 |
|  |  |  |  | $\mathrm{P}=0.531$ |
| Sex |  |  |  |  |
| Male | $\begin{gathered} 2252 \\ (62.0) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 4027 \\ & (2.7) \end{aligned}$ | $\begin{gathered} \hline 185 \\ (35.3) \end{gathered}$ | 6464 |
| Female | $\begin{aligned} & 2612 \\ & (3.9) \end{aligned}$ | $\begin{gathered} 3727 \\ (49.1) \end{gathered}$ | $\begin{gathered} 74 \\ (47.0) \end{gathered}$ | 64113 |
|  |  |  |  | $\mathrm{P}=0.000$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{gathered} 4066 \\ (33.1) \end{gathered}$ | $\begin{gathered} 6527 \\ (24.3) \end{gathered}$ | $\begin{gathered} 203 \\ (42.6) \end{gathered}$ | 10796 |
| Mixed | $\begin{gathered} 120 \\ (30.8) \\ \hline \end{gathered}$ | $\begin{gathered} 206 \\ (29.5) \end{gathered}$ | $\begin{gathered} 10 \\ (39.7) \end{gathered}$ | 336 |
| Indian | $\begin{gathered} 117 \\ (40.5) \end{gathered}$ | $\begin{gathered} 200 \\ (35.4) \end{gathered}$ | $\begin{gathered} 10 \\ (24.1) \end{gathered}$ | 327 |
| Pakistani or Bangladeshi | $\begin{gathered} 321 \\ (40.9) \end{gathered}$ | $\begin{gathered} 426 \\ (41.6) \end{gathered}$ | $\begin{gathered} 20 \\ (17.5) \end{gathered}$ | 767 |
| Black | $\begin{gathered} 153 \\ (30.9) \end{gathered}$ | $\begin{gathered} 235 \\ (24.6) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (44.5) \end{gathered}$ | 397 |
| Other inc. Chinese | $\begin{gathered} 64 \\ (32.6) \\ \hline \end{gathered}$ | $\begin{gathered} 103 \\ (32.2) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (35.2) \\ \hline \end{gathered}$ | 169 |
|  |  |  |  | $\mathrm{P}=0.000$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{aligned} & 2920 \\ & (33.5) \end{aligned}$ | $\begin{aligned} & 4805 \\ & (24.8) \end{aligned}$ | $\begin{gathered} 117 \\ (41.8) \end{gathered}$ | 7842 |
| Not employed/on leave | $\begin{array}{r} 1772 \\ (33.3) \\ \hline \end{array}$ | $\begin{array}{r} 2693 \\ (26.1) \\ \hline \end{array}$ | $\begin{gathered} 130 \\ (40.6) \\ \hline \end{gathered}$ | 4595 |
|  |  |  |  | $\mathrm{P}=0.360$ |

Table 5.3: Are your friends mostly boys, mostly girls or a mixture?

|  | Mostly boys | Mostly girls | A mixture of boys and girls | Total observations |
| :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 549 \\ (34.2) \end{gathered}$ | $\begin{gathered} 706 \\ (27.7) \end{gathered}$ | $\begin{gathered} 51 \\ (38.1) \end{gathered}$ | 1306 |
| Overseas/other qualification only | $\begin{gathered} 119 \\ (35.3) \end{gathered}$ | $\begin{gathered} 193 \\ (24.8) \end{gathered}$ | $\begin{gathered} 12 \\ (39.9) \end{gathered}$ | 324 |
| NVQ level 1 | $\begin{gathered} 346 \\ (31.5) \\ \hline \end{gathered}$ | $\begin{gathered} 476 \\ (22.0) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (46.6) \\ \hline \end{gathered}$ | 845 |
| NVQ level 2 | $\begin{array}{r} 1315 \\ (32.1) \end{array}$ | $\begin{gathered} 1919 \\ (253.7) \end{gathered}$ | $\begin{gathered} 73 \\ (42.2) \end{gathered}$ | 3307 |
| NVQ level 3 | $\begin{gathered} 726 \\ (34.6) \end{gathered}$ | $\begin{aligned} & 1155 \\ & (23.9) \end{aligned}$ | $\begin{gathered} 34 \\ (41.5) \end{gathered}$ | 1915 |
| NVQ level 4 | $\begin{array}{r} 1364 \\ (34.5) \\ \hline \end{array}$ | $\begin{array}{r} 2473 \\ (25.4) \\ \hline \end{array}$ | $\begin{gathered} 45 \\ (40.1) \\ \hline \end{gathered}$ | 3882 |
| NVQ level 5 + | $\begin{gathered} 272 \\ (30.9) \\ \hline \end{gathered}$ | $\begin{gathered} 574 \\ (26.1) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (42.9) \\ \hline \end{gathered}$ | 855 |
|  |  |  |  | $\mathrm{P}=0.016$ |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{gathered} 3434 \\ (33.4) \end{gathered}$ | $\begin{aligned} & 2705 \\ & (25.9) \end{aligned}$ | $\begin{aligned} & 4126 \\ & (40.7) \end{aligned}$ | 10265 |
| One parent/carer | $\begin{gathered} 847 \\ (33.6) \\ \hline \end{gathered}$ | $\begin{gathered} 669 \\ (24.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 1145 \\ (42.3) \\ \hline \end{array}$ | 2661 |
|  |  |  |  | $\mathrm{P}=0.226$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 1524 \\ (33.6) \end{gathered}$ | $\begin{aligned} & 1252 \\ & (26.4) \end{aligned}$ | $\begin{gathered} 1843 \\ (39.9) \end{gathered}$ | 4619 |
| $£ 10400$ to less than £20,800 | $\begin{gathered} 786 \\ (33.0) \\ \hline \end{gathered}$ | $\begin{gathered} 648 \\ (25.1) \end{gathered}$ | $\begin{gathered} 959 \\ (41.9) \\ \hline \end{gathered}$ | 2393 |
| $£ 20800$ to less than £31,200 | $\begin{gathered} 746 \\ (33.2) \end{gathered}$ | $\begin{gathered} 559 \\ (25.2) \end{gathered}$ | $\begin{gathered} 981 \\ (41.6) \end{gathered}$ | 2286 |
| £31,200 and more | $\begin{gathered} 554 \\ (32.8) \end{gathered}$ | $\begin{gathered} 409 \\ (24.1) \end{gathered}$ | $\begin{gathered} 713 \\ (43.1) \end{gathered}$ | 1676 |
| £41,00 to less than £52,000 | $\begin{gathered} 300 \\ (35.0) \\ \hline \end{gathered}$ | $\begin{gathered} 229 \\ (25.1) \end{gathered}$ | $\begin{gathered} 336 \\ (39.9) \\ \hline \end{gathered}$ | 865 |
| $£ 52,000$ to less than £80,000 | $\begin{gathered} 237 \\ (32.0) \\ \hline \end{gathered}$ | $\begin{gathered} 186 \\ (26.2) \\ \hline \end{gathered}$ | $\begin{gathered} 296 \\ (41.8) \\ \hline \end{gathered}$ | 719 |
| £80,000 and more | $\begin{gathered} 134 \\ (37.3) \\ \hline \end{gathered}$ | $\begin{gathered} 91 \\ (23.2) \end{gathered}$ | $\begin{gathered} 143 \\ (39.5) \end{gathered}$ | 368 |
|  |  |  |  | $\mathrm{P}=0.474$ |
| All responding children Unweighted sample size | 4281 | 3374 | 5271 | 12,926 |

Table 5.4: Feelings - those reporting to feel a particular way 'all of the time'

|  | Happy | Worried | Sad | Quiet |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} 2919 \\ (35.1) \end{gathered}$ | $\begin{aligned} & \hline 458 \\ & (5.8) \end{aligned}$ | $\begin{aligned} & \hline 268 \\ & (3.3) \end{aligned}$ | $\begin{gathered} 1302 \\ (15.6) \end{gathered}$ |
| Wales | $\begin{gathered} 726 \\ (40.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 115 \\ (6.2) \\ \hline \end{array}$ | $\begin{gathered} 50 \\ (2.7) \\ \hline \end{gathered}$ | $\begin{gathered} 278 \\ (15.6) \\ \hline \end{gathered}$ |
| Scotland | $\begin{gathered} 607 \\ (41.6) \end{gathered}$ | $\begin{gathered} 59 \\ (4.3) \end{gathered}$ | $\begin{gathered} 40 \\ (3.0) \end{gathered}$ | $\begin{gathered} 250 \\ (17.5) \\ \hline \end{gathered}$ |
| Northern Ireland | $\begin{gathered} 612 \\ (46.1) \end{gathered}$ | $\begin{gathered} 57 \\ (4.7) \end{gathered}$ | $\begin{gathered} 35 \\ (3.1) \end{gathered}$ | $\begin{gathered} 215 \\ (17.8) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.075$ | $\mathrm{P}=0.789$ | $\mathrm{P}=0.163$ |
| Sex |  |  |  |  |
| Male | $\begin{gathered} 2252 \\ (33.4) \end{gathered}$ | $\begin{aligned} & 387 \\ & (6.2) \end{aligned}$ | $\begin{aligned} & 221 \\ & (3.5) \end{aligned}$ | $\begin{array}{r} 1049 \\ (16.1) \end{array}$ |
| Female | $\begin{aligned} & 2612 \\ & (39.5) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 302 \\ & (5.1) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 172 \\ (2.9) \\ \hline \end{gathered}$ | $\begin{gathered} 996 \\ (15.6) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.027$ | $\mathrm{P}=0.097$ | $\mathrm{P}=0.517$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{aligned} & 4066 \\ & (36.3) \end{aligned}$ | $\begin{aligned} & 548 \\ & (5.4) \end{aligned}$ | $\begin{gathered} 301 \\ (3.0) \end{gathered}$ | $\begin{gathered} 1653 \\ (15.4) \end{gathered}$ |
| Mixed | $\begin{gathered} 120 \\ (34.0) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (8.9) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (16.7) \\ \hline \end{gathered}$ |
| Indian | $\begin{array}{r} 117 \\ (37.8) \\ \hline \end{array}$ | $\begin{gathered} 18 \\ (6.2) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (1.9) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (19.3) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 321 \\ (40.3) \end{gathered}$ | $\begin{gathered} 52 \\ (7.5) \end{gathered}$ | $\begin{gathered} 42 \\ (6.5) \end{gathered}$ | $\begin{gathered} 159 \\ (20.9) \end{gathered}$ |
| Black | $\begin{gathered} 153 \\ (38.2) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (8.6) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (7.1) \end{gathered}$ | $\begin{gathered} 75 \\ (18.0) \\ \hline \end{gathered}$ |
| Other inc. Chinese | $\begin{gathered} 64 \\ (38.4) \end{gathered}$ | $\begin{gathered} 9 \\ (3.6) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (4.1) \end{gathered}$ | $\begin{gathered} 40 \\ (21.3) \end{gathered}$ |
|  | $\mathrm{P}=0.450$ | $\mathrm{P}=0.011$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.011$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{aligned} & 2920 \\ & (36.0) \end{aligned}$ | $\begin{aligned} & \hline 346 \\ & (4.5) \end{aligned}$ | $\begin{aligned} & \hline 182 \\ & (2.6) \end{aligned}$ | $\begin{aligned} & 1113 \\ & (14.3) \end{aligned}$ |
| Not employed/on leave | $\begin{array}{r} 1772 \\ (37.1) \\ \hline \end{array}$ | $\begin{array}{r} 311 \\ (7.4) \\ \hline \end{array}$ | $\begin{aligned} & 187 \\ & (4.1) \\ & \hline \end{aligned}$ | $\begin{gathered} 845 \\ (18.4) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.431$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 549 \\ (41.2) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 108 \\ (8.9) \\ \hline \end{array}$ | $\begin{gathered} \hline 67 \\ (6.1) \\ \hline \end{gathered}$ | $\begin{gathered} 277 \\ (22.3) \\ \hline \end{gathered}$ |
| Overseas/other qualification only | $\begin{gathered} 119 \\ (35.1) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (5.4) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (3.4) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (17.1) \\ \hline \end{gathered}$ |
| NVQ level 1 | $\begin{gathered} 346 \\ (39.6) \end{gathered}$ | $\begin{gathered} 61 \\ (8.6) \end{gathered}$ | $\begin{gathered} 38 \\ (5.0) \end{gathered}$ | $\begin{gathered} 160 \\ (20.8) \end{gathered}$ |
| NVQ level 2 | $\begin{array}{r} 1315 \\ (38.4) \\ \hline \end{array}$ | $\begin{aligned} & 191 \\ & (5.8) \\ & \hline \end{aligned}$ | $\begin{gathered} 101 \\ (2.9) \\ \hline \end{gathered}$ | $\begin{gathered} 542 \\ (15.9) \\ \hline \end{gathered}$ |
| NVQ level 3 | $\begin{array}{r} 726 \\ (36.0) \\ \hline \end{array}$ | $\begin{array}{r} 106 \\ (6.4) \\ \hline \end{array}$ | $\begin{gathered} 57 \\ (2.8) \\ \hline \end{gathered}$ | $\begin{gathered} 294 \\ (14.9) \\ \hline \end{gathered}$ |
| NVQ level 4 | $\begin{array}{r} 1364 \\ (33.5) \\ \hline \end{array}$ | $\begin{array}{r} 138 \\ (3.4) \\ \hline \end{array}$ | $\begin{gathered} 86 \\ (2.4) \\ \hline \end{gathered}$ | $\begin{gathered} 523 \\ (13.3) \\ \hline \end{gathered}$ |
| NVQ level 5 + | $\begin{gathered} 272 \\ (30.4) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (4.4) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (1.4) \end{gathered}$ | $\begin{gathered} 96 \\ (12.0) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Continued |  |  |  |  |


|  | Happy | Worried | Sad | Quiet |
| :---: | :---: | :---: | :---: | :---: |
| Number of Parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{gathered} 3858 \\ (36.3) \end{gathered}$ | $\begin{aligned} & 495 \\ & (5.1 \end{aligned}$ | $\begin{aligned} & 295 \\ & (3.0) \end{aligned}$ | $\begin{aligned} & 1581 \\ & (15.3) \end{aligned}$ |
| One parent/carer | $\begin{array}{r} 1006 \\ (36.7) \\ \hline \end{array}$ | $\begin{array}{r} 194 \\ (8.0) \\ \hline \end{array}$ | $\begin{gathered} 98 \\ (3.9) \\ \hline \end{gathered}$ | $\begin{gathered} 464 \\ (18.1) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.780$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.059$ | $\mathrm{P}=0.002$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 1791 \\ (37.4) \end{gathered}$ | $\begin{aligned} & \hline 329 \\ & (7.9) \end{aligned}$ | $\begin{gathered} 193 \\ (3.5) \end{gathered}$ | $\begin{gathered} 882 \\ (19.3) \end{gathered}$ |
| $£ 10,400$ to less than £20,800 | $\begin{gathered} 924 \\ (36.9) \\ \hline \end{gathered}$ | $\begin{array}{r} 129 \\ (5.6) \\ \hline \end{array}$ | $\begin{gathered} 83 \\ (2.9) \\ \hline \end{gathered}$ | $\begin{gathered} 391 \\ (16.3) \\ \hline \end{gathered}$ |
| £20,800 to less than £31,200 | $\begin{gathered} 855 \\ (36.1) \end{gathered}$ | $\begin{aligned} & 117 \\ & (5.2) \end{aligned}$ | $\begin{gathered} 56 \\ (3.2) \end{gathered}$ | $\begin{gathered} 332 \\ (14.8) \end{gathered}$ |
| £31,200 and more | $\begin{gathered} 619 \\ (36.1) \\ \hline \end{gathered}$ | $\begin{gathered} 57 \\ (3.8) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 208 \\ (12.3) \\ \hline \end{gathered}$ |
| £41,600 to less than £52,000 | $\begin{gathered} 289 \\ (32.4) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (3.3) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.0) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (13.8) \\ \hline \end{gathered}$ |
| $£ 52,000$ to less than £80,000 | $\begin{gathered} 255 \\ (35.6) \end{gathered}$ | $\begin{gathered} 20 \\ (2.5) \end{gathered}$ | $\begin{gathered} 17 \\ (2.0) \end{gathered}$ | $\begin{gathered} 66 \\ (9.3) \end{gathered}$ |
| £80,000 and more | $\begin{gathered} 131 \\ (36.1 \end{gathered}$ | $\begin{gathered} 9 \\ (2.3) \end{gathered}$ | $\begin{gathered} 4 \\ (1.4) \\ \hline \end{gathered}$ | $\begin{gathered} 45 \\ (11.5) \end{gathered}$ |
|  | $\mathrm{P}=0.246$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| All responding 'all of the time' <br> Unweighted sample size | $\begin{gathered} 4864 \\ 12,877 \\ \hline \end{gathered}$ | $\begin{gathered} 689 \\ 12,800 \end{gathered}$ | $\begin{gathered} 393 \\ 12,841 \end{gathered}$ | $\begin{gathered} 2045 \\ 12,813 \end{gathered}$ |

Note: Other response categories, not shown, are 'some of the time' and 'never'.

## Feelings

Children were asked such questions as how often they feel happy, how often they feel sad and how often they worry. The aim of these questions was to get a sense of the child's general wellbeing. It was first explained to the children that everyone has times when they feel happy, sad or angry and they were asked to check a box stating whether they felt like this all of the time, some of the time or never. The results can be found in Tables 5.4 and 5.5.

When asked how often they felt happy, girls were more likely than boys to say that they felt happy 'all of the time' ( $40 \%: 33 \%$ ). Thirty-five per cent of children in England said they felt happy all of the time compared to 40 per cent in Wales, 42 per cent in Scotland and 46 per cent in Northern Ireland.

The children were then asked how often they worried about things. The proportion who worried all of the time was very low, and there was no great difference between boys and girls ( $6 \%: 5 \%$ ). Black, mixed, Pakistani or Bangladeshi children were, however, more likely to worry all the time ( $8-9 \%$ ) than children in 'other' ethnic groups (Indian 6\%, white 5\%, other 4\%).

The proportion of children who said that they felt sad all of the time was also very low (see Table 5.4). Gender had no bearing on how often children said that they felt sad. The characteristics associated with feeling sad all of the time were being in a family where the mother was not employed or had a lower educational attainment. Pakistani, Bangladeshi and black children were more likely than children from other ethnic minorities to report feeling sad all of the time ( $7 \%$, compared to 'other' $4 \%$, white $3 \%$ and mixed or Indian 2\%).

Children were also asked how often they were quiet (Table 5.4). Again, there was no gender difference but there were ethnic differences. Pakistani, Bangladeshi and children from other ethnic groups including Chinese were the most likely to be quiet all of the time ( $21 \%$ ) and white children the least ( $15 \%$ ). Twenty-two per cent of children whose mothers had no educational qualifications said they were quiet all of the time, compared to around 13 per cent of children with graduate mothers.

A minority ( $9 \%$ ) of children liked being alone all of the time, boys more than girls (10\%:8\%). See Table 5.5.

Children were also asked how often they laugh (Table 5.5). Nearly 42 per cent overall said they laughed all the time; 48 per cent in Northern Ireland versus 40 per cent in England. More girls (44\%) than boys (39\%) said that they laughed all the time. Black children were the most likely to say they laughed all the time (54\%). White children, those of mixed ethnic background and other ethnic groups were the least likely to laugh all of the time (around 4 in 10). Mother's educational attainment and family income were also inversely related to how often a child laughed. Children in lone-parent families were more likely to laugh, even though (as in Table 5.4) they were also more likely to say that they worried all of the time.

Boys were almost twice as likely as girls (13\%:7\%) to say that they lost their temper all of the time (Table 5.5). Children living in more disadvantaged families also said they had short tempers. At least twice as many children whose mothers had no more than NVQ1 said they lost their temper all of the time, as opposed to those whose mothers were graduates.

Table 5.5: Feelings - those reporting to laugh, lose their temper or wanting to be alone 'all of the time'

|  | Laugh | Lose my temper | I like to be alone |
| :---: | :---: | :---: | :---: |
| Country |  |  |  |
| England | $\begin{array}{r} 3393 \\ (40.3) \\ \hline \end{array}$ | $\begin{gathered} 820 \\ (10.1) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 738 \\ (9.3) \\ \hline \end{array}$ |
| Wales | $\begin{gathered} 841 \\ (46.4) \end{gathered}$ | $\begin{array}{r} 173 \\ (9.3) \end{array}$ | $\begin{aligned} & 165 \\ & (8.7) \end{aligned}$ |
| Scotland | $\begin{array}{r} 672 \\ (46.2) \\ \hline \end{array}$ | $\begin{gathered} 127 \\ (9.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 117 \\ (8.1) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{gathered} 622 \\ (48.4) \end{gathered}$ | $\begin{gathered} 136 \\ (11.5) \end{gathered}$ | $\begin{gathered} 81 \\ (6.9) \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.330$ | $\mathrm{P}=0.043$ |
| Sex |  |  |  |
| Male | $\begin{array}{r} 2619 \\ (39.2) \\ \hline \end{array}$ | $\begin{gathered} 818 \\ (13.2) \\ \hline \end{gathered}$ | $\begin{gathered} 631 \\ (10.2) \\ \hline \end{gathered}$ |
| Female | $\begin{array}{r} 2909 \\ (43.8) \\ \hline \end{array}$ | $\begin{aligned} & \hline 438 \\ & (6.7) \end{aligned}$ | $\begin{aligned} & 470 \\ & (7.9) \end{aligned}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Ethnicity |  |  |  |
| White | $\begin{array}{r} 4577 \\ (40.9) \\ \hline \end{array}$ | $\begin{aligned} & 1011 \\ & (9.6) \\ & \hline \end{aligned}$ | $\begin{gathered} 902 \\ (8.9) \\ \hline \end{gathered}$ |
| Mixed | $\begin{gathered} 136 \\ (40.6) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (14.5) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (13.5) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 141 \\ (45.2) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (11.9) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (6.1) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 368 \\ (45.6) \end{gathered}$ | $\begin{gathered} 87 \\ (11.1) \end{gathered}$ | $\begin{gathered} 80 \\ (11.2) \end{gathered}$ |
| Black | $\begin{gathered} 203 \\ (53.7) \\ \hline \end{gathered}$ | $\begin{gathered} 51 \\ (12.0) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (9.6) \\ \hline \end{gathered}$ |
| Other inc. Chinese | $\begin{gathered} 71 \\ (40.0) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (9.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 12 \\ (6.2) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.003$ | $\mathrm{P}=0.098$ | $\mathrm{P}=0.054$ |
| Mother's employment status |  |  |  |
| Employed/on leave | $\begin{gathered} 3278 \\ (40.7) \end{gathered}$ | $\begin{gathered} \hline 682 \\ (8.8) \\ \hline \end{gathered}$ | $\begin{aligned} & 548 \\ & (7.2) \end{aligned}$ |
| Not employed/on leave | $\begin{array}{r} 2040 \\ (42.2) \\ \hline \end{array}$ | $\begin{gathered} 536 \\ (12.0) \\ \hline \end{gathered}$ | $\begin{gathered} 514 \\ (12.3) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.129$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Mother's highest qualification |  |  |  |
| No qualifications | $\begin{gathered} 647 \\ (48.0) \\ \hline \end{gathered}$ | $\begin{gathered} 173 \\ (13.4) \\ \hline \end{gathered}$ | $\begin{gathered} 165 \\ (14.2) \\ \hline \end{gathered}$ |
| Overseas/other qualification only | $\begin{gathered} 146 \\ (38.9) \end{gathered}$ | $\begin{gathered} 36 \\ (11.6) \end{gathered}$ | $\begin{gathered} 4.9 \\ (12.0) \end{gathered}$ |
| NVQ level 1 | $\begin{gathered} 415 \\ (48.5) \end{gathered}$ | $\begin{gathered} 128 \\ (16.0) \end{gathered}$ | $\begin{gathered} 75 \\ (9.3) \end{gathered}$ |
| NVQ level 2 | $\begin{array}{r} 1478 \\ (42.9) \\ \hline \end{array}$ | $\begin{gathered} 367 \\ (11.5) \\ \hline \end{gathered}$ | $\begin{gathered} 316 \\ (10.1) \\ \hline \end{gathered}$ |
| NVQ level 3 | $\begin{gathered} 850 \\ (43.0) \\ \hline \end{gathered}$ | $\begin{gathered} 185 \\ (9.6) \\ \hline \end{gathered}$ | $\begin{gathered} 171 \\ (9.5) \\ \hline \end{gathered}$ |
| NVQ level 4 | $\begin{gathered} 1492 \\ (37.0) \end{gathered}$ | $\begin{aligned} & 282 \\ & (6.9) \end{aligned}$ | $\begin{aligned} & 258 \\ & (6.8) \end{aligned}$ |
| NVQ level 5 + | $\begin{array}{r} 288 \\ (31.6) \\ \hline \end{array}$ | $\begin{array}{r} 47 \\ (5.6) \\ \hline \end{array}$ | $\begin{array}{r} 43 \\ (4.9) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Number of parents/carers in the household |  |  |  |
| Two parents/carers | $\begin{aligned} & 4306 \\ & (40.7) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 916 \\ (9.0) \end{gathered}$ | $\begin{array}{r} \hline 812 \\ (8.2) \end{array}$ |
| Continued |  |  |  |

Table 5.5: Feelings - those reporting to laugh, lose their temper or wanting to be alone 'all of the time'

|  | Laugh | Lose my temper | I like to be alone |
| :---: | :---: | :---: | :---: |
| One parent/carer | $\begin{gathered} 1222 \\ (44.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 340 \\ (13.7) \\ \hline \end{array}$ | $\begin{gathered} 289 \\ (12.1) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.010$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Total income |  |  |  |
| Less than £10,400 | $\begin{gathered} 2120 \\ (45.0) \end{gathered}$ | $\begin{gathered} 562 \\ (12.8) \end{gathered}$ | $\begin{gathered} \hline 473 \\ (11.3) \end{gathered}$ |
| £10,400 to less than £20,800 | $\begin{array}{r} 1065 \\ (41.9) \\ \hline \end{array}$ | $\begin{gathered} 250 \\ (11.1) \\ \hline \end{gathered}$ | $\begin{gathered} 235 \\ (10.4) \\ \hline \end{gathered}$ |
| £20,800 to less than £31,200 | $\begin{gathered} 979 \\ (41.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 194 \\ (8.6) \\ \hline \end{array}$ | $\begin{array}{r} 166 \\ (7.8) \\ \hline \end{array}$ |
| £31,200 and more | $\begin{array}{r} 678 \\ (39.9) \\ \hline \end{array}$ | $\begin{array}{r} 131 \\ (7.6) \\ \hline \end{array}$ | $\begin{array}{r} 109 \\ (6.5) \\ \hline \end{array}$ |
| $£ 41,600$ to less than £52,000 | $\begin{gathered} 306 \\ (34.9) \end{gathered}$ | $\begin{gathered} 58 \\ (7.1) \end{gathered}$ | $\begin{gathered} 62 \\ (7.3) \end{gathered}$ |
| $£ 52,000$ to less than £80,000 | $\begin{array}{r} 258 \\ (35.2) \\ \hline \end{array}$ | $\begin{gathered} 39 \\ (5.3) \end{gathered}$ | $\begin{gathered} 34 \\ (4.6) \\ \hline \end{gathered}$ |
| £80,000 and more | $\begin{gathered} 122 \\ (30.5) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (4.6) \end{gathered}$ | $\begin{gathered} 22 \\ (6.4) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| All responding 'all of the time' Unweighted sample size | $\begin{gathered} 5528 \\ 12,871 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1256 \\ 12,813 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1101 \\ 12,833 \\ \hline \end{gathered}$ |

Note: Other response categories, not shown, are 'some of the time' and 'never'.

Table 5.6: How often do you have fun with your family at the weekend?

|  | All of the time | Some of the time | Never | Total observations |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} 5122 \\ (62.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 2859 \\ (34.8) \\ \hline \end{array}$ | $\begin{gathered} 253 \\ (3.1) \end{gathered}$ | 8234 |
| Wales | $\begin{array}{r} 1182 \\ (65.2) \\ \hline \end{array}$ | $\begin{gathered} 585 \\ (32.8) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (2.0) \\ \hline \end{gathered}$ | 1806 |
| Scotland | $\begin{gathered} 940 \\ (63.4) \\ \hline \end{gathered}$ | $\begin{gathered} 512 \\ (33.7) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (2.9) \end{gathered}$ | 1492 |
| Northern Ireland | $\begin{gathered} 851 \\ (65.9) \end{gathered}$ | $\begin{gathered} 399 \\ (30.7) \end{gathered}$ | $\begin{gathered} 40 \\ (3.4) \end{gathered}$ | 1290 |
|  |  |  |  | $\mathrm{P}=0.037$ |
| Sex |  |  |  |  |
| Male | $\begin{gathered} 3977 \\ (61.6) \end{gathered}$ | $\begin{gathered} 2233 \\ (34.7) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 226 \\ & (3.7) \\ & \hline \end{aligned}$ | 6436 |
| Female | $\begin{array}{r} 4118 \\ (63.6) \\ \hline \end{array}$ | $\begin{array}{r} 2122 \\ (34.1) \\ \hline \end{array}$ | $\begin{array}{r} 146 \\ (2.3) \\ \hline \end{array}$ | 6386 |
|  |  |  |  | $\mathrm{P}=0.038$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{gathered} 6799 \\ (62.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 3665 \\ (34.6) \\ \hline \end{array}$ | $\begin{aligned} & \hline 287 \\ & (2.9) \\ & \hline \end{aligned}$ | 10751 |
| Mixed | $\begin{gathered} 193 \\ (57.8) \end{gathered}$ | $\begin{gathered} 123 \\ (36.8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 17 \\ (5.4) \end{gathered}$ | 333 |
| Indian | $\begin{gathered} 213 \\ (66.1) \\ \hline \end{gathered}$ | $\begin{gathered} 103 \\ (31.2) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (2.7) \\ \hline \end{gathered}$ | 327 |
| Pakistani or Bangladeshi | $\begin{gathered} 490 \\ (64.8) \\ \hline \end{gathered}$ | $\begin{gathered} 248 \\ (33.0) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (2.2) \\ \hline \end{gathered}$ | 762 |
| Black | $\begin{array}{r} 256 \\ (66.0) \\ \hline \end{array}$ | $\begin{gathered} 119 \\ (28.7) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (5.3) \\ \hline \end{gathered}$ | 394 |
| Continued |  |  |  |  |

Table 5.6: How often do you have fun with your family at the weekend?

|  | All of the time | Some of the time | Never | Total observations |
| :---: | :---: | :---: | :---: | :---: |
| Other inc. Chinese | $\begin{gathered} 89 \\ (53.8) \end{gathered}$ | $\begin{gathered} 72 \\ (42.4) \end{gathered}$ | $\begin{gathered} \hline 8 \\ (3.9) \end{gathered}$ | 169 |
|  |  |  |  | $\mathrm{P}=0.014$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{aligned} & 4995 \\ & (63.2) \end{aligned}$ | $\begin{aligned} & 2628 \\ & (34.3) \end{aligned}$ | $\begin{aligned} & \hline 184 \\ & (2.5) \end{aligned}$ | 7807 |
| Not employed/on leave | $\begin{array}{r} 2810 \\ (61.3) \\ \hline \end{array}$ | $\begin{array}{r} 1596 \\ (34.9) \\ \hline \end{array}$ | $\begin{array}{r} 174 \\ (3.8) \\ \hline \end{array}$ | 4580 |
|  |  |  |  | $\mathrm{P}=0.070$ |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 807 \\ (61.2) \\ \hline \end{gathered}$ | $\begin{gathered} 430 \\ (33.5) \\ \hline \end{gathered}$ | $\begin{gathered} 66 \\ (5.3) \\ \hline \end{gathered}$ | 1303 |
| Overseas/other qualification only | $\begin{gathered} 195 \\ (62.0) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (33.8) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (4.2) \\ \hline \end{gathered}$ | 325 |
| NVQ level 1 | $\begin{gathered} 539 \\ (64.1) \end{gathered}$ | $\begin{gathered} 269 \\ (32.6) \end{gathered}$ | $\begin{gathered} \hline 27 \\ (3.3) \end{gathered}$ | 835 |
| NVQ level 2 | $\begin{array}{r} 2033 \\ (61.2) \\ \hline \end{array}$ | $\begin{gathered} 1161 \\ (35.9) \end{gathered}$ | $\begin{gathered} 99 \\ (3.0) \\ \hline \end{gathered}$ | 3293 |
| NVQ level 3 | $\begin{array}{r} 1247 \\ (65.3) \\ \hline \end{array}$ | $\begin{gathered} 607 \\ (32.0) \end{gathered}$ | $\begin{gathered} 52 \\ (2.7) \\ \hline \end{gathered}$ | 1906 |
| NVQ level 4 | $\begin{array}{r} 2447 \\ (62.6) \\ \hline \end{array}$ | $\begin{array}{r} 1336 \\ (34.9) \\ \hline \end{array}$ | $\begin{gathered} \hline 88 \\ (2.4) \end{gathered}$ | 3871 |
| NVQ level 5 + | $\begin{gathered} 535 \\ (61.2) \\ \hline \end{gathered}$ | $\begin{gathered} 303 \\ (37.5) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (1.4) \end{gathered}$ | 851 |
|  |  |  |  | $\mathrm{P}=0.102$ |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{gathered} 6460 \\ (63.1) \end{gathered}$ | $\begin{gathered} 3460 \\ (34.4) \end{gathered}$ | $\begin{aligned} & \hline 258 \\ & (2.5) \\ & \hline \end{aligned}$ | 10,178 |
| One parent/carer | $\begin{gathered} 1635 \\ (60.7) \\ \hline \end{gathered}$ | $\begin{gathered} 895 \\ (34.5) \end{gathered}$ | $\begin{aligned} & 114 \\ & (4.7) \end{aligned}$ | 2644 |
|  |  |  |  | $\mathrm{P}=0.067$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 2825 \\ (61.4) \\ \hline \end{gathered}$ | $\begin{array}{r} 1556 \\ (34.3) \\ \hline \end{array}$ | $\begin{array}{r} 192 \\ (4.4) \\ \hline \end{array}$ | 4573 |
| $£ 10,400$ to less than £20,800 | $\begin{array}{r} 1515 \\ (61.7) \\ \hline \end{array}$ | $\begin{gathered} 793 \\ (34.7) \\ \hline \end{gathered}$ | $\begin{gathered} 77 \\ (3.5) \\ \hline \end{gathered}$ | 2385 |
| £20,800 to less than £31,200 | $\begin{array}{r} 1418 \\ (61.6) \\ \hline \end{array}$ | $\begin{gathered} 815 \\ (36.3) \end{gathered}$ | $\begin{gathered} \hline 44 \\ (2.0) \\ \hline \end{gathered}$ | 2277 |
| £31,200 and more | $\begin{array}{r} 1076 \\ (65.0) \\ \hline \end{array}$ | $\begin{gathered} 549 \\ (33.4) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (1.6) \\ \hline \end{gathered}$ | 1654 |
| $£ 41,600$ to less than $£ 52,000$ | $\begin{gathered} 558 \\ (64.6) \end{gathered}$ | $\begin{gathered} 290 \\ (33.8) \end{gathered}$ | $\begin{gathered} 14 \\ (1.6) \end{gathered}$ | 862 |
| $£ 52,000$ to less than $£ 80,000$ | $\begin{array}{r} 462 \\ (65.6) \\ \hline \end{array}$ | $\begin{array}{r} 236 \\ (33.0) \\ \hline \end{array}$ | $\begin{gathered} 11 \\ (1.4) \\ \hline \end{gathered}$ | 709 |
| £80,000 and more | $\begin{gathered} 241 \\ (66.0) \end{gathered}$ | $\begin{gathered} 116 \\ (32.5) \end{gathered}$ | $\begin{gathered} 5 \\ (1.4) \end{gathered}$ | 362 |
|  |  |  |  | $\mathrm{P}=0.067$ |
| All responding children Unweighted sample size | 8095 | 4355 | 372 | 12,822 |

## Schooling

The final section of the questionnaire asks the children about their school. The aims of these questions are to find out how much they enjoy school and how they see their behaviour at school and academic performance. They are also asked about how often they are bullied and how often they feel left out.

As shown in Table 5.7, in general girls liked school significantly more than boys. Sixty-three per cent of girls said they liked school a lot compared to 43 per cent of boys. Black children were the most likely to say they enjoyed school a lot (67\%) followed by Pakistani, Bangladeshi and Indian children (63-65\%). Only half of white children said that they enjoyed school a lot. This finding concurs with other research on 14- to 16-year-olds which showed that white teenagers were more likely to be disengaged than young people from ethnic minorities (Ross, 2009). The lower the mother's educational attainment the more likely the child was to say he or she liked school a lot. These results are not what we expected. We also noted that the children of more educated or employed mothers were less likely to say explicitly that they do not like school (Figure 5.1).

Figure 5.1: How much do you like school?


Table 5.7: How much do you like school?

|  | I like it a lot | I like it a bit | I don't like it | Total observations |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} 4461 \\ (53.2) \end{gathered}$ | $\begin{gathered} 2504 \\ (30.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1253 \\ (16.2) \\ \hline \end{array}$ | 8218 |
| Wales | $\begin{gathered} 955 \\ (51.8) \\ \hline \end{gathered}$ | $\begin{gathered} 530 \\ (30.1) \\ \hline \end{gathered}$ | $\begin{gathered} 319 \\ (18.1) \\ \hline \end{gathered}$ | 1804 |
| Scotland | $\begin{array}{r} 712 \\ (47.7) \\ \hline \end{array}$ | $\begin{gathered} 492 \\ (31.8) \\ \hline \end{gathered}$ | $\begin{gathered} 289 \\ (20.5) \\ \hline \end{gathered}$ | 1493 |
| Northern Ireland | $\begin{gathered} 663 \\ (50.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 375 \\ (28.2) \\ \hline \end{array}$ | $\begin{gathered} 262 \\ (21.6) \\ \hline \end{gathered}$ | 1300 |
|  |  |  |  | $\mathrm{P}=0.009$ |
| Sex |  |  |  |  |
| Male | $\begin{aligned} & 2752 \\ & (42.6) \end{aligned}$ | $\begin{gathered} 2148 \\ (33.6) \end{gathered}$ | $\begin{aligned} & 1527 \\ & (23.8) \end{aligned}$ | 6427 |
| Female | $\begin{array}{r} 4039 \\ (62.8) \\ \hline \end{array}$ | $\begin{array}{r} 1753 \\ (27.5) \\ \hline \end{array}$ | $\begin{gathered} 596 \\ (9.8) \end{gathered}$ | 6388 |
|  |  |  |  | $\mathrm{p}=0.000$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{gathered} 5471 \\ (50.8) \\ \hline \end{gathered}$ | $\begin{gathered} 3330 \\ (31.2) \\ \hline \end{gathered}$ | $\begin{gathered} 1921 \\ (18.0) \\ \hline \end{gathered}$ | 10722 |
| Mixed | $\begin{gathered} 59 \\ (53.2) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (24.8) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (22.0) \\ \hline \end{gathered}$ | 105 |
| Indian | $\begin{gathered} 203 \\ (65.1) \end{gathered}$ | $\begin{gathered} 87 \\ (28.0) \end{gathered}$ | $\begin{gathered} 24 \\ (6.9) \end{gathered}$ | 314 |
| Pakistani or Bangladeshi | $\begin{gathered} 423 \\ (62.3) \end{gathered}$ | $\begin{gathered} 175 \\ (27.9) \end{gathered}$ | $\begin{gathered} 59 \\ (9.8) \end{gathered}$ | 657 |
| Black | $\begin{gathered} 244 \\ (66.6) \\ \hline \end{gathered}$ | $\begin{gathered} 106 \\ (25.0) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (8.4) \end{gathered}$ | 389 |
| Other inc. Chinese | $\begin{gathered} 124 \\ (66.2) \end{gathered}$ | $\begin{gathered} 54 \\ (28.7) \end{gathered}$ | $\begin{gathered} 9 \\ (5.1) \end{gathered}$ | 187 |
|  |  |  |  | $\mathrm{p}=0.000$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{gathered} 4026 \\ (51.1) \end{gathered}$ | $\begin{aligned} & 2501 \\ & (32.2) \end{aligned}$ | $\begin{gathered} 1286 \\ (16.6) \end{gathered}$ | 7813 |
| Not employed/on leave | $\begin{array}{r} 2499 \\ (54.1) \end{array}$ | $\begin{array}{r} 1279 \\ (28.2) \end{array}$ | $\begin{gathered} 784 \\ (17.6) \end{gathered}$ | 4562 |
|  |  |  |  | $\mathrm{P}=0.008$ |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 751 \\ (57.9) \end{gathered}$ | $\begin{gathered} 294 \\ (21.7) \end{gathered}$ | $\begin{gathered} 244 \\ (20.4) \end{gathered}$ | 1289 |
| Overseas/other qualification only | $\begin{gathered} 185 \\ (54.5) \end{gathered}$ | $\begin{gathered} 87 \\ (29.3) \end{gathered}$ | $\begin{gathered} 48 \\ (16.3) \end{gathered}$ | 320 |
| NVQ level 1 | $\begin{gathered} 457 \\ (53.0) \\ \hline \end{gathered}$ | $\begin{gathered} 224 \\ (26.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 157 \\ (20.2) \\ \hline \end{array}$ | 838 |
| NVQ level 2 | $\begin{aligned} & 1755 \\ & (52.9) \end{aligned}$ | $\begin{gathered} 941 \\ (28.6) \end{gathered}$ | $\begin{gathered} 604 \\ (18.5) \end{gathered}$ | 3300 |
| NVQ level 3 | $\begin{array}{r} 1014 \\ (52.3) \end{array}$ | $\begin{gathered} 582 \\ (31.5) \end{gathered}$ | $\begin{gathered} 312 \\ (16.2) \end{gathered}$ | 1908 |
| NVQ level 4 | $\begin{array}{r} 1933 \\ (49.9) \\ \hline \end{array}$ | $\begin{array}{r} 1333 \\ (35.1) \\ \hline \end{array}$ | $\begin{gathered} 598 \\ (15.1) \\ \hline \end{gathered}$ | 3864 |
| NVQ level 5 + | $\begin{gathered} 427 \\ (48.8) \\ \hline \end{gathered}$ | $\begin{gathered} 319 \\ (38.7) \\ \hline \end{gathered}$ | $\begin{gathered} 107 \\ (12.4) \\ \hline \end{gathered}$ | 853 |
|  |  |  |  | $\mathrm{P}=0.002$ |
| Continued |  |  |  |  |


| Table 5.7: How much do you like school? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | I like it a lot | I like it a bit | I don't like it | Total observations |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{gathered} 5405 \\ (52.7) \end{gathered}$ | $\begin{aligned} & \hline 3180 \\ & (31.5) \end{aligned}$ | $\begin{gathered} 1593 \\ (15.8) \end{gathered}$ | 10178 |
| One parent/carer | $\begin{gathered} 1386 \\ (51.9) \end{gathered}$ | $\begin{gathered} 721 \\ (27.5) \end{gathered}$ | $\begin{gathered} 530 \\ (20.6) \end{gathered}$ | 2637 |
|  |  |  |  | $\mathrm{P}=0.585$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 2493 \\ (54.0) \end{gathered}$ | $\begin{aligned} & 1246 \\ & (27.6) \end{aligned}$ | $\begin{gathered} \hline 819 \\ (18.5) \end{gathered}$ | 4558 |
| $£ 10,400$ to less than £20,800 | $\begin{array}{r} 1234 \\ (50.2) \\ \hline \end{array}$ | $\begin{array}{r} 700 \\ (29.6) \\ \hline \end{array}$ | $\begin{gathered} 451 \\ (20.2) \\ \hline \end{gathered}$ | 2385 |
| £20,800 to less than £31,200 | $\begin{gathered} 1197 \\ (53.1) \end{gathered}$ | $\begin{gathered} 713 \\ (30.3) \\ \hline \end{gathered}$ | $\begin{gathered} 369 \\ (16.6) \end{gathered}$ | 2279 |
| £31,200 and more | $\begin{gathered} 873 \\ (52.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 539 \\ (33.0) \\ \hline \end{array}$ | $\begin{gathered} 243 \\ (14.3) \\ \hline \end{gathered}$ | 1655 |
| $£ 41,600$ to less than $£ 52,000$ | $\begin{gathered} 452 \\ (52.3) \end{gathered}$ | $\begin{gathered} 297 \\ (35.9) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (10.9) \end{gathered}$ | 854 |
| Continued |  |  |  |  |
| $£ 52,000$ to less than £80,000 | $\begin{gathered} \hline 349 \\ (49.7) \end{gathered}$ | $\begin{gathered} 281 \\ (39.3) \\ \hline \end{gathered}$ | $\begin{gathered} 87 \\ (10.9) \end{gathered}$ | 717 |
| £80,000 and more | $\begin{array}{r} 193 \\ (51.3) \\ \hline \end{array}$ | $\begin{array}{r} 125 \\ (35.3) \\ \hline \end{array}$ | $\begin{gathered} 49 \\ (13.4) \\ \hline \end{gathered}$ | 367 |
|  |  |  |  | $\mathrm{P}=0.244$ |
| All responding children Unweighted sample size | 6791 | 3901 | 2123 | 12,815 |

Girls enjoyed reading more than boys with 65 per cent of girls saying that they liked reading a lot compared to only 48 per cent of boys (Table 5.8). Pakistani and Bangladeshi children were the most likely to say they enjoyed reading a lot (68\%), followed by black children ( $62 \%$ ). White children were the least likely to say they enjoyed reading a lot ( $56 \%$ ). None of the other characteristics examined showed significant relationships with reading.

The children were asked how much they liked maths and working with numbers, and Table 5.8 shows a different pattern than was seen for reading. Fewer children reported they liked number work than reading, but slightly more boys reported enjoying maths ( $55 \%$ ) than girls ( $52 \%$ ). Children of other ethnic groups including Chinese were the most likely to enjoy number work a lot ( $63 \%$ ) compared to Pakistani or Bangladeshi children (62\%), black (60\%), Indian (59\%), white (53\%) and children with a mixed ethnicity ( $52 \%$ ).

Ethnicity was related to how much the children enjoyed science but not as strongly as with maths. Gender appeared to have no bearing on enjoyment of science. The final question in this section asked the children how much they enjoyed physical education (PE). About three-quarters of children liked PE, significantly more girls than boys ( $77 \%$ and $74 \%$ ). Black children were the most likely to say they enjoyed PE a lot ( $87 \%$ ). For all other ethnic groups the proportion was 75 to 78 per cent.

Table 5.8: School - Reading, number work, science or PE, reports of 'liking a lot'

|  | Reading | Number work | Science | PE |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{array}{r} 4771 \\ (56.9) \\ \hline \end{array}$ | $\begin{gathered} 4420 \\ (53.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 4304 \\ (52.6) \\ \hline \end{array}$ | $\begin{array}{r} 6148 \\ (74.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 1018 \\ (55.9) \\ \hline \end{array}$ | $\begin{array}{r} 1022 \\ (55.7) \\ \hline \end{array}$ | $\begin{gathered} 858 \\ (49.6) \end{gathered}$ | $\begin{gathered} 1428 \\ (78.1) \end{gathered}$ |
| Scotland | $\begin{gathered} 802 \\ (53.8) \end{gathered}$ | $\begin{gathered} 844 \\ (56.2) \end{gathered}$ | $\begin{gathered} 670 \\ (49.9) \end{gathered}$ | $\begin{array}{r} 1216 \\ (82.7) \end{array}$ |
| Northern Ireland | $\begin{gathered} 735 \\ (55.3) \end{gathered}$ | $\begin{gathered} 719 \\ (54.5) \end{gathered}$ | $\begin{gathered} 572 \\ (47.7) \end{gathered}$ | $\begin{gathered} 1151 \\ (87.9) \end{gathered}$ |
|  | $\mathrm{P}=0.279$ | $\mathrm{P}=0.093$ | $\mathrm{P}=0.016$ | $\mathrm{P}=0.000$ |
| Sex |  |  |  |  |
| Male | $\begin{array}{r} 3105 \\ (48.1) \\ \hline \end{array}$ | $\begin{array}{r} 3597 \\ (55.1) \\ \hline \end{array}$ | $\begin{array}{r} 3246 \\ (52.3) \\ \hline \end{array}$ | $\begin{array}{r} 4917 \\ (74.3) \\ \hline \end{array}$ |
| Female | $\begin{array}{r} 4221 \\ (65.4) \\ \hline \end{array}$ | $\begin{gathered} 3408 \\ (52.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 3158 \\ (51.7) \\ \hline \end{array}$ | $\begin{array}{r} 5026 \\ (76.9) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.010$ | $\mathrm{P}=0.530$ | $\mathrm{P}=0.008$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{gathered} 6029 \\ (55.6) \end{gathered}$ | $\begin{gathered} 5780 \\ (52.7) \end{gathered}$ | $\begin{gathered} 5247 \\ (51.1) \end{gathered}$ | $\begin{gathered} 8312 \\ (75.1) \end{gathered}$ |
| Mixed | $\begin{array}{r} 200 \\ (59.8) \\ \hline \end{array}$ | $\begin{gathered} 176 \\ (51.5) \\ \hline \end{gathered}$ | $\begin{gathered} 192 \\ (57.4) \\ \hline \end{gathered}$ | $\begin{gathered} 253 \\ (75.4) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 190 \\ (59.3) \\ \hline \end{gathered}$ | $\begin{gathered} 188 \\ (59.2) \\ \hline \end{gathered}$ | $\begin{gathered} 169 \\ (51.6) \\ \hline \end{gathered}$ | $\begin{gathered} 243 \\ (76.7) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 516 \\ ((67.7) \\ \hline \end{gathered}$ | $\begin{gathered} 475 \\ (62.4) \\ \hline \end{gathered}$ | $\begin{gathered} 429 \\ (56.9) \\ \hline \end{gathered}$ | $\begin{gathered} 599 \\ (78.4) \\ \hline \end{gathered}$ |
| Black | $\begin{gathered} 236 \\ (62.4) \\ \hline \end{gathered}$ | $\begin{gathered} 231 \\ (60.4) \\ \hline \end{gathered}$ | $\begin{gathered} 223 \\ (59.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 338 \\ (86.9) \\ \hline \end{array}$ |
| Other inc. Chinese | $\begin{gathered} 105 \\ (56.7) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (63.2) \end{gathered}$ | $\begin{gathered} 97 \\ (57.5) \\ \hline \end{gathered}$ | $\begin{gathered} 134 \\ (75.3) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.006$ | $\mathrm{P}=0.003$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{gathered} 4427 \\ (56.2) \\ \hline \end{gathered}$ | $\begin{gathered} 4194 \\ (56.2) \\ \hline \end{gathered}$ | $\begin{gathered} 3880 \\ (51.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 6052 \\ (75.7) \\ \hline \end{array}$ |
| Not employed/on leave | $\begin{gathered} 2642 \\ (56.9) \\ \hline \end{gathered}$ | $\begin{gathered} 2557 \\ (55.0) \\ \hline \end{gathered}$ | $\begin{gathered} 2294 \\ (52.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 3544 \\ (75.3) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.519$ | $\mathrm{P}=0.043$ | $\mathrm{P}=0.352$ | $\mathrm{P}=0.722$ |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 786 \\ (58.5) \\ \hline \end{gathered}$ | $\begin{gathered} 751 \\ (55.9) \\ \hline \end{gathered}$ | $\begin{gathered} 628 \\ (50.9) \\ \hline \end{gathered}$ | $\begin{array}{r} 1029 \\ (77.8) \\ \hline \end{array}$ |
| Overseas/other qualification only | $\begin{gathered} 165 \\ (47.3) \end{gathered}$ | $\begin{gathered} 193 \\ (61.1) \end{gathered}$ | $\begin{gathered} 155 \\ (51.2) \end{gathered}$ | $\begin{gathered} 243 \\ (70.3) \end{gathered}$ |
| NVQ level 1 | $\begin{gathered} 478 \\ (57.5) \\ \hline \end{gathered}$ | $\begin{gathered} 472 \\ (55.9) \\ \hline \end{gathered}$ | $\begin{gathered} 404 \\ (50.8) \\ \hline \end{gathered}$ | $\begin{gathered} 672 \\ (78.7) \\ \hline \end{gathered}$ |
| NVQ level 2 | $\begin{array}{r} 1864 \\ (55.6) \\ \hline \end{array}$ | $\begin{array}{r} 1830 \\ (53.9) \\ \hline \end{array}$ | $\begin{array}{r} 1643 \\ (51.9) \\ \hline \end{array}$ | $\begin{array}{r} 2581 \\ (76.5) \\ \hline \end{array}$ |
| NVQ level 3 | $\begin{gathered} 1093 \\ (57.0) \end{gathered}$ | $\begin{gathered} 1022 \\ (52.0) \end{gathered}$ | $\begin{gathered} 969 \\ (53.8) \end{gathered}$ | $\begin{array}{r} 1524 \\ (77.8) \end{array}$ |
| NVQ level 4 | $\begin{array}{r} 2172 \\ (56.4) \\ \hline \end{array}$ | $\begin{array}{r} 2035 \\ (52.3) \\ \hline \end{array}$ | $\begin{array}{r} 1933 \\ (51.4) \\ \hline \end{array}$ | $\begin{array}{r} 2901 \\ (73.0) \\ \hline \end{array}$ |
| NVQ level 5 + | $\begin{gathered} 508 \\ (58.2) \\ \hline \end{gathered}$ | $\begin{gathered} 445 \\ (51.1) \\ \hline \end{gathered}$ | $\begin{gathered} 440 \\ (52.4) \end{gathered}$ | $\begin{gathered} 643 \\ (72.1) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.122$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.811$ | $\mathrm{P}=0.000$ |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{gathered} 5852 \\ (56.8) \end{gathered}$ | $\begin{gathered} 5564 \\ (53.8) \end{gathered}$ | $\begin{gathered} 5098 \\ (51.9) \end{gathered}$ | $\begin{array}{r} 7873 \\ (75.3) \end{array}$ |
| One parent/carer | $\begin{array}{r} 1474 \\ (55.8) \\ \hline \end{array}$ | $\begin{array}{r} 1441 \\ (52.9) \\ \hline \end{array}$ | $\begin{array}{r} 1306 \\ (52.3) \\ \hline \end{array}$ | $\begin{array}{r} 2070 \\ (76.40 \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.413$ | $\mathrm{P}=0.479$ | $\mathrm{P}=0.770$ | $\mathrm{P}=0.323$ |

Table 5.8: School - Reading, number work, science or PE, reports of 'liking a lot’

|  | Reading | Number work | Science | PE |
| :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{array}{r} 2617 \\ (56.7) \\ \hline \end{array}$ | $\begin{gathered} 2597 \\ (55.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 2265 \\ (52.0) \\ \hline \end{array}$ | $\begin{array}{r} 3594 \\ (76.9) \\ \hline \end{array}$ |
| $£ 10,400$ to less than £20,800 | $\begin{gathered} 1327 \\ (54.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1286 \\ (52.0) \\ \hline \end{array}$ | $\begin{array}{r} 1178 \\ (51.2) \\ \hline \end{array}$ | $\begin{array}{r} 1848 \\ (74.9) \\ \hline \end{array}$ |
| £20,800 to less than £31,200 | $\begin{array}{r} 1320 \\ (57.9) \\ \hline \end{array}$ | $\begin{array}{r} 1214 \\ (52.5) \\ \hline \end{array}$ | $\begin{array}{r} 1145 \\ (52.7) \\ \hline \end{array}$ | $\begin{array}{r} 1760 \\ (75.3) \\ \hline \end{array}$ |
| £31,200 and more | $\begin{gathered} 940 \\ (55.5) \\ \hline \end{gathered}$ | $\begin{gathered} 883 \\ (52.6) \\ \hline \end{gathered}$ | $\begin{gathered} 826 \\ (52.3) \\ \hline \end{gathered}$ | $\begin{array}{r} 1277 \\ (75.0) \\ \hline \end{array}$ |
| £41,600 to less than £52,000 | $\begin{gathered} 495 \\ (57.3) \\ \hline \end{gathered}$ | $\begin{gathered} 467 \\ (53.3) \\ \hline \end{gathered}$ | $\begin{gathered} 450 \\ (53.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 655 \\ (75.3) \\ \hline \end{array}$ |
| £52,000 to less than £80,000 | $\begin{gathered} 405 \\ (56.6) \\ \hline \end{gathered}$ | $\begin{gathered} 369 \\ (51.8) \\ \hline \end{gathered}$ | $\begin{gathered} 359 \\ (51.9) \\ \hline \end{gathered}$ | $\begin{gathered} 544 \\ (73.7) \\ \hline \end{gathered}$ |
| £80,000 and more | $\begin{gathered} 222 \\ (62.4) \\ \hline \end{gathered}$ | $\begin{gathered} 189 \\ (51.00) \\ \hline \end{gathered}$ | $\begin{gathered} 181 \\ (41.8) \end{gathered}$ | $\begin{gathered} 265 \\ (71.5) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.126$ | $\mathrm{P}=0.168$ | $\mathrm{P}=0.838$ | $\mathrm{P}=0.367$ |
| All responding 'like it a lot' Unweighted sample size | $\begin{gathered} 7326 \\ 12,801 \end{gathered}$ | $\begin{gathered} \hline 7005 \\ 12,801 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6404 \\ 12,387 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 9943 \\ 12,805 \end{gathered}$ |

Note: Other response categories, not shown, are 'a little bit' and 'don't like it'

The next section of the schooling questions asked children about how they thought they performed and behaved at school. Around half reported that they answered questions in class a lot (Table 5.9). The proportion was slightly higher for girls than for boys. Pakistani and Bangladeshi children were the most likely to give this answer (60\%) and white children were the least likely to do so (47\%).

Table 5.9: How much do you like answering questions in class?

|  | I like it a lot | I like it a bit | I don't like it | Total observations |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} \hline 3987 \\ (48.1) \end{gathered}$ | $\begin{gathered} \hline 3174 \\ (38.5) \end{gathered}$ | $\begin{gathered} 1050 \\ (13.4) \end{gathered}$ | 8211 |
| Wales | $\begin{gathered} 880 \\ (47.5) \end{gathered}$ | $\begin{gathered} 680 \\ (38.9) \end{gathered}$ | $\begin{gathered} 241 \\ (13.6) \\ \hline \end{gathered}$ | 1801 |
| Scotland | $\begin{array}{r} 700 \\ (46.4) \\ \hline \end{array}$ | $\begin{array}{r} 600 \\ (40.3) \\ \hline \end{array}$ | $\begin{array}{r} 190 \\ (13.3) \\ \hline \end{array}$ | 1490 |
| Northern Ireland | $\begin{gathered} 679 \\ \hline(52.7) \end{gathered}$ | $\begin{gathered} 446 \\ (33.6) \end{gathered}$ | $\begin{gathered} 173 \\ (13.7) \end{gathered}$ | 1298 |
|  |  |  |  | $\mathrm{P}=0.016$ |
| Sex |  |  |  |  |
| Male | $\begin{aligned} & \hline 2967 \\ & (45.6) \end{aligned}$ | $\begin{gathered} 2445 \\ (38.1) \end{gathered}$ | $\begin{gathered} 1012 \\ (16.3) \end{gathered}$ | 6424 |
| Female | $\begin{array}{r} 3279 \\ (50.7) \\ \hline \end{array}$ | $\begin{array}{r} 2455 \\ (38.9) \end{array}$ | $\begin{gathered} 642 \\ (10.4) \end{gathered}$ | 6376 |
|  |  |  |  | $\mathrm{p}=0.000$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{aligned} & \hline 5142 \\ & (47.0) \end{aligned}$ | $\begin{aligned} & 4160 \\ & (39.1) \end{aligned}$ | $\begin{gathered} 1446 \\ (13.9) \end{gathered}$ | 10748 |
| Mixed | $\begin{array}{r} 159 \\ (48.2) \end{array}$ | $\begin{array}{r} 126 \\ (37.1) \\ \hline \end{array}$ | $\begin{gathered} 45 \\ (14.6) \\ \hline \end{gathered}$ | 330 |
| Indian | $\begin{gathered} 162 \\ (52.6) \end{gathered}$ | $\begin{gathered} 134 \\ (39.7) \end{gathered}$ | $\begin{gathered} 26 \\ (7.7) \end{gathered}$ | 322 |
| Pakistani or Bangladeshi | $\begin{gathered} 434 \\ (60.4) \end{gathered}$ | $\begin{gathered} 257 \\ (31.5) \\ \hline \end{gathered}$ | $\begin{gathered} 66 \\ (8.1) \end{gathered}$ | 757 |
| Black | $\begin{gathered} 214 \\ (55.9) \end{gathered}$ | $\begin{array}{r} 137 \\ (34.4) \\ \hline \end{array}$ | $\begin{gathered} 39 \\ (9.7) \end{gathered}$ | 390 |

Table 5.9: How much do you like answering questions in class?

|  | I like it a lot | I like it a bit | I don't like it | Total observations |
| :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |
| Other inc. Chinese | $\begin{gathered} 89 \\ (54.2) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (39.8) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 15 \\ (6.0) \\ \hline \end{gathered}$ | 166 |
|  |  |  |  | $\mathrm{p}=0.000$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{gathered} 3751 \\ (47.2) \end{gathered}$ | $\begin{aligned} & 3110 \\ & (40.5) \end{aligned}$ | $\begin{gathered} 940 \\ (12.3) \end{gathered}$ | 7801 |
| Not employed/on leave | $\begin{array}{r} 2256 \\ (49.1) \\ \hline \end{array}$ | $\begin{array}{r} 1636 \\ (35.5) \\ \hline \end{array}$ | $\begin{array}{r} 667 \\ (15.4) \\ \hline \end{array}$ | 4559 |
|  |  |  |  | $\mathrm{P}=0.113$ |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 659 \\ (50.1) \end{gathered}$ | $\begin{gathered} 407 \\ (31.9) \\ \hline \end{gathered}$ | $\begin{gathered} 224 \\ (18.0) \end{gathered}$ | 1290 |
| Overseas qualification only | $\begin{gathered} 166 \\ (50.4) \end{gathered}$ | $\begin{gathered} 107 \\ (35.1) \end{gathered}$ | $\begin{gathered} 45 \\ (14.50 \\ \hline \end{gathered}$ | 318 |
| NVQ level 1 | $\begin{gathered} 413 \\ (49.6) \end{gathered}$ | $\begin{gathered} 289 \\ (33.1) \end{gathered}$ | $\begin{gathered} 131 \\ (17.2) \end{gathered}$ | 833 |
| NVQ level 2 | $\begin{array}{r} 1601 \\ (47.3) \\ \hline \end{array}$ | $\begin{array}{r} 1237 \\ (38.5) \\ \hline \end{array}$ | $\begin{gathered} 458 \\ (14.2) \\ \hline \end{gathered}$ | 3296 |
| NVQ level 3 | $\begin{gathered} 950 \\ (49.8) \end{gathered}$ | $\begin{gathered} 734 \\ (38.2) \\ \hline \end{gathered}$ | $\begin{gathered} 222 \\ (11.9) \\ \hline \end{gathered}$ | 1906 |
| NVQ level 4 | $\begin{array}{r} 1828 \\ (46.9) \\ \hline \end{array}$ | $\begin{array}{r} 1600 \\ (41.6) \\ \hline \end{array}$ | $\begin{array}{r} 437 \\ (11.4) \\ \hline \end{array}$ | 3865 |
| NVQ level 5 + | $\begin{gathered} 387 \\ (43.6) \end{gathered}$ | $\begin{gathered} 372 \\ (45.3) \end{gathered}$ | $\begin{gathered} 90 \\ (11.1) \end{gathered}$ | 849 |
|  |  |  |  | $\mathrm{P}=0.084$ |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{aligned} & 2272 \\ & (47.8) \end{aligned}$ | $\begin{gathered} 1597 \\ (39.7) \end{gathered}$ | $\begin{gathered} 685 \\ (12.5) \end{gathered}$ | 10,170 |
| One parent/carer | $\begin{array}{r} 1180 \\ (49.0) \\ \hline \end{array}$ | $\begin{gathered} 895 \\ (34.3) \\ \hline \end{gathered}$ | $\begin{gathered} 309 \\ (16.6) \\ \hline \end{gathered}$ | 2630 |
|  |  |  |  | $\mathrm{P}=0.349$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{array}{r} 2272 \\ (49.5) \\ \hline \end{array}$ | $\begin{array}{r} 1597 \\ (34.6) \\ \hline \end{array}$ | $\begin{gathered} 685 \\ (15.9) \\ \hline \end{gathered}$ | 4554 |
| $£ 10,400$ to less than £20,800 | $\begin{array}{r} 1180 \\ (47.4) \end{array}$ | $\begin{gathered} \hline 895 \\ (38.7) \end{gathered}$ | $\begin{gathered} 309 \\ (13.9) \end{gathered}$ | 2384 |
| $£ 20,800$ to less than £31,200 | $\begin{array}{r} 1092 \\ (48.1) \\ \hline \end{array}$ | $\begin{gathered} 902 \\ (40.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 276 \\ (11.9) \\ \hline \end{array}$ | 2270 |
| £31,200 and more | $\begin{gathered} 784 \\ (46.6) \\ \hline \end{gathered}$ | $\begin{gathered} 684 \\ (41.5) \\ \hline \end{gathered}$ | $\begin{gathered} 188 \\ (11.9) \end{gathered}$ | 1656 |
| $£ 41,600$ to less than £52,000 | $\begin{gathered} 417 \\ (48.1) \end{gathered}$ | $\begin{gathered} 346 \\ (41.7) \end{gathered}$ | $\begin{gathered} 90 \\ (10.1) \end{gathered}$ | 853 |
| $£ 52,000$ to less than £80,000 | $\begin{array}{r} 329 \\ (45.9) \\ \hline \end{array}$ | $\begin{gathered} 317 \\ (43.8) \\ \hline \end{gathered}$ | $\begin{gathered} 70 \\ (10.4) \\ \hline \end{gathered}$ | 716 |
| £80,000 and more | $\begin{gathered} 172 \\ (46.0) \end{gathered}$ | $\begin{gathered} 159 \\ (44.5) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (9.6) \\ \hline \end{gathered}$ | 367 |
|  |  |  |  | $\mathrm{P}=0.492$ |
| All responding children Unweighted sample size | 6246 | 4900 | 1654 | 12,800 |

As shown in Table 5.10, most children said they tried their best at school all of the time. Girls were more likely than boys to say this ( $85 \%$ and $74 \%$ ). No relationship was seen with ethnicity, mother's highest qualification or whether the child was in a one or two-parent family. There was however a significant but small lead in selfreported effort for children in higher income families and where mothers were employed.

Half of the girls interviewed believed that their teachers thought they were clever all of the time compared to 44 per cent of boys. Black children were the most likely to think this ( $57 \%$ ) compared to only 46 per cent of white children and about half of the children in any of the other ethnic groups (50-52\%). This question did draw out some results that are counter-intuitive. Namely that children with non-employed mothers and children in lower income families were also more likely to believe that their teachers thought they were clever all of the time. Although statistically significant, the percentage differences are quite small.

When asked whether they thought they behaved themselves in class all of the time four-fifths of girls answered 'yes' compared to three-fifths of boys. Indian, Pakistani and Bangladeshi children were the most likely to say that they behaved in class all of the time ( $72-74 \%$ ), followed by white children and those of other ethnic groups ( $71 \%$ ), mixed ( $68 \%$ ) and finally black children ( $60 \%$ ). Children in two-parent families were more likely to say they behaved in class (71\%) than children in lone-parent families (67\%).

Table 5.10: Responses of 'all of the time', to questions about school - doing their best, feeling safe, teacher opinion and good behaviour

|  | I do my best | I feel safe in the playground | My teacher thinks l'm clever | I behave well in class |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} 6507 \\ (79.2) \end{gathered}$ | $\begin{gathered} 4958 \\ (60.6) \\ \hline \end{gathered}$ | $\begin{gathered} 3827 \\ (46.5) \end{gathered}$ | $\begin{gathered} 5728 \\ (69.9) \\ \hline \end{gathered}$ |
| Wales | $\begin{array}{r} 1455 \\ (80.9) \\ \hline \end{array}$ | $\begin{array}{r} 1134 \\ (62.9) \\ \hline \end{array}$ | $\begin{gathered} 831 \\ (46.3) \end{gathered}$ | $\begin{array}{r} 1290 \\ (70.7) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 1209 \\ (80.8) \\ \hline \end{array}$ | $\begin{array}{r} 962 \\ (64.9) \\ \hline \end{array}$ | $\begin{gathered} 747 \\ (52.2) \\ \hline \end{gathered}$ | $\begin{array}{r} 1093 \\ (74.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 1062 \\ (81.5) \\ \hline \end{array}$ | $\begin{gathered} 868 \\ (67.4) \end{gathered}$ | $\begin{gathered} 672 \\ (52.7) \end{gathered}$ | $\begin{gathered} 931 \\ (71.9) \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.132$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.054$ |
| Sex |  |  |  |  |
| Male | $\begin{array}{r} 3992 \\ (73.9) \\ \hline \end{array}$ | $\begin{array}{r} 3992 \\ (62.0) \\ \hline \end{array}$ | $\begin{array}{r} 2815 \\ (43.9) \\ \hline \end{array}$ | $\begin{array}{r} 3945 \\ (61.2) \\ \hline \end{array}$ |
| Female | $\begin{array}{r} 3930 \\ (85.3) \\ \hline \end{array}$ | $\begin{gathered} 3930 \\ (60.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 3262 \\ (50.8) \\ \hline \end{array}$ | $\begin{array}{r} 5097 \\ (79.8) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.249$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{array}{r} 6705 \\ (79.8) \\ \hline \end{array}$ | $\begin{gathered} 6705 \\ (61.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 5004 \\ (46.1) \\ \hline \end{array}$ | $\begin{array}{r} 7622 \\ (70.6) \\ \hline \end{array}$ |
| Mixed | $\begin{gathered} 204 \\ (83.4) \end{gathered}$ | $\begin{gathered} 204 \\ (60.8) \end{gathered}$ | $\begin{gathered} 168 \\ (51.6) \end{gathered}$ | $\begin{gathered} 231 \\ (67.9) \end{gathered}$ |
| Indian | $\begin{gathered} 184 \\ (78.7) \\ \hline \end{gathered}$ | $\begin{gathered} 184 \\ (57.2) \\ \hline \end{gathered}$ | $\begin{gathered} 155 \\ (50.0) \\ \hline \end{gathered}$ | $\begin{gathered} 230 \\ (73.6) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 450 \\ (75.8) \\ \hline \end{gathered}$ | $\begin{gathered} 450 \\ (59.6) \\ \hline \end{gathered}$ | $\begin{gathered} 405 \\ (51.3) \\ \hline \end{gathered}$ | $\begin{gathered} 550 \\ (72.1) \\ \hline \end{gathered}$ |
| Black | $\begin{gathered} 230 \\ (77.1) \end{gathered}$ | $\begin{gathered} 230 \\ (60.3) \end{gathered}$ | $\begin{gathered} 218 \\ (57.1) \end{gathered}$ | $\begin{gathered} 232 \\ (59.9) \end{gathered}$ |
| Other inc. Chinese | $\begin{gathered} 96 \\ (76.0) \\ \hline \end{gathered}$ | $\begin{gathered} 96 \\ (60.3) \end{gathered}$ | $\begin{gathered} 83 \\ (51.1) \end{gathered}$ | $\begin{gathered} 118 \\ (70.6) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.718$ | $\mathrm{P}=0.138$ | $\mathrm{P}=0.010$ | $\mathrm{P}=0.002$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{gathered} 4913 \\ (80.7) \end{gathered}$ | $\begin{gathered} 4913 \\ (80.7) \end{gathered}$ | $\begin{gathered} 3606 \\ (45.9) \end{gathered}$ | $\begin{gathered} 5554 \\ (71.0) \end{gathered}$ |

Table 5.10: Responses of 'all of the time', to questions about school - doing their best, feeling safe, teacher opinion and good behaviour

|  | I do my best | I feel safe in the playground | My teacher thinks I'm clever | I behave well in class |
| :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |
| Not employed/on leave | $\begin{gathered} 2746 \\ (77.7) \\ \hline \end{gathered}$ | $\begin{gathered} 2746 \\ (77.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 2253 \\ (49.5) \\ \hline \end{array}$ | $\begin{array}{r} 3180 \\ (69.5) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.069$ | $\mathrm{P}=0.001$ | $\mathrm{P}=0.002$ | $\mathrm{P}=0.138$ |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 738 \\ (77.6) \\ \hline \end{gathered}$ | $\begin{gathered} 738 \\ (57.0) \\ \hline \end{gathered}$ | $\begin{gathered} 692 \\ (53.9) \\ \hline \end{gathered}$ | $\begin{gathered} 897 \\ (69.0) \\ \hline \end{gathered}$ |
| Overseas/other qualification only | $\begin{gathered} 183 \\ (73.8) \\ \hline \end{gathered}$ | $\begin{gathered} 183 \\ (56.9) \end{gathered}$ | $\begin{gathered} 137 \\ (43.5) \\ \hline \end{gathered}$ | $\begin{gathered} 216 \\ (64.6) \\ \hline \end{gathered}$ |
| NVQ level 1 | $\begin{gathered} 485 \\ (77.0) \\ \hline \end{gathered}$ | $\begin{gathered} 485 \\ (57.9) \\ \hline \end{gathered}$ | $\begin{gathered} 411 \\ (47.4) \\ \hline \end{gathered}$ | $\begin{gathered} 590 \\ (72.1) \\ \hline \end{gathered}$ |
| NVQ level 2 | $\begin{gathered} 2061 \\ (79.9) \end{gathered}$ | $\begin{gathered} 2061 \\ (61.6) \end{gathered}$ | $\begin{gathered} 1584 \\ (47.0) \end{gathered}$ | $\begin{aligned} & 2343 \\ & (70.4) \end{aligned}$ |
| NVQ level 3 | $\begin{array}{r} 1213 \\ (80.2) \end{array}$ | $\begin{array}{r} 1213 \\ (63.4) \end{array}$ | $\begin{gathered} 921 \\ (48.8) \end{gathered}$ | $\begin{array}{r} 1386 \\ (72.3) \end{array}$ |
| NVQ level 4 | $\begin{gathered} 2434 \\ (80.5) \end{gathered}$ | $\begin{gathered} 2434 \\ (62.9) \end{gathered}$ | $\begin{array}{r} 1740 \\ (45.2) \end{array}$ | $\begin{array}{r} 2726 \\ (70.5) \end{array}$ |
| NVQ level 5 + | $\begin{gathered} 542 \\ (80.0) \\ \hline \end{gathered}$ | $\begin{gathered} 542 \\ (63.4) \\ \hline \end{gathered}$ | $\begin{gathered} 372 \\ (43.7) \\ \hline \end{gathered}$ | $\begin{gathered} 573 \\ (68.1) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.011$ | $\mathrm{P}=0.103$ | $\mathrm{P}=0.001$ | $\mathrm{P}=0.164$ |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{aligned} & \hline 8163 \\ & (79.9) \end{aligned}$ | $\begin{gathered} 6321 \\ (61.6) \end{gathered}$ | $\begin{aligned} & 4798 \\ & (47.1) \end{aligned}$ | $\begin{gathered} 7279 \\ (71.4) \end{gathered}$ |
| One parent/carer | $\begin{array}{r} 2070 \\ (78.1) \\ \hline \end{array}$ | $\begin{array}{r} 1601 \\ (60.5) \\ \hline \end{array}$ | $\begin{array}{r} 1279 \\ (48.3) \\ \hline \end{array}$ | $\begin{array}{r} 1763 \\ (66.5) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.396$ | $\mathrm{P}=0.176$ | $\mathrm{P}=0.377$ | $\mathrm{P}=0.000$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 3570 \\ (77.6) \end{gathered}$ | $\begin{gathered} 2749 \\ (59.8) \end{gathered}$ | $\begin{aligned} & 2280 \\ & (49.9) \end{aligned}$ | $\begin{gathered} 3160 \\ (69.4) \end{gathered}$ |
| $£ 10,400$ to less than £20,800 | $\begin{array}{r} 1861 \\ (76.9) \\ \hline \end{array}$ | $\begin{array}{r} 1443 \\ (59.7) \\ \hline \end{array}$ | $\begin{array}{r} 1116 \\ (45.8) \\ \hline \end{array}$ | $\begin{array}{r} 1659 \\ (68.6) \\ \hline \end{array}$ |
| £20,800 to less than £31,200 | $\begin{array}{r} 1858 \\ (81.5) \\ \hline \end{array}$ | $\begin{array}{r} 1402 \\ (61.5) \\ \hline \end{array}$ | $\begin{array}{r} 1067 \\ (47.4) \end{array}$ | $\begin{array}{r} 1637 \\ (71.7) \end{array}$ |
| £31,200 and more | $\begin{aligned} & 1339 \\ & (80.7) \end{aligned}$ | $\begin{gathered} 1074 \\ (64.2) \end{gathered}$ | $\begin{gathered} 749 \\ (44.6) \end{gathered}$ | $\begin{aligned} & 1188 \\ & (71.2) \end{aligned}$ |
| £41,600 to less than £52,000 | $\begin{gathered} 718 \\ (84.7) \\ \hline \end{gathered}$ | $\begin{gathered} 547 \\ (64.1) \\ \hline \end{gathered}$ | $\begin{gathered} 375 \\ (45.4) \\ \hline \end{gathered}$ | $\begin{gathered} 607 \\ (71.3) \\ \hline \end{gathered}$ |
| $£ 52,000$ to less than £80,000 | $\begin{gathered} 582 \\ (81.7) \\ \hline \end{gathered}$ | $\begin{gathered} 467 \\ (65.7) \\ \hline \end{gathered}$ | (43.3) | $\begin{gathered} 527 \\ (74.2) \\ \hline \end{gathered}$ |
| £80,000 and more | $\begin{gathered} 305 \\ (83.7) \\ \hline \end{gathered}$ | $\begin{gathered} 240 \\ (63.0) \\ \hline \end{gathered}$ | $\begin{gathered} 182 \\ (48.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 264 \\ (71.2) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.005$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.008$ | $\mathrm{P}=0.166$ |
| All responding 'all of the time' <br> Unweighted sample size | $\begin{array}{r} 10233 \\ 12,806 \\ \hline \end{array}$ | $\begin{gathered} 7922 \\ 12,760 \end{gathered}$ | $\begin{gathered} 6077 \\ 12,672 \end{gathered}$ | $\begin{gathered} 9042 \\ 12,760 \end{gathered}$ |

Note: Other response categories, not shown, are 'some of the time' and 'never'.

Almost half of the girls interviewed thought that school was interesting all of the time (Table 5.11). This was significantly more than boys. Pakistani, Bangladeshi and Indian children were most likely to find school interesting and white children were the least likely. Children with non-employed mothers and children whose mothers had a lower educational attainment were more likely to find school interesting all of the time.

A very small proportion of children stated that they were always unhappy at school, boys significantly more than girls ( $9 \%: 6 \%$ ). Children from 'other' ethnic groups were more likely to be unhappy all of the time and white and Indian children were the least likely to feel unhappy. Children from poorer families were more likely to say that they were unhappy at school. They were significantly more likely to report always feeling unhappy at school if their mothers had a lower educational attainment, if they were in a lone-parent family, if their mothers were not employed and if they lived in a lowincome family.

Table 5.11 also shows the answers to how often the children felt tired at school. This is important as tired children are unlikely to be able to concentrate and are therefore less likely to learn. Just over a quarter of boys and just under a quarter of girls stated they always felt tired at school. There was no evident relationship with ethnicity; however, the lower the mother's educational attainment the more likely the children were to say they felt tired at school all of the time ( $32 \%$ of children of mothers with no qualifications compared to 17-22\% with mothers with at least an NVQ level 4). Children in lone-parent families were also more likely to report this tiredness (30\% compared to $23 \%$ of children in two-parent families) and those in families with lower total incomes ( $27 \%$ of those earning less than $£ 20,800$ ). Children in more disadvantaged families may be less likely to have a set bed time and routine therefore making it more likely that they would feel more tired. Children in disadvantaged households were also more likely to be sharing bedrooms with other siblings or perhaps sleeping in communal or less quiet areas. See Chapter 4 on Parenting.

As part of the questions aiming to gauge children's anxiety and isolation levels at school they were asked how often they felt safe in the playground (Table 5.10). Overall, 62 per cent felt safe all of the time. There were no significant differences in the proportions of those who felt safe and unsafe by gender, ethnicity or family type, or by mothers' job status. There was however a relationship with total income. The higher the total income bracket, the more likely children were to always feel safe in the playground. At least 64 per cent of children in families with a total income of at least $£ 31,200$ felt safe in the playground compared to 60 per cent of those in families with less than $£ 10,400$.

|  | School is interesting | I feel unhappy at school | I get tired at school | I get fed up at school |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} 3595 \\ (43.1) \end{gathered}$ | $\begin{aligned} & \hline 559 \\ & (7.2) \end{aligned}$ | $\begin{aligned} & 1930 \\ & (24.2) \end{aligned}$ | $\begin{array}{r} 1167 \\ (14.6) \end{array}$ |
| Wales | $\begin{gathered} 755 \\ (40.9) \\ \hline \end{gathered}$ | $\begin{aligned} & 142 \\ & (7.4) \end{aligned}$ | $\begin{gathered} 467 \\ (25.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 308 \\ (17.1) \\ \hline \end{array}$ |
| Scotland | $\begin{gathered} 584 \\ (39.6) \end{gathered}$ | $\begin{gathered} 114 \\ (8.3) \end{gathered}$ | $\begin{gathered} 381 \\ (26.3) \end{gathered}$ | $\begin{array}{r} 305 \\ (21.3) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{gathered} 569 \\ (44.0) \\ \hline \end{gathered}$ | $\begin{gathered} 99 \\ (7.9) \end{gathered}$ | $\begin{gathered} \hline 337 \\ (25.2) \end{gathered}$ | $\begin{array}{r} 259 \\ (21.0) \\ \hline \end{array}$ |
|  | $\mathrm{P}=0.109$ | $\mathrm{P}=0.638$ | $\mathrm{P}=0.387$ | $\mathrm{P}=0.000$ |
| Sex |  |  |  |  |
| Male | $\begin{gathered} 2424 \\ (37.8) \end{gathered}$ | $\begin{gathered} 543 \\ (8.6) \end{gathered}$ | $\begin{gathered} 1757 \\ (27.4) \end{gathered}$ | $\begin{array}{r} 1356 \\ (20.7) \end{array}$ |
| Female | $\begin{aligned} & 3079 \\ & (47.8) \end{aligned}$ | $\begin{gathered} 371 \\ (6.00) \end{gathered}$ | $\begin{aligned} & 1358 \\ & (21.6) \end{aligned}$ | $\begin{array}{r} 683 \\ (10.5) \end{array}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{aligned} & 4399 \\ & (40.9) \end{aligned}$ | $\begin{gathered} \hline 738 \\ (6.8) \end{gathered}$ | $\begin{aligned} & 2685 \\ & (24.8) \end{aligned}$ | $\begin{array}{r} 1756 \\ (15.8) \end{array}$ |
| Mixed | $\begin{gathered} 163 \\ (49.1) \end{gathered}$ | $\begin{gathered} 30 \\ (10.7) \end{gathered}$ | $\begin{gathered} 66 \\ (21.7) \end{gathered}$ | $\begin{array}{r} 51 \\ (15.9) \\ \hline \end{array}$ |
| Indian | $\begin{gathered} 174 \\ (53.0) \end{gathered}$ | $\begin{gathered} 20 \\ (6.9) \end{gathered}$ | $\begin{gathered} 58 \\ (16.7) \end{gathered}$ | $\begin{array}{r} 28 \\ (8.3) \end{array}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 432 \\ (57.4) \end{gathered}$ | $\begin{gathered} 76 \\ (10.7) \end{gathered}$ | $\begin{gathered} 168 \\ (23.6) \end{gathered}$ | $\begin{array}{r} 99 \\ (14.6) \end{array}$ |
| Black | $\begin{gathered} 198 \\ (54.1) \\ \hline \end{gathered}$ | $\begin{gathered} 26 \\ (8.4) \\ \hline \end{gathered}$ | $\begin{gathered} 81 \\ (23.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 68 \\ (18.7) \\ \hline \end{array}$ |
| Other inc. Chinese | $\begin{gathered} 96 \\ (57.3) \end{gathered}$ | $\begin{gathered} 13 \\ (12.3) \end{gathered}$ | $\begin{gathered} 27 \\ (18.1) \end{gathered}$ | $\begin{array}{r} 19 \\ (14.2) \end{array}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.003$ | $\mathrm{P}=0.152$ | $\mathrm{P}=0.063$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{aligned} & 3209 \\ & (40.9) \end{aligned}$ | $\begin{gathered} \hline 443 \\ (5.6) \end{gathered}$ | $\begin{gathered} 1741 \\ (23.0) \end{gathered}$ | $\begin{array}{r} 1158 \\ (14.5) \end{array}$ |
| Not employed/on leave | $\begin{aligned} & 2061 \\ & (44.7) \end{aligned}$ | $\begin{gathered} 428 \\ (9.7) \end{gathered}$ | $\begin{gathered} 171 \\ (27.3) \end{gathered}$ | $\begin{array}{r} 819 \\ (17.9) \end{array}$ |
|  | $\mathrm{P}=0.002$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Mother's highest qualification |  |  |  |  |
| No qualifications | $\begin{gathered} 624 \\ (48.2) \end{gathered}$ | $\begin{gathered} 156 \\ (13.20) \end{gathered}$ | $\begin{gathered} 380 \\ (31.5) \end{gathered}$ | $\begin{array}{r} 249 \\ (19.5) \end{array}$ |
| Overseas/other qualification only | $\begin{gathered} 146 \\ (41.6) \end{gathered}$ | $\begin{gathered} 31 \\ (8.3) \end{gathered}$ | $\begin{gathered} 83 \\ (26.7) \end{gathered}$ | $\begin{array}{r} 48 \\ (17.2) \end{array}$ |
| NVQ level 1 | $\begin{gathered} 388 \\ (47.0) \end{gathered}$ | $\begin{gathered} 78 \\ (9.9) \end{gathered}$ | $\begin{gathered} 234 \\ (28.4) \end{gathered}$ | $\begin{array}{r} 142 \\ (17.5) \end{array}$ |
| NVQ level 2 | $\begin{gathered} 1432 \\ (43.4) \end{gathered}$ | $\begin{gathered} 248 \\ (7 . .4) \end{gathered}$ | $\begin{gathered} 831 \\ (25.4) \end{gathered}$ | $\begin{array}{r} 578 \\ (16.6) \end{array}$ |
| NVQ level 3 | $\begin{gathered} 861 \\ (44.5) \end{gathered}$ | $\begin{aligned} & 137 \\ & (7.2) \end{aligned}$ | $\begin{gathered} 463 \\ (24.0) \end{gathered}$ | $\begin{array}{r} 328 \\ (17.3) \end{array}$ |
| NVQ level 4 | $\begin{gathered} 1498 \\ (37.9) \end{gathered}$ | $\begin{aligned} & 181 \\ & (4.5) \end{aligned}$ | $\begin{gathered} 864 \\ (22.0) \end{gathered}$ | $\begin{array}{r} 528 \\ (13.2) \\ \hline \end{array}$ |
| Continued |  |  |  |  |


|  | School is interesting | I feel unhappy at school | I get tired at school | I get fed up at school |
| :---: | :---: | :---: | :---: | :---: |
| NVQ level 5 + | $\begin{gathered} \hline 318 \\ (38.2) \end{gathered}$ | $\begin{gathered} \hline 39 \\ (4.5) \end{gathered}$ | $\begin{gathered} 160 \\ (17.2) \end{gathered}$ | $\begin{array}{r} 104 \\ (12.2) \end{array}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{array}{r} 4378 \\ (42.6) \\ \hline \end{array}$ | $\begin{aligned} & \hline 645 \\ & (6.3) \end{aligned}$ | $\begin{aligned} & 2340 \\ & (23.1) \end{aligned}$ | $\begin{array}{r} 1507 \\ (14.3) \\ \hline \end{array}$ |
| One parent/carer | $\begin{aligned} & 1125 \\ & (43.2) \end{aligned}$ | $\begin{gathered} 269 \\ (10.9) \end{gathered}$ | $\begin{gathered} 775 \\ (29.9) \end{gathered}$ | $\begin{array}{r} 532 \\ (20.6) \end{array}$ |
|  | $\mathrm{P}=0.623$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 2040 \\ (44.6) \end{gathered}$ | $\begin{aligned} & \hline 427 \\ & (9.9) \end{aligned}$ | $\begin{gathered} 1206 \\ (26.9) \end{gathered}$ | $\begin{array}{r} 841 \\ (18.5) \end{array}$ |
| $£ 10400$ to less than £20,800 | $\begin{gathered} 1053 \\ (43.4) \end{gathered}$ | $\begin{aligned} & 198 \\ & (8.6) \end{aligned}$ | $\begin{gathered} 602 \\ (27.3) \end{gathered}$ | $\begin{array}{r} 430 \\ (18.6) \end{array}$ |
| $£ 20800$ to less than £31,200 | $\begin{gathered} 951 \\ (41.4) \\ \hline \end{gathered}$ | $\begin{gathered} 136 \\ (5.9) \end{gathered}$ | $\begin{gathered} 559 \\ (24.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 312 \\ (12.4) \\ \hline \end{array}$ |
| Continued |  |  |  |  |
| £31,200 and more | $\begin{gathered} 694 \\ (42.5) \end{gathered}$ | $\begin{gathered} 79 \\ (4.7) \end{gathered}$ | $\begin{gathered} 377 \\ (22.0) \end{gathered}$ | $\begin{array}{r} 216 \\ (12.8) \end{array}$ |
| $£ 41,600$ to less than £52,000 | $\begin{gathered} 347 \\ (40.6) \end{gathered}$ | $\begin{gathered} 30 \\ (3.5) \end{gathered}$ | $\begin{gathered} 177 \\ (20.5) \end{gathered}$ | $\begin{array}{r} 115 \\ (12.6) \end{array}$ |
| $£ 52,000$ to less than £80,000 | $\begin{gathered} 266 \\ (37.2) \end{gathered}$ | $\begin{gathered} 34 \\ (4.4) \end{gathered}$ | $\begin{gathered} 134 \\ (18.8) \end{gathered}$ | $\begin{array}{r} 92 \\ (12.6) \end{array}$ |
| £80,000 and more | $\begin{gathered} 152 \\ (40.7) \end{gathered}$ | $\begin{gathered} 10 \\ (2.9) \end{gathered}$ | $\begin{gathered} 60 \\ (15.8) \end{gathered}$ | $\begin{array}{r} 33 \\ (8.4) \end{array}$ |
|  | $\mathrm{P}=0.058$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| All responding 'all of the time' <br> Unweighted sample size | $\begin{gathered} 5503 \\ 12,757 \end{gathered}$ | $\begin{gathered} 914 \\ 12,784 \end{gathered}$ | $\begin{gathered} 3115 \\ 12,800 \end{gathered}$ | $\begin{gathered} 2039 \\ 12,932 \end{gathered}$ |

Note: Other response categories, not shown, are 'some of the time' and 'never'.
One in ten boys and one in twelve girls said that they were bullied at school all of the time (Table 5.12). Pakistani and Bangladeshi children were the most likely to report this followed by mixed ethnicity children, Indian children, black children, white children and children of 'other' ethnic groups. This finding conflicts with other research on the characteristics of bullying victims in secondary schools in England which shows that white children are more likely to be bullied than children from ethnic minority groups (Green et al., 2010). The difference may reflect genuine differences in bullying related to the victim's age but we would need to carry out further analyses, taking into account multiple factors which may be related to bullying to make a more like-for-like comparison. Children in lone-parent families were more likely to report being bullied all of the time ( $13 \%$ compared to $8 \%$ of children in two-parent families), as were those whose mothers had lower educational attainment, those whose mothers were not employed and those in lower income families. Sixteen per cent of children whose mothers had no qualifications reported being bullied at school all of the time compared to only 6 per cent of those whose mothers had attained at least an NVQ level 4. Twice as many children in families with an income of less than
$£ 10,400$ reported being bullied compared to those in families with an income of at least $£ 31,200$ ( $12 \%$ and 6\%).

Table 5.12 also shows a very small proportion of children who said that they were always horrible to other children at school and the proportion was higher for boys ( $4 \%$ compared to $2 \%$ of girls). Children of mixed ethnicity were the most likely to admit to this (6\%), followed by Indian, Pakistani or Bangladeshi and black children (all 4\%). As with bullying, children in disadvantaged families - lone-parent families, children whose mothers were not employed or had a lower educational attainment and children in families with a lower income - were more likely to say that they were horrible to other children at school (for example, $5 \%$ of children from lone-parent families compared to $2 \%$ of children from two-parent families). The results from the two questions on bullying - whether they reported being bullied themselves and whether they reported being horrible to other children - highlight the important finding in this analysis that the characteristics of the victims and perpetrators are the same.

Boys were more likely than girls to say that they always talked when they should be doing their work ( $17 \%$ and $11 \%$ ). Children in lone-parent families, with mothers with a lower educational attainment, non-employed mothers and in lower income families were all more likely to say that they talked in class all the time. Eighteen per cent of children in lone-parent families reported doing so (compared to only $13 \%$ of children in two-parent families) and 17 per cent of children with an unemployed parent (compared to $12 \%$ of those whose mothers were employed). Seventeen per cent of children in families whose total income was less than £10,400 said that they talked all the time in class (compared to $9 \%$ of children in families with at least $£ 42,000$ ).

The final question in this section asked the children how often they felt left out of things at school. This question focused on social exclusion. Neither gender nor ethnicity had any relationship with the answers. However again, children in more disadvantaged families were more likely to report feeling left out all of the time. Eleven per cent of children whose mothers were not employed felt left out of things at school compared to 7 per cent of children whose mothers were employed. Thirteen per cent of children in lone-parent families felt left out (compared to 7\% in two-parent families). As shown in Figure 5.2, 14 per cent of children whose mothers had no qualification felt left out compared to those whose mothers had qualifications ( $5-6 \%$ of those with at least an NVQ level 4). There was also a significant relationship between household total income and whether or not the child felt socially excluded at school. Eleven per cent of children in low income families (<£10,400) felt left out all of the time compared to no more than 5 per cent of those in families that had an annual income of at least $£ 31,200$.

Figure 5.2: How often do you feel left out of things by other children?


Table 5.12: Responses of 'all of the time', to questions on interactions with other children at school

|  | I talk to my friends when I shouldn't | I am bullied | I am horrible to other children at school | I feel left out of things by other children |
| :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $\begin{gathered} 1111 \\ (13.8) \end{gathered}$ | $\begin{aligned} & \hline 767 \\ & (9.3) \end{aligned}$ | $\begin{aligned} & \hline 227 \\ & (2.9) \end{aligned}$ | $\begin{aligned} & \hline 656 \\ & (8.4) \end{aligned}$ |
| Wales | $\begin{gathered} 321 \\ (17.4) \\ \hline \end{gathered}$ | $\begin{gathered} 186 \\ (10.1) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (2.1) \\ \hline \end{gathered}$ | $\begin{array}{r} 145 \\ (8.1) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 176 \\ (12.5) \\ \hline \end{array}$ | $\begin{aligned} & 112 \\ & (8.2) \end{aligned}$ | $\begin{gathered} 30 \\ (2.1) \end{gathered}$ | $\begin{array}{r} 112 \\ (8.2) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{gathered} 170 \\ (13.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 103 \\ (8.5) \\ \hline \end{array}$ | $\begin{gathered} 27 \\ (1.8) \end{gathered}$ | $\begin{gathered} 98 \\ (7.6) \end{gathered}$ |
|  | $\mathrm{P}=0.008$ | $\mathrm{P}=0.458$ | $\mathrm{P}=0.063$ | $\mathrm{P}=0.812$ |
| Sex |  |  |  |  |
| Male | $\begin{array}{r} 1113 \\ (17.1) \\ \hline \end{array}$ | $\begin{gathered} \hline 678 \\ (10.6) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 215 \\ & (3.7) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 528 \\ (8.4) \\ \hline \end{gathered}$ |
| Female | $\begin{gathered} 665 \\ (10.5) \end{gathered}$ | $\begin{aligned} & 490 \\ & (7.8) \end{aligned}$ | $\begin{aligned} & 101 \\ & (1.9) \end{aligned}$ | $\begin{aligned} & 483 \\ & (8.2) \end{aligned}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.680$ |
| Child's ethnicity |  |  |  |  |
| White | $\begin{array}{r} 1479 \\ (13.7) \end{array}$ | $\begin{aligned} & \hline 948 \\ & (8.9) \end{aligned}$ | $\begin{aligned} & 238 \\ & (2.5) \end{aligned}$ | $\begin{aligned} & \hline 831 \\ & (8.0) \end{aligned}$ |
| Mixed | $\begin{gathered} 45 \\ (14.0) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (11.0) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (6.4) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (11.5) \\ \hline \end{gathered}$ |
| Indian | $\begin{gathered} 38 \\ (11.6) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 28 \\ (9.4) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (4.4) \end{gathered}$ | $\begin{gathered} 23 \\ (7.6) \\ \hline \end{gathered}$ |
| Pakistani or Bangladeshi | $\begin{gathered} 111 \\ (14.8) \\ \hline \end{gathered}$ | $\begin{gathered} 103 \\ (14.0) \end{gathered}$ | $\begin{gathered} 29 \\ (4.1) \end{gathered}$ | $\begin{gathered} 79 \\ (11.4) \end{gathered}$ |
| Black | $\begin{gathered} 75 \\ (18.2) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (9.3) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (4.3) \end{gathered}$ | $\begin{gathered} 33 \\ (10.0) \\ \hline \end{gathered}$ |

Table 5.12: Responses of 'all of the time', to questions on interactions with other children at school

|  | I talk to my friends when I shouldn't | I am bullied | I am horrible to other children at school | I feel left out of things by other children |
| :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |
| Other inc. Chinese | $\begin{gathered} 14 \\ (7.6) \end{gathered}$ | $\begin{gathered} 13 \\ (7.8) \end{gathered}$ | $\begin{gathered} 4 \\ (2.4) \end{gathered}$ | $\begin{gathered} 5 \\ (5.1) \end{gathered}$ |
|  | $\mathrm{P}=0.226$ | $\mathrm{P}=0.018$ | $\mathrm{P}=0.005$ | $\mathrm{P}=0.054$ |
| Mother's employment status |  |  |  |  |
| Employed/on leave | $\begin{gathered} 966 \\ (12.0) \end{gathered}$ | $\begin{aligned} & 585 \\ & (7.5) \end{aligned}$ | $\begin{gathered} \hline 131 \\ (1.8) \end{gathered}$ | $\begin{aligned} & \hline 488 \\ & (6.5) \end{aligned}$ |
| Not employed/on leave | $\begin{gathered} 749 \\ (16.7) \\ \hline \end{gathered}$ | $\begin{gathered} 523 \\ (11.5) \\ \hline \end{gathered}$ | $\begin{array}{r} 172 \\ (4.3) \\ \hline \end{array}$ | $\begin{gathered} 483 \\ (11.0) \\ \hline \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |


| Mother's highest qualification |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No qualifications | $\begin{gathered} 247 \\ (19.9) \end{gathered}$ | $\begin{gathered} 191 \\ (16.2) \end{gathered}$ | $\begin{gathered} \hline 74 \\ (5.7) \end{gathered}$ | $\begin{gathered} 164 \\ (13.4) \end{gathered}$ |
| Overseas/other qualification only | $\begin{gathered} 41 \\ (12.8) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (8.0) \end{gathered}$ | $\begin{gathered} 10 \\ (2.8) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (9.2) \\ \hline \end{gathered}$ |
| NVQ level 1 | $\begin{gathered} 155 \\ (17.3) \end{gathered}$ | $\begin{gathered} 99 \\ (13.1) \end{gathered}$ | $\begin{gathered} 37 \\ (5.2) \end{gathered}$ | $\begin{gathered} 99 \\ (13.0) \end{gathered}$ |
| NVQ level 2 | $\begin{gathered} 485 \\ (14.8) \\ \hline \end{gathered}$ | $\begin{array}{r} 324 \\ (9.6) \\ \hline \end{array}$ | $\begin{gathered} 73 \\ (2.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 301 \\ (9.3) \\ \hline \end{array}$ |
| NVQ level 3 | $\begin{array}{r} 261 \\ (13.3) \end{array}$ | $\begin{array}{r} 180 \\ (9.1) \end{array}$ | $\begin{gathered} 35 \\ (1.9) \end{gathered}$ | $\begin{aligned} & 136 \\ & (7.6) \end{aligned}$ |
| NVQ level 4 | $\begin{gathered} 444 \\ (10.8) \\ \hline \end{gathered}$ | $\begin{gathered} 227 \\ (5.6) \end{gathered}$ | $\begin{gathered} 60 \\ (1.7) \end{gathered}$ | $\begin{array}{r} 194 \\ (4.9) \end{array}$ |
| NVQ level 5 + | $\begin{gathered} 81 \\ (10.0) \end{gathered}$ | $\begin{gathered} 58 \\ (6.3) \end{gathered}$ | $\begin{gathered} 14 \\ (2.4) \end{gathered}$ | $\begin{gathered} 46 \\ (6.1) \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Number of parents/carers in the household |  |  |  |  |
| Two parents/carers | $\begin{array}{r} 1309 \\ (12.7) \\ \hline \end{array}$ | $\begin{aligned} & \hline 839 \\ & (8.2) \end{aligned}$ | $\begin{array}{r} 218 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 703 \\ (7.1) \\ \hline \end{array}$ |
| One parent/carer | $\begin{array}{r} 469 \\ (17.9) \\ \hline \end{array}$ | $\begin{gathered} 329 \\ (13.0) \\ \hline \end{gathered}$ | $\begin{gathered} 98 \\ (4.7) \end{gathered}$ | $\begin{gathered} 308 \\ (12.8) \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| Total income |  |  |  |  |
| Less than £10,400 | $\begin{gathered} 766 \\ (16.9) \\ \hline \end{gathered}$ | $\begin{gathered} 542 \\ (12.0) \end{gathered}$ | $\begin{aligned} & \hline 167 \\ & (4.3) \end{aligned}$ | $\begin{gathered} 490 \\ (11.4) \end{gathered}$ |
| £10,400 to less than £20,800 | $\begin{gathered} 359 \\ (15.5) \\ \hline \end{gathered}$ | $\begin{gathered} 246 \\ (11.0) \\ \hline \end{gathered}$ | $\begin{gathered} 71 \\ (3.2) \end{gathered}$ | $\begin{gathered} 199 \\ (9.4) \end{gathered}$ |
| $\begin{aligned} & £ 20,800 \text { to less than } \\ & £ 31,200 \end{aligned}$ | $\begin{array}{r} 277 \\ (12.3) \\ \hline \end{array}$ | $\begin{array}{r} 166 \\ (7.5) \\ \hline \end{array}$ | $\begin{array}{r} 34 \\ (1.6) \\ \hline \end{array}$ | $\begin{gathered} 152 \\ (7.0) \\ \hline \end{gathered}$ |
| £31,200 and more | $\begin{gathered} 175 \\ (10.6) \end{gathered}$ | $\begin{aligned} & 111 \\ & (6.3) \end{aligned}$ | $\begin{gathered} 19 \\ (1.3) \end{gathered}$ | $\begin{gathered} 94 \\ (5.3) \end{gathered}$ |
| £41,600 to less than $52,000$ | $\begin{gathered} 89 \\ (9.4) \end{gathered}$ | $\begin{gathered} 53 \\ (6.5) \end{gathered}$ | $\begin{gathered} 8 \\ (0.8) \end{gathered}$ | $\begin{gathered} 36 \\ (4.1) \end{gathered}$ |
| $£ 52,000$ to less than £80,000 | $\begin{gathered} 72 \\ (9.4) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (4.4) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (2.0) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (3.3) \\ \hline \end{gathered}$ |
| £80,000 and more | $\begin{gathered} 40 \\ (9.0) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (4.1) \end{gathered}$ | $\begin{gathered} 5 \\ (1.6) \end{gathered}$ | $\begin{gathered} 15 \\ (4.6) \end{gathered}$ |
|  | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ | $\mathrm{P}=0.000$ |
| All responding 'all of the time' Unweighted sample size | $\begin{gathered} 1778 \\ 12,878 \end{gathered}$ | $\begin{gathered} 1168 \\ 12,872 \\ \hline \end{gathered}$ | $\begin{gathered} 316 \\ 12,875 \\ \hline \end{gathered}$ | $\begin{gathered} 316 \\ 12,875 \\ \hline \end{gathered}$ |

Note: Other response categories, not shown, are 'some of the time' and 'never'.

## Conclusion

This chapter has provided a summary description of the MCS child self-completion information about hobbies (reading, watching TV, playing game consoles, playing sports), their feelings (including whether they felt happy, sad or worried), their friends (who they were, how many they had) and their school experience. Various relationships were statistically significant when looking at these topics by key sociodemographic characteristics: gender, the country they live in (within the UK), ethnicity, family income, mother's highest qualification, family type (lone-parent or two-parent family) and whether or not the mother was currently working.

There were many differences between girls and boys. Boys were more likely than girls to enjoy watching television, videos, and DVDs. They were also more likely to enjoy participating in sports and playing games on a computer or a PlayStation. Girls were more likely to enjoy listening to music, drawing or making things. Girls were also more likely to say that they had a lot of friends of both sexes and that they enjoyed playing with their friends. It would have been interesting to look at this question in relation to the number of siblings of each child, and this would be an idea for future research. The analysis also showed us that children from more disadvantaged families were more likely to enjoy music and playing computer games than children from less disadvantaged families.

In regards to feelings, whereas girls were more likely to say they were happy, boys were more likely to say they worried. It would be possible using this data to examine the children's feelings in relation to their mothers' mental health status and how often they felt depressed, for example, as this may affect the children's feelings and general wellbeing. Children from more disadvantaged families were more likely to worry, feel sad, be tired and like to be alone. A consistent theme throughout this basic analysis of feelings was the more disadvantaged the family the more extreme emotional behaviour the children are likely to express.

The school questions also produced some interesting results, particularly in relation to behaviour and possible self-esteem and confidence. Children from higher income families were more likely to say that they always tried to do their best at school.

One important feature of the questionnaire exercise is the scope to look at the children's hobbies, feelings, relationships and attitudes to school in relation to certain socio-demographic statistics. It is crucial, however, to note that this analysis is only descriptive and therefore we cannot make any claims on causality. There are underlying relationships between the socio-demographic characteristics, for example between ethnicity and lone parenthood (more than half of black dependent children live with a lone parent compared with $21 \%$ of white children and $14 \%$ of Asian or Asian British children (ONS, 2009; see also Chapter 3 of this report)). Ethnic minority groups are also twice as likely to be poor (Palmer and Kenway, 2007; see also Chapter 12 of this report). Future analysis should take account of these relationships and therefore deliver more robust results. It must also be noted that whether children should report their own wellbeing is a topic of ongoing debate. Limited information exists about the quality of child report when items are interviewer administered. Even
less is known about children's ability to self-complete questions.
Finally, there are many additional characteristics that will play important roles in relation to attitudes to school. Research has shown that poorer children are less likely to eat healthy food. By having a poorer diet they are less likely to get all their essential nutrients. Information from the Health Survey for England (HSE) also shows us that children in lower income families are more likely to be obese (NHS Information Centre, 2008). These factors are highly likely to affect a child's general mood and wellbeing. Further investigation into the MCS data would allow these factors to be taken into consideration when examining wellbeing.

## References

DCSF (2008) Effective Pre-school and Primary Education 3-11 Project (EPPE 3-11): Pupils' self-perception and views of primary school in year 5. Research Brief -DCSF-RBX-15-08. London: Department for Children, Schools and Families.

Green, R., Collingwood, A. and Ross, A. (2010) Characteristics of Bullying in Secondary Schools in England. Research Report - DFE-RR001. Department for Education.

Nairn, A. and Ormrod, J. with Bottomley, P. (2007) Watching, wanting and wellbeing: Exploring the links. National Consumer Council.

NHS Information Centre (January 2008) Statistics on obesity, physical activity and diet: England, January 2008. NHS Information Centre.

NSPCC (2008) Child's Voice Appeal www.nspcc.org.uk/whatwedo/childvoiceappeal/CV2hub launch cvh65040.html
ONS (2009) 'Chapter 2: Households and families’, Social Trends 39. Office for National Statistics/Palgave Macmillan.

Palmer, G. and Kenway, P. (2007) Poverty rates among ethnic groups in Great Britain. Joseph Rowntree Foundation.

Ross, A. (2009) Disengagement from Education among 14-16 year olds. Department for Children Schools and Families Research Report - DCSF-RR178.

## Chapter 6

## EDUCATION, SCHOOLING AND CHILDCARE

Kirstine Hansen and Elizabeth M. Jones

## Chapter overview

This chapter looks at children's education, schooling experiences and childcare arrangements at age 7. In particular, it examines the following:

- Cohort member's school
- Absences from school
- Special education needs
- Mother's satisfaction with school and educational aspirations
- Parental involvement
- Homework
- Travel to school
- Out of school clubs
- Childcare


## Introduction

This chapter reports on children's education, schooling experiences and childcare arrangements at age 7.

Most children aged 7 are in Year 2 in England and Wales and Primary 3 in Scotland and Northern Ireland. In England and Wales, children of this age are at Key Stage 1 (KS1) of the National Curriculum, ${ }^{9}$ when they are assessed in reading; writing (including handwriting and spelling); speaking and listening; maths; and science. The teacher-assessed tasks and tests for KS1 pupils can be taken at a time the school chooses. The results are not reported publicly but they are given to parents and are used to help the teacher assess children's work. By the age of 7, most children are expected to achieve level 2. Seven-year olds in Northern Ireland will generally be at KS1 of the Northern Ireland Curriculum, which is based on the National Curriculum used in England and Wales. In Scotland, children of this age will usually be at the first level of the Curriculum for Excellence, when they are encouraged to develop their thinking and learning across a broad range of subjects and contexts.

[^9]The sample used in this chapter consists of Millennium Cohort Study (MCS) families in which the main respondent is the cohort member's mother and the partnerrespondent, if there is one, is the cohort member's father. In total, 13,244 of the 13,857 families who took part in the fourth sweep of the MCS fell into this category; these are the families that were retained for these analyses. In families with twin and triplet cohort members, records for only one child per family were used, making the number of cohort members equal to the number of families.

All data used are cross-sectional, from the fourth sweep of MCS only, unless otherwise specified. The schooling and education variables are tabulated across a number of demographic and social variables, including country of residence at MCS4, parental qualifications, family poverty status, parental occupational status, child gender, parent partnership status, and father's relationship to the child. Unless otherwise stated, all information is provided by the mother through the main respondent interview. The parental qualification variable is the higher of the mother's and father's qualification levels or the mother's qualification if she is a lone parent or information on the father's qualifications is not available. Families are classified as being in poverty if their equivalised income is below 60 per cent of the median household income. Parent occupational status is condensed into two categories one for those with at least one parent in a professional or managerial occupation and the other for those with no parent in such an occupation. For parents living in the same household, partnerships are classified as married or cohabiting. The father's relationship to the child is an indicator of whether the partner resident in the household is the natural father of the cohort member child. Each education and childcare variable is shown tabulated against country, child and family variables that might be expected to be related to it. For example, all percentages and means reported are weighted for original sampling and attrition up to MCS4 as well as adjusted for the complex survey design.

## Cohort member's school

The large majority of children (94\%) were in Year 2/Primary 3. Five per cent were in Year 3/Primary 4 and another 1 per cent were in Year 1/Primary 2 or another year. The majority of children were in the same school they were in at age 5 (MCS3) but around 11 per cent of children had changed schools at least once since the previous MCS sweep. Children in Northern Ireland were less likely to have changed schools (5\%). Of those in the UK who had changed schools, 92 per cent did so once, and 7 per cent twice.

Most MCS children attend state schools but 3.9 per cent of them attend fee-paying schools. This figure is similar to the proportion at MCS3 when 4.1 per cent of children attended private schools. It was mostly the same children who were in fee-paying schools at each sweep. Of those in fee-paying schools at MCS4, 86 per cent had also been in such schools at MCS3. A very small percentage (less than 1\%) of those who were in a state school at MCS3 were in a fee-paying school at MCS4. Rates of attending fee-paying schools were higher in England (4.5\%) than in Scotland (2.5\%), Northern Ireland (1.5\%) and Wales (1.4\%).

## Absences from school

Regular school attendance is important for children's futures. Pupils who miss school frequently can fall behind with their work and do less well in exams. In addition, research suggests that children who attend school regularly could also be at less risk of getting involved in antisocial behaviour or crime (Hansen, 2003). If a child misses school without good reason, schools and local authorities have a number of legal powers that they can use. Authorised local authority staff, police officers and head teachers can issue penalty notices to parents of children who are not attending school regularly. In England, the fine is $£ 50 .{ }^{10}$ In addition, the local authority may prosecute parents, which could result in a more severe penalty. Parents could get a fine of up to $£ 2,500$, a community order or, in extreme cases, a jail sentence of up to three months. The specific periods of time that lead to penalties are up to school or local authority discretion. If the court thinks it will help to stop a child missing school, it may also impose a Parenting Order, which requires parents to attend parenting education or support classes. ${ }^{11}$

Table 6.1 shows the number of complete weeks that children had missed, both out of all respondents, and out of those who had missed two or more complete weeks. Ninety-five per cent of children had missed fewer than two weeks. Of those who missed two or more, just over half were absent for two weeks and 11 per cent missed five or more weeks. III health was by far the most common reason for extended absence, with foreign holidays being the second most common (see Table 6.2).

| Table 6.1: Number of complete weeks off school,* MCS4 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Of all respondents |  | Of those missing >=2 |  |
|  | Obs | $\%$ | Obs | $\%$ |
| Fewer than 2 | 12491 | 94.5 | -- | -- |
| 2 | 413 | 3.1 | 413 | 55.8 |
| 3 | 180 | 1.3 | 180 | 23.0 |
| 4 | 70 | 0.6 | 70 | 10.3 |
| 5 or more | 81 | 0.6 | 81 | 10.9 |
| Unweighted sample size | 13235 |  | 744 |  |
| Weighted count | 13185 |  | 730 |  |

*Periods of continuous absence in term-time lasting two weeks or more.
Note. Percentages are weighted for sampling and attrition. Obs (number of observations) are unweighted.
Table 6.2: Main reason for extended absence, MCS4

|  | Obs | $\%$ |
| :--- | :---: | :---: |
| III health | 498 | 63.8 |
| Needed to help out at home or other family issue | 7 | 0.8 |
| Child out of country on holiday | 177 | 23.9 |
| Other reason | 71 | 11.5 |
| Unweighted sample size | 753 |  |
| Weighted count | 740 |  |

Note. Percentages are weighted for sampling and attrition. Obs (number of observations) are unweighted.

## Special education needs

[^10]The term 'special educational needs' (SEN) refers to children who have learning difficulties or disabilities (or occasionally, talents) that make it harder for them to learn or access education than most children of the same age. A substantial minority of children will have SEN of some kind at some time during their education. Help will usually be provided in their mainstream school, sometimes with the involvement of outside specialists. Children with SEN may need extra help in a range of areas, for example in schoolwork; expressing themselves or understanding what others are saying; making friends or relating to adults; behaving properly in school; or organising themselves. They may also have some kind of sensory or physical needs which may affect them in school. Some children with identified special needs also have a 'statement' of special educational needs which not only sets out a child's needs but the help they should receive. It is reviewed annually. In January 2010, 2.7 per cent of pupils across all schools in England had statements of SEN, the same percentage as the previous two years. ${ }^{12}$ The figure for Wales (3\%) was almost identical. ${ }^{13}$ Scotland does not have SEN statements, but does refer to pupils' Additional Support Needs (ASNs); in 2009 approximately 5 per cent of pupils in mainstream primary schools had ASNs. ${ }^{14}$ In Northern Ireland in October 2009, 4 per cent of pupils had SEN statements. ${ }^{15}$

Table 6.3 shows the frequency of identified special needs among the cohort children. About 9 per cent had an identified special need, though only 3 per cent had statements for their special needs. The most common problems were learning difficulties and speech and language problems.

Table 6.3: Receipt of special education for identified needs, MCS4

|  | Obs | \% of those with <br> needs | \% of all |
| :--- | :---: | :---: | :---: |
| Has any special needs | 1080 | 100.0 | 8.8 |
| Learning difficulties | 307 | 28.5 | 2.5 |
| Other reason | 256 | 23.5 | 2.1 |
| Speech or language problems | 242 | 21.7 | 1.9 |
| Dyslexia | 151 | 13.9 | 1.2 |
| Autism or Asperger's | 148 | 13.8 | 1.2 |
| Behaviour problems or hyperactivity | 114 | 10.8 | 1.0 |
| ADHD | 96 | 9.0 | 0.8 |
| Hearing problems | 40 | 4.1 | 0.4 |
| Other physical disability | 42 | 3.4 | 0.3 |
| Sight problems | 37 | 3.2 | 0.3 |
| Medical or health problem | 39 | 3.1 | 0.3 |

[^11]Table 6.3: Receipt of special education for identified needs, MCS4

|  | Obs | \% of those with <br> needs | \% of all |
| :--- | :---: | :---: | :---: |
| Gifted | 30 | 3.0 | 0.3 |
| Bullied | 5 | 0.5 | 0.0 |
| Mental illness or depression | 6 | 0.4 | 0.0 |
| Unweighted sample size | 13151 |  |  |
| Weighted count | 13103 |  |  |

Note. Percentages are weighted for sampling and attrition. Obs (number of observations) are unweighted.
Table 6.4 shows the prevalence of special education needs by child and family characteristics. Rates of special need identification were highest in Scotland and lowest in Wales and Northern Ireland. The higher the parents' qualification level, the less likely their children are to have identified special needs - nearly 12 per cent of children with parents with no qualification had special needs identified by the school, while just under of 7 per cent of those with a parent with a higher degree had an identified special need. Children who were not living in poverty were less likely to have an identified special need, as were children of parents who were in a professional or managerial occupation.

Table 6.4: Whether school has said child has special needs*

| *Whether statemented or not | Yes |  | Base |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Obs | Weighted \% | Obs | Weighted count |
| Country |  |  |  |  |
| England | 699 | (8.8) | 8433 | 8441 |
| Wales | 142 | (7.3) | 1958 | 1950 |
| Scotland | 161 | (10.4) | 1587 | 1585 |
| Northern Ireland | 91 | (7.1) | 1342 | 1340 |
|  |  |  |  | $\mathrm{P}=0.008$ |
| Highest parental qualification |  |  |  |  |
| None | 110 | (11.5) | 987 | 981 |
| NVQ Level 1 | 75 | (12.4) | 612 | 676 |
| NVQ Level 2 | 268 | (9.6) | 2851 | 3015 |
| NVQ Level 3 | 185 | (9.0) | 2148 | 2109 |
| NVQ Level 4 | 328 | (7.7) | 4680 | 4573 |
| NVQ Level 5 | 92 ( | 6.6) | 1679 | 1556 |
|  |  |  |  | $\mathrm{P}<0.001$ |
| Family income poverty |  |  |  |  |
| Not in poverty | 694 | (7.9) | 9378 | 9456 |
| In poverty | 400 | (11.1) | 3934 | 3812 |
|  |  |  |  | $\mathrm{P}<0.001$ |
| Parental occupational status |  |  |  |  |
| Professional or Managerial | 333 | (6.9) | 5356 | 5319 |
| Other | 421 | (8.5) | 5287 | 5228 |
|  |  |  |  | $\mathrm{P}=0.019$ |
| All | 1094 | (8.8) | 12226 | 12100 |

Most children (75\%) had one identified need in their plans; 15 per cent had two and 7 per cent had three (Table 6.5).

| Table 6.5 Number of issues in special needs plan, MCS4 |  |  |
| :--- | :---: | :---: |
|  | Obs | $\%$ |
| 1 | 796 | 74.9 |
| 2 | 163 | 14.8 |
| 3 | 67 | 6.8 |
| 4 | 20 | 1.4 |
| 5 | 10 | 1.1 |
| 6 | 8 | 0.5 |
| Unweighted sample size | 1069 |  |
| Weighted count | 1148 |  |

Note. Percentages are weighted for sampling and attrition. Obs (number of observations) are unweighted.
The numbers of children having difficulty with maths, reading and writing are shown in Table 6.6. For all subjects, the majority of children ( 69 to $73 \%$ ) were reported to have no difficulty. The subject with which the fewest children had difficulty was reading - 27 per cent compared to 31 per cent for maths and writing.

Table 6.6: Difficulties at school with subjects, MCS4

|  | No difficulty | Some difficulty | Great difficulty |
| :--- | :---: | :---: | :---: |
|  | 9292 | 3385 | 453 |
| Maths | $(68.9)$ | $(27.3)$ | $(3.8)$ |
|  | 9656 | 2965 | 534 |
| Reading | $(72.6)$ | $(23.1)$ | $(4.3)$ |
|  | 9398 | 3239 | 515 |
| Writing | $(69.5)$ | $(26.4)$ | $(4.2)$ |
| Unweighted sample size | 13152 |  |  |
| Weighted count | 13106 |  |  |

Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages and count are weighted for sampling and attrition.

## Satisfaction and aspirations

Mothers were asked how satisfied they were with their child's current school. The results are shown in Table 6.7. Overall, close to two-thirds of mothers reported being very satisfied, nearly one-third said they were fairly satisfied, and 6 per cent reported that they were not satisfied. Mothers in Wales and Northern Ireland were more likely to report being very satisfied. The dissatisfaction rate was highest in England.

| Table 6.7: Mother's satisfaction with current school, MCS4 |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Very satisfied | Fairly <br> satisfied | Not <br> satisfied | Obs <br> count |
| Country | 5109 | 2710 | 480 | 8310 |
| England | $(61.9)$ | $(32.4)$ | $(5.8)$ | 8316 |
|  | 1345 | 516 | 72 | 1933 |
| Wales | $(69.5)$ | $(26.6)$ | $(3.9)$ | 1922 |

Table 6.7: Mother's satisfaction with current school, MCS4

|  | Very satisfied | Fairly satisfied satisfied | Not satisfied | Obs count |
| :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |
| Scotland | $\begin{array}{r} 1005 \\ (64.4) \\ \hline \end{array}$ | $\begin{gathered} 480 \\ (30.4) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 78 \\ (5.2) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 1563 \\ & 1559 \end{aligned}$ |
| Northern Ireland | $\begin{gathered} 974 \\ (73.3) \\ \hline \end{gathered}$ | $\begin{gathered} 289 \\ (22.7) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (4.0) \end{gathered}$ | $\begin{aligned} & 1319 \\ & 1320 \\ & \hline \end{aligned}$ |


| Highest parental qualification ${ }^{1}$ |  |  |  | $\mathrm{P}=0.000$ |
| :--- | :---: | :---: | :---: | :---: |
|  | 608 | 289 | 70 | 967 |
| None | $(60.0)$ | $(33)$. | $(6.4)$ | 962 |
|  | 373 | 197 | 34 | 604 |
| NVQ Level 1 | $(61.4)$ | $(32.7)$ | $(5.8)$ | 662 |
|  | 1807 | 858 | 142 | 2807 |
| NVQ Level 2 | $(62.2)$ | $(32.2)$ | $(5.6)$ | 2969 |
|  | 1369 | 640 | 109 | 2118 |
| NVQ Level 3 | $(63.5)$ | $(31.0)$ | $(5.5)$ | 2078 |
|  | 2999 | 1376 | 236 | 4611 |
| NVQ Level 4 | $(64.2)$ | $(30.4)$ | $(5.4)$ | 4506 |
|  | 1071 | 515 | 68 | 1657 |
| NVQ Level 5 | $(63.2)$ | $(32.5)$ | $(4.3)$ | 1531 |


| $\mathrm{P}=0.473$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Family income poverty |  |  |  |  |
| Not in poverty | $\begin{array}{r} \hline 6050 \\ (63.9) \\ \hline \end{array}$ | $\begin{gathered} 2767 \\ (31.0) \end{gathered}$ | $\begin{array}{r} \hline 433 \\ (5.0) \end{array}$ | $\begin{aligned} & \hline 9250 \\ & 9318 \\ & \hline \end{aligned}$ |
| In poverty | $\begin{gathered} 2378 \\ (60.4) \\ \hline \end{gathered}$ | $\begin{aligned} & 1227 \\ & (32.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 262 \\ & (6.9) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3867 \\ & 3751 \\ & \hline \end{aligned}$ |
| $\mathrm{P}=0.000$ |  |  |  |  |
| Parental occupational status |  |  |  |  |
| Professional or managerial | $\begin{aligned} & 3463 \\ & (64.4) \end{aligned}$ | $\begin{aligned} & 1599 \\ & (30.7) \end{aligned}$ | $\begin{aligned} & 244 \\ & (4.9) \end{aligned}$ | $\begin{aligned} & 5306 \\ & 5253 \end{aligned}$ |
| Other | $\begin{aligned} & 3408 \\ & (61.9) \end{aligned}$ | $\begin{aligned} & 1629 \\ & (32.4) \end{aligned}$ | $\begin{aligned} & 291 \\ & (5.7) \end{aligned}$ | $\begin{aligned} & 5328 \\ & 5256 \end{aligned}$ |
| $\mathrm{P}=0.048$ |  |  |  |  |
| All | $\begin{array}{r} 8433 \\ (62.9) \\ \hline \end{array}$ | $\begin{array}{r} 3995 \\ (31.5) \\ \hline \end{array}$ | $\begin{gathered} \hline 697 \\ (5.6) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 13125 \\ & 13075 \\ & \hline \end{aligned}$ |

Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages and count are weighted for sampling and attrition. ${ }^{1} \mathrm{NVQ}=$ National Vocational Qualification. Levels range from 1 (basic work activities that are routine and predictable) to 5 (senior management). Also includes academic qualifications, with NVQ1 being equivalent to some basic school-leaving qualifications and NVQ5 being equivalent to a postgraduate qualification or higher degree. Overseas and other unclassified qualifications are excluded.

Reported satisfaction was not significantly different across different parental qualification levels. Mothers in families below the poverty line were less likely to report being very satisfied and more likely to report not being satisfied with their children's schools. Those in families with at least one parent in a professional or managerial occupation were more likely to report being very satisfied and less likely to report not being satisfied.

A very high percentage of mothers reported wanting their children to stay on at school past the minimum leaving age ( 98 per cent) and attend university ( 97 per cent). The percentages of mothers wanting their children to stay on at school are shown in Table 6.8. Scottish mothers were especially likely to say they wanted their children to stay on at school. The higher the parental qualification level, the higher the rate of wanting their children to stay on at school. Mothers in families where a
parent has (or had) a professional or managerial job were significantly more likely to want their children to finish school, while those living in poverty were less likely. These differences are statistically different, but rates were universally very high.

Similar patterns are seen for mothers' reports of wanting their children to go to university (Table 6.8). However, while mothers in Scotland were most likely to want their child to attend university, the differences among countries are not statistically significant. Mothers in families with higher parental qualification levels or a parent in a professional or managerial occupation were more likely to want their children to attend university. For this question, there was no difference between mothers in families above or below the poverty line.

Table 6.8: Mothers' aspirations at MCS4 for child's further education,

|  | Stay in school past minimum leaving age |  | Go to university |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Yes | Obs Count | Yes | Obs Count |
| Country |  |  |  |  |
| England | $\begin{gathered} 7902 \\ (97.8) \end{gathered}$ | $\begin{aligned} & 8065 \\ & 8046 \end{aligned}$ | $\begin{gathered} 7397 \\ (96.6) \end{gathered}$ | $\begin{aligned} & 7630 \\ & 7580 \end{aligned}$ |
| Wales | $\begin{array}{r} 1859 \\ (97.9) \end{array}$ | $\begin{aligned} & \hline 1892 \\ & 1876 \\ & \hline \end{aligned}$ | $\begin{array}{r} 1759 \\ (96.7) \\ \hline \end{array}$ | $\begin{aligned} & \hline 1818 \\ & 1797 \\ & \hline \end{aligned}$ |
| Scotland | $\begin{gathered} 1517 \\ (99.1) \end{gathered}$ | $\begin{aligned} & 1531 \\ & 1531 \end{aligned}$ | $\begin{gathered} 1433 \\ (97.9) \end{gathered}$ | $\begin{aligned} & 1465 \\ & 1465 \end{aligned}$ |
| Northern Ireland | $\begin{array}{r} 1268 \\ (96.4) \\ \hline \end{array}$ | $\begin{aligned} & 1299 \\ & 1299 \end{aligned}$ | $\begin{array}{r} 1205 \\ (96.9) \\ \hline \end{array}$ | $\begin{aligned} & 1221 \\ & 1235 \end{aligned}$ |
|  |  | $\mathrm{P}=0.001$ |  | $\mathrm{P}=0.079$ |
| Highest parental qualification |  |  |  |  |
| None | $\begin{gathered} 906 \\ (95.5) \\ \hline \end{gathered}$ | $\begin{aligned} & 942 \\ & 937 \\ & \hline \end{aligned}$ | $\begin{gathered} 840 \\ (95.6) \end{gathered}$ | $\begin{aligned} & \hline 877 \\ & 861 \end{aligned}$ |
| NVQ Level 1 | $\begin{gathered} 573 \\ (97.7) \\ \hline \end{gathered}$ | $\begin{aligned} & 584 \\ & 640 \end{aligned}$ | $\begin{gathered} 528 \\ (95.7) \\ \hline \end{gathered}$ | $\begin{aligned} & 550 \\ & 595 \end{aligned}$ |
| NVQ Level 2 | $\begin{array}{r} 2627 \\ (96.6) \\ \hline \end{array}$ | $\begin{array}{r} 2703 \\ 2832 \\ \hline \end{array}$ | $\begin{array}{r} 2440 \\ (95.5) \\ \hline \end{array}$ | $\begin{array}{r} 2542 \\ 2641 \\ \hline \end{array}$ |
| NVQ Level 3 | $\begin{array}{r} 2013 \\ (98.4) \\ \hline \end{array}$ | $\begin{aligned} & 2048 \\ & 2000 \\ & \hline \end{aligned}$ | $\begin{array}{r} 1891 \\ (96.6) \\ \hline \end{array}$ | $\begin{aligned} & 1948 \\ & 1891 \\ & \hline \end{aligned}$ |
| NVQ Level 4 | $\begin{array}{r} 4463 \\ (98.4) \\ \hline \end{array}$ | $\begin{aligned} & 4522 \\ & 4404 \\ & \hline \end{aligned}$ | $\begin{array}{r} 4207 \\ (97.2) \\ \hline \end{array}$ | $\begin{aligned} & 4314 \\ & 4179 \end{aligned}$ |
| NVQ Level 5 | $\begin{array}{r} 1615 \\ (99.3) \end{array}$ | $\begin{aligned} & 1629 \\ & 1510 \\ & \hline \end{aligned}$ | $\begin{array}{r} 1557 \\ (98.4) \end{array}$ | $\begin{aligned} & 1579 \\ & 1467 \end{aligned}$ |
|  |  | $\mathrm{P}=0.000$ |  | $\mathrm{P}=0.001$ |
| Family income poverty |  |  |  |  |
| Not in poverty | $\begin{gathered} 8866 \\ (98.1) \end{gathered}$ | $\begin{aligned} & \hline 9014 \\ & 9042 \\ & \hline \end{aligned}$ | $\begin{gathered} 8313 \\ (96.7) \\ \hline \end{gathered}$ | $\begin{aligned} & 8563 \\ & 8530 \\ & \hline \end{aligned}$ |
| In poverty | $\begin{array}{r} 3672 \\ (97.3) \\ \hline \end{array}$ | $\begin{aligned} & 3765 \\ & 3636 \\ & \hline \end{aligned}$ | $\begin{array}{r} 3473 \\ (96.7) \\ \hline \end{array}$ | $\begin{array}{r} 3577 \\ 3439 \\ \hline \end{array}$ |
|  |  | $\mathrm{P}=0.021$ |  | $\mathrm{P}=0.970$ |
| Parental occupational status |  |  |  |  |
| Professional or managerial | $\begin{array}{r} 5146 \\ (98.6) \\ \hline \end{array}$ | $\begin{array}{r} 5208 \\ 5143 \\ \hline \end{array}$ | $\begin{array}{r} 4854 \\ (97.3) \\ \hline \end{array}$ | $\begin{array}{r} 4979 \\ 4889 \\ \hline \end{array}$ |
| Other | $\begin{array}{r} 5049 \\ (97.7) \end{array}$ | $\begin{aligned} & 5158 \\ & 5064 \\ & \hline \end{aligned}$ | $\begin{gathered} 4734 \\ (96.1) \end{gathered}$ | $\begin{aligned} & 4892 \\ & 4772 \\ & \hline \end{aligned}$ |
| $\mathrm{P}=0.048$ |  |  |  | $\mathrm{P}=0.003$ |
| All | $\begin{aligned} & 12546 \\ & (97.8) \end{aligned}$ | $\begin{aligned} & 12787 \\ & 12411 \end{aligned}$ | $\begin{aligned} & 11794 \\ & (96.7) \end{aligned}$ | $\begin{aligned} & 12148 \\ & 11976 \end{aligned}$ |

[^12] and count are weighted for sampling and attrition.

## Parental involvement

Parental involvement and interest in their children's education has been a strong predictor of children's educational success in past research (Barnard, 2004, Lee and Bowen, 2006). In the MCS4 sample, someone in the family had attended a parents' evening at school in 93 per cent of families. Of those who hadn't attended one, more than half had not done so because there had not yet been a parents' evening. Mothers had attended a parents' evening in 89 per cent of families.

The percentages of resident partners who had attended a parents' evening are shown in Table 6.9. Overall, just under two-thirds of partners had attended at least one evening. There was no difference in rates of attendance by the child's gender. Partners who were married to the mother were somewhat more likely to have attended a parents' evening. Partners in families with higher parental qualifications were more likely to attend, as were partners who are the natural fathers, those who are not in poverty, and those in families with a parent in a professional or managerial occupation.

| Table 6.9: Whether resident partner has been to parents' evenings at school, MCS4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Yes \% | Obs | Base Obs | Base count |
| Child gender |  |  |  |  |
| Male | (63.1) | 2954 | 4867 | 4842 |
| Female | (63.3) | 2904 | 4733 | 4636 |
|  |  |  |  | $\mathrm{P}=0.899$ |
| Relationship between parents |  |  |  |  |
| Married | (65.0) | 4770 | 7650 | 7337 |
| Cohabiting | (57.1) | 1088 | 1950 | 2141 |
|  |  |  |  | $\mathrm{P}=0.000$ |
| Highest parental qualification |  |  |  |  |
| None | (42.6) | 192 | 452 | 401 |
| NVQ Level 1 | (42.0) | 126 | 297 | 316 |
| NVQ Level 2 | (57.3) | 974 | 1774 | 1859 |
| NVQ Level 3 | (62.1) | 891 | 1530 | 1517 |
| NVQ Level 4 | (68.4) | 2549 | 3826 | 3770 |
| NVQ Level 5 | (70.6) | 995 | 1470 | 1371 |
|  |  |  |  | $\mathrm{P}=0.000$ |
| Partner is natural father |  |  |  |  |
| No | (54.1) | 374 | 696 | 746 |
| Yes | (64.0) | 5484 | 8904 | 8731 |
| Family income |  |  |  |  |
| Not in poverty | (66.0) | 4782 | 7488 | 7574 |
| In poverty | (50.5) | 870 | 1762 | 1565 |
|  |  |  |  | $\mathrm{P}<0.001$ |
| Parental occupational status |  |  |  |  |
| Professional or Managerial | (71.2) | 3124 | 4512 | 4528 |
| Other | (57.7) | 2080 | 3748 | 3675 |
|  |  |  |  | $\mathrm{P}<0.001$ |
| All with resident partner | (63.2) | 5858 | 9600 | 9477 |

## Homework

Schools are encouraged to plan homework carefully alongside work that children do at school, and to ensure that all activities are appropriate for individual children. In England and Wales the government guideline for the amount of time children in Years 1 and 2 should spend on homework is 1 hour per week. ${ }^{16}$ At MCS 4 nearly all ( $98 \%$ ) children received homework. The average amount of time spent per week on homework was 86 minutes. Time spent on homework per week was not significantly different for those children who did and did not receive help at home (86 and 84 minutes per week, respectively). Average minutes of homework did vary by country; the means were 69 in Wales, 84 in England, 87 in Scotland, and 115 in Northern Ireland. The average amount of time in England was nearly half an hour over the guideline.

Table 6.10 shows the percentage of children who receive help with reading, writing or maths from someone at home (i.e. in the family) and the frequency of that help. Overall, 79 per cent of children received help with at least one of these subjects. Children with parents with higher qualification levels were less likely to receive subject help at home, contrary to what one might expect. Similarly, children in families living in poverty were more likely to get help at home, as were children who did not have a parent in a professional or managerial occupation. Among children who did receive help, those with parents with lower-level qualifications were more likely to get help every day, while those with parents with higher-level qualifications were more likely to get help several times a week. There was no significant difference in the frequency of receiving help among those who did receive it by the income status of the family or the parents' occupational status.

Table 6.10: Does anyone at home help child with reading, writing, or maths? MCS4


[^13]Table 6.10: Does anyone at home help child with reading, writing, or maths? MCS4

|  | Yes | If yes, how often |  |  |  |  | Obs count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Every day | Several times /week | 1 or 2 times /week | 1 or 2 times /month | Less often |  |
| Continued |  |  |  |  |  |  |  |
| Family income poverty |  |  |  |  |  |  |  |
| Not in poverty | $\begin{gathered} 7139 \\ (77.7) \end{gathered}$ | $\begin{aligned} & 2512 \\ & (34.2) \end{aligned}$ | $\begin{array}{r} \hline 2658 \\ (37.4) \\ \hline \end{array}$ | $\begin{gathered} 1715 \\ (24.6) \end{gathered}$ | $\begin{aligned} & \hline 203 \\ & (3.1) \end{aligned}$ | $\begin{gathered} 49 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{aligned} & 9264 \\ & 9332 \\ & \hline \end{aligned}$ |
| In poverty | $\begin{array}{r} 3157 \\ (82.3) \\ \hline \end{array}$ | $\begin{array}{r} 1128 \\ (34.4) \\ \hline \end{array}$ | $\begin{array}{r} 1132 \\ (35.9) \\ \hline \end{array}$ | $\begin{gathered} 809 \\ (26.6) \\ \hline \end{gathered}$ | $\begin{gathered} 66 \\ (2.3) \end{gathered}$ | $\begin{gathered} 21 \\ (0.8) \\ \hline \end{gathered}$ | $\begin{gathered} 3886 \\ 3772 \end{gathered}$ |
| $\mathrm{P}=0.000$ |  | $\mathrm{P}=0.140$ |  |  |  |  |  |
| Parental occupational status |  |  |  |  |  |  |  |
| Professional or Managerial | $\begin{array}{r} 4032 \\ (76.6) \\ \hline \end{array}$ | $\begin{array}{r} 1409 \\ (33.8) \\ \hline \end{array}$ | $\begin{gathered} 1508 \\ (37.7) \\ \hline \end{gathered}$ | $\begin{gathered} 954 \\ (24.2) \\ \hline \end{gathered}$ | $\begin{gathered} 129 \\ (3.6) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{aligned} & 5309 \\ & 5258 \\ & \hline \end{aligned}$ |
| Other | $\begin{array}{r} 4249 \\ (79.9) \end{array}$ | $\begin{gathered} 1492 \\ (34.1) \end{gathered}$ | $\begin{gathered} 1570 \\ (37.1) \end{gathered}$ | $\begin{gathered} 1064 \\ (25.7) \end{gathered}$ | $\begin{gathered} 97 \\ (2.5) \end{gathered}$ | $\begin{gathered} 25 \\ (0.6) \\ \hline \end{gathered}$ | $\begin{aligned} & 5342 \\ & 5273 \end{aligned}$ |
| $\mathrm{P}=0.001$ |  | $\mathrm{P}=0.130$ |  |  |  |  |  |
| All | $\begin{aligned} & 10301 \\ & (79.0) \end{aligned}$ | $\begin{array}{r} 3642 \\ (34.3) \\ \hline \end{array}$ | $\begin{gathered} 3792 \\ (37.0) \\ \hline \end{gathered}$ | $\begin{gathered} 2524 \\ (25.2) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 269 \\ & (2.8) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 71 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{aligned} & 13157 \\ & 13110 \end{aligned}$ |

Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages and count are weighted for sampling and attrition.

In addition to receiving help with homework from someone at home, a small percentage of MCS children (5\%) received tutoring or extra lessons outside of school in reading, writing or maths (see Table 6.11). Children in England were more likely than children in other UK countries to receive tutoring. Children of parents with higher qualifications were more likely to be receiving tutoring. This is the opposite of the pattern seen for receiving help from someone at home. There were no differences in the rates of receiving tutoring by family poverty status or parents' occupational status.

Table 6.11. Does child get extra lessons outside of school in reading, writing, or maths, MCS

|  | Yes \% | Obs | Base obs | Base count |
| :--- | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |
| England | $(5.3)$ | 553 | 8940 | 11375 |
| Wales | $(3.0)$ | 64 | 1988 |  |
| Scotland | $(1.6)$ | 25 | 1629 |  |
| Northern Ireland | $(2.9)$ | 37 | 1383 | 562 |
|  |  |  |  |  |

Highest parental qualification

| None | $(3.8)$ | 48 | 970 | 974 |
| :--- | :---: | :---: | :---: | :---: |
| NVQ Level 1 | $(3.6)$ | 26 | 608 | 667 |
| NVQ Level 2 | $(3.8)$ | 108 | 2818 | 2980 |
| NVQ Level 3 | $(4.2)$ | 99 | 2121 | 2079 |
| NVQ Level 4 | $(5.3)$ | 226 | 4616 | 4510 |
| NVQ Level 5 | $(6.8)$ | 108 | 1656 | 1535 |
|  |  |  |  |  |
| Continued |  |  |  |  |

Table 6.11. Does child get extra lessons outside of school in reading, writing, or maths, MCS

|  | Yes \% | Obs | Base obs | Base count |
| :--- | :---: | :---: | :---: | :---: |
| Family income poverty | $(4.8)$ | 442 | 9264 | 9332 |
| Not in poverty | $(4.9)$ | 201 | 3886 | 3772 |
| In poverty |  |  | $\mathrm{P}=0.889$ |  |
|  |  |  |  |  |
| Parental occupational status | $(5.4)$ | 284 | 5310 | 5258 |
| Professional or managerial | $(4.6)$ | 243 | 5341 | 5271 |
| Other | $(4.8)$ | 645 | 13157 | 13109 |
|  |  |  |  |  |
| All |  |  |  |  |

Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages and count are weighted for sampling and attrition.

## Travel to school

In September 2003 the Department for Education and Skills, ${ }^{17}$ jointly with the Department of Transport, introduced the 'Travelling to School Initiative', which aims to develop a strategic approach to promoting the use of walking, cycling and public transport and reducing car dependency for journeys to school. The initiative operates throughout the UK, with several agencies in the devolved administrations being coordinated by the transport charity Sustrans.

The modes of transport used by MCS children to get to school are shown in Table 6.12. Overall, half of children get to school by car and 42 per cent by walking. The remaining forms of transport-school or local authority bus, public transport, bicycle or other-are used by not more than 3 per cent each. More than half ( $55 \%$ ) of the children in Scotland walk to school in contrast to one-quarter in Northern Ireland. Children outside England are more likely to take a school or local authority bus, and children in Northern Ireland are more likely to take public transport or car. There is some variation in mode of travel to school by parental characteristics. The higher the parental qualifications, the more likely the children are to travel to school by car and the less likely they are to walk. Car travel is more likely in families above the poverty level or where a parent has a professional or managerial occupation.

Table 6.12: How child travels to school, MCS4

|  | Public <br> transport | School or <br> LA bus | Car | Bicycle | Walking | Other | Obs <br> count |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country |  |  |  |  |  |  |  |
|  | 153 | 138 | 3508 | 84 | 4402 | 36 | 8332 |
| England | $(1.9)$ | $(1.9)$ | $(42.5)$ | $(1.1)$ | $(52.1)$ | $(0.5)$ | 8338 |
|  | 29 | 110 | 957 | 6 | 826 | 9 | 1938 |
| Wales | $(1.4)$ | $(5.5)$ | $(48.4)$ | $(0.2)$ | $(44.0)$ | $(0.4)$ | 1928 |
| Continued |  |  |  |  |  |  |  |

[^14]Table 6.12: How child travels to school, MCS4

|  | Public transport | School or LA bus | Car | Bicycle | Walking | Other | Obs count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scotland | $\begin{gathered} 25 \\ (1.9) \end{gathered}$ | $\begin{aligned} & \hline 104 \\ & (6.6) \end{aligned}$ | $\begin{gathered} 580 \\ (35.2) \end{gathered}$ | $\begin{gathered} 17 \\ (0.9) \end{gathered}$ | $\begin{gathered} 828 \\ (54.9) \end{gathered}$ | $\begin{gathered} \hline 11 \\ (0.6) \end{gathered}$ | $\begin{aligned} & 1565 \\ & 1561 \end{aligned}$ |
| Northern Ireland | $\begin{gathered} 54 \\ (4.8) \end{gathered}$ | $\begin{gathered} 136 \\ (10.4) \end{gathered}$ | $\begin{gathered} 805 \\ (59.1) \end{gathered}$ | $\begin{gathered} 3 \\ (0.3) \end{gathered}$ | $\begin{gathered} 331 \\ (25.1) \end{gathered}$ | $\begin{gathered} 6 \\ (0.3) \end{gathered}$ | $\begin{aligned} & 1322 \\ & 1322 \end{aligned}$ |
| $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |
| Highest parental qualification |  |  |  |  |  |  |  |
| None | $\begin{gathered} \hline 40 \\ (4.8) \end{gathered}$ | $\begin{gathered} \hline 32 \\ (2.6) \\ \hline \end{gathered}$ | $\begin{gathered} 242 \\ (23.7) \end{gathered}$ | $\begin{gathered} \hline 5 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{gathered} 651 \\ (67.9) \end{gathered}$ | $\begin{gathered} 3 \\ (0.2) \end{gathered}$ | $\begin{aligned} & 974 \\ & 970 \end{aligned}$ |
| NVQ Level 1 | $\begin{gathered} 19 \\ (3.2) \end{gathered}$ | $\begin{gathered} 21 \\ (3.0) \end{gathered}$ | $\begin{gathered} 175 \\ (26.0) \end{gathered}$ | $\begin{gathered} 3 \\ (0.7) \end{gathered}$ | $\begin{gathered} 389 \\ (67.1) \end{gathered}$ | $\begin{gathered} 1 \\ (0.0) \end{gathered}$ | $\begin{aligned} & 608 \\ & 667 \end{aligned}$ |
| NVQ Level 2 | $\begin{gathered} 71 \\ (2.4) \end{gathered}$ | $\begin{aligned} & 104 \\ & (2.7) \end{aligned}$ | $\begin{aligned} & 1121 \\ & (39.3) \end{aligned}$ | $\begin{gathered} 16 \\ (0.6) \end{gathered}$ | $\begin{gathered} 1491 \\ (54.4) \end{gathered}$ | $\begin{gathered} 13 \\ (4.6) \end{gathered}$ | $\begin{aligned} & 2819 \\ & 2981 \end{aligned}$ |
| NVQ Level 3 | $\begin{gathered} 40 \\ (1.7) \\ \hline \end{gathered}$ | $\begin{gathered} 81 \\ (3.0) \\ \hline \end{gathered}$ | $\begin{gathered} 943 \\ (42.5) \end{gathered}$ | $\begin{gathered} 18 \\ (1.0) \\ \hline \end{gathered}$ | $\begin{gathered} 1033 \\ (51.6) \end{gathered}$ | $\begin{gathered} 4 \\ (0.2) \\ \hline \end{gathered}$ | $\begin{aligned} & 2121 \\ & 2079 \end{aligned}$ |
| NVQ Level 4 | $\begin{gathered} 69 \\ (1.4) \end{gathered}$ | $\begin{gathered} 175 \\ (2.8) \end{gathered}$ | $\begin{gathered} 2396 \\ (50.2) \end{gathered}$ | $\begin{gathered} 41 \\ (1.1) \end{gathered}$ | $\begin{gathered} 1902 \\ (43.8) \end{gathered}$ | $\begin{gathered} 30 \\ (0.6) \end{gathered}$ | $\begin{aligned} & 4615 \\ & 4509 \end{aligned}$ |
| NVQ Level 5 | $\begin{gathered} 18 \\ (1.1) \end{gathered}$ | $\begin{gathered} 61 \\ (2.8) \end{gathered}$ | $\begin{gathered} 853 \\ (49.9) \end{gathered}$ | $\begin{gathered} 24 \\ (1.5) \end{gathered}$ | $\begin{gathered} 687 \\ (44.0) \end{gathered}$ | $\begin{gathered} 10 \\ (0.7) \end{gathered}$ | $\begin{aligned} & 1656 \\ & 1535 \end{aligned}$ |
| $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |
| Family income poverty |  |  |  |  |  |  |  |
| Not in poverty | $\begin{aligned} & 138 \\ & (1.4) \end{aligned}$ | $\begin{gathered} \hline 348 \\ (2.9) \end{gathered}$ | $\begin{gathered} 4589 \\ (47.6) \end{gathered}$ | $\begin{gathered} 89 \\ (1.1) \end{gathered}$ | $\begin{gathered} 4039 \\ (46.4) \end{gathered}$ | $\begin{gathered} 53 \\ (0.5) \end{gathered}$ | $\begin{aligned} & 9264 \\ & 9332 \end{aligned}$ |
| In poverty | $\begin{array}{r} 123 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 139 \\ (2.6) \\ \hline \end{array}$ | $\begin{gathered} 1260 \\ (30.9) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (0.7) \\ \hline \end{gathered}$ | $\begin{array}{r} 2330 \\ (62.0) \\ \hline \end{array}$ | $\begin{gathered} 9 \\ (2.5) \end{gathered}$ | $\begin{aligned} & 3886 \\ & 3772 \end{aligned}$ |
| $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |
| Parental occupational status |  |  |  |  |  |  |  |
| Professional or managerial | $\begin{gathered} \hline 67 \\ (1.3) \end{gathered}$ | $\begin{aligned} & \hline 185 \\ & (2.7) \end{aligned}$ | $\begin{gathered} 2764 \\ (50.5) \end{gathered}$ | $\begin{gathered} \hline 50 \\ (1.1) \end{gathered}$ | $\begin{gathered} 2204 \\ (43.9) \end{gathered}$ | $\begin{gathered} \hline 35 \\ (0.6) \end{gathered}$ | $\begin{aligned} & 5309 \\ & 5257 \end{aligned}$ |
| Other | $\begin{gathered} 99 \\ (1.8) \end{gathered}$ | $\begin{aligned} & 205 \\ & (2.7) \end{aligned}$ | $\begin{gathered} 2353 \\ (42.5) \end{gathered}$ | $\begin{gathered} 39 \\ (0.9) \end{gathered}$ | $\begin{aligned} & 2619 \\ & (51.5) \end{aligned}$ | $\begin{gathered} \hline 35 \\ (0.6) \end{gathered}$ | $\begin{aligned} & \hline 5342 \\ & 5273 \end{aligned}$ |
| $\mathrm{P}=0.000$ |  |  |  |  |  |  |  |
| All | $\begin{aligned} & 261 \\ & (2.0) \end{aligned}$ | $\begin{aligned} & \hline 488 \\ & (2.9) \end{aligned}$ | $\begin{gathered} 5850 \\ (42.8) \end{gathered}$ | $\begin{gathered} 110 \\ (1.0) \end{gathered}$ | $\begin{gathered} 6374 \\ (50.9) \end{gathered}$ | $\begin{gathered} 62 \\ (0.5) \end{gathered}$ | $\begin{aligned} & 13157 \\ & 13109 \end{aligned}$ |

Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages and count are weighted for sampling and attrition.

## Out of school clubs

Mothers were asked to report whether, where, and how often their children attend breakfast or after-school clubs. Just over one-quarter of children attended one or the other. Table 6.13 shows the breakdown of those attending each type of club.
Children were most likely to attend an after-school club only ( 61 per cent of those attending a club), followed by breakfast club only ( 23 per cent), then both breakfast and after-school club (16 per cent). Children who attended both unsurprisingly spent the most time per week at the clubs - they attended an average of 9 hours a week. Those who attended only breakfast or only after-school clubs attended an average of 3.9 and 3.3 hours per week, respectively. In a similar pattern, the children most likely to be attending their clubs for childcare reasons were those who attended both types
of club ( 76 per cent), followed by breakfast club only ( 51 per cent), then after-school club only ( 33 per cent). Both types of club tended to be on school premises, but breakfast club was more likely to be at school.

Table 6.13: Whether child attends breakfast or after-school clubs MCS4

|  | Of all <br> respondents | Of those <br> who attend <br> a club | Mean <br> hours per <br> week | For <br> childcare <br> reasons | On school <br> premises |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No club | 9858 |  |  |  |  |
|  | $(72.4)$ | - | - | - | - |
| Breakfast club only | 994 | 994 |  | 492 | 935 |
|  | $(6.3)$ | $(22.8)$ | 3.89 | $(51.3)$ | $(94.1)$ |
| After-school club only | 2263 | 2263 |  | 810 | 1743 |
| Breakfast and after-school | $(16.8)$ | $(60.9)$ | 3.33 | $(33.4)$ | $(79.5)$ |
| club | 649 | 649 |  | 507 | 552 |
| Unweighted sample size | $13.5)$ | $(16.2)$ | 8.99 | $(75.8)$ | $(84.4)$ |
| Weighted count | 13764 | 3906 | 3594 | 3904 | 3904 |

Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages and count are weighted for sampling and attrition.

The percentages of children who attend a breakfast or after-school club by selected characteristics are shown in Table 6.14. Children in Wales were more likely than children in other countries to attend a club which may reflect the Free Breakfast Initiative providing clubs in Wales. Children with parents with higher qualification levels were more likely to attend, though the most notable difference is between children whose parents have no qualifications and those whose parents have any level of qualification. Children whose families have poverty-level income are less likely to attend, while children who had a parent in a professional or managerial occupation were more likely to attend a club. Differences between ethnic groups are not shown as they were not significant.

Table 6.14: Whether child attends breakfast or after-school clubs MCS4

|  | Yes | Obs <br> Count |  |
| :--- | :---: | :---: | :---: |
| Country |  |  |  |
| England | 2406 | 8784 |  |
|  | $(27.5)$ | 8781 |  |
| Wales | 733 | 2011 |  |
|  | $(35.6)$ | 2011 |  |
| Scotland | 425 | 1611 |  |
| Northern Ireland | $(25.0)$ | 1612 |  |
| 1358 |  |  |  |
| Highest parental qualification | 342 | 1356 |  |
| None | $(25.5)$ |  |  |
| Continued | 236 | 1067 |  |

Table 6.14: Whether child attends breakfast or after-school clubs MCS4

|  | Yes | Obs |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count |  |  |  |  |
|  | 178 | 644 |  |  |  |
| NVQ Level 1 | $(27.2)$ | 713 |  |  |  |
|  | 802 | 2957 |  |  |  |
| NVQ Level 2 | $(26.4)$ | 3140 |  |  |  |
|  | 636 | 2197 |  |  |  |
| NVQ Level 3 | $(28.5)$ | 2165 |  |  |  |
|  | 1387 | 4781 |  |  |  |
| NVQ Level 4 | $(28.3)$ | 4679 |  |  |  |
| NVQ Level 5 | 576 | 1724 |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  | P=0.000 |


| Family income poverty |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 2840 | 9617 |  |  |  |
| Not in poverty | $(28.6)$ | 9742 |  |  |  |
|  | 1064 | 4138 |  |  |  |
| In poverty | $(25.3)$ | 4013 |  |  |  |
|  |  |  |  |  | $\mathrm{P}=0.003$ |


| $\mathrm{P}=0.003$ |  |  |  |
| :--- | :---: | :---: | :---: |
| Parental occupational status | 1719 | 5486 |  |
|  | $(30.1)$ | 5438 |  |
| Professional or managerial | 1546 | 5621 |  |
|  | $(27.2)$ | 5570 |  |
| Other | 3906 | 13764 |  |
|  |  |  |  |
| All | $(27.6)$ | 13761 |  |

Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages and count are weighted for sampling and attrition.

## Childcare

In addition to attending school and clubs before or after school, some MCS children also have childcare arrangements during the week, at weekends, or during school holidays. The rates of use and the hours spent in each type of care are shown in Table 6.15. The most commonly used childcare arrangement on weekdays, weekends, and holidays was a grandparent taking responsibility for the child. All other care arrangements were used much less frequently. Children were in the care of non-resident parents more often at weekends and during holidays than on termtime weekdays. They were left in the charge of older siblings more often on term-time weekdays than term-time weekends or holidays. Other relatives and friends or neighbours were used least often at term-time weekends.

The most frequently used care arrangements were not necessarily the ones in which children spent the most time when they were in them. Children spent the most time per week during term time with non-resident parents, if they did this at all. During holidays, childminders or settings described as nurseries provided the longest periods of cover, though very few used the latter. Holiday clubs were attended by 9 per cent of children, who spent an average of nine days of the holiday there.

Table 6.15. Amount of time in childcare arrangements MCS4

|  | Term-time weekdays |  |  | Term-time weekend |  |  | Holidays |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N <br> using | $\%$ <br> using | Mean <br> hrs/wk | N <br> using | $\%$ <br> using | Mean <br> hrs/wk | N <br> using | $\%$ <br> using | Mean <br> days |
|  | 60 | 0.3 | 6.64 |  |  |  | 109 | 0.7 | 11.27 |
|  | 744 | 5.4 | 7.92 |  |  |  | 438 | 3.1 | 13.06 |
| Grandparent | 3790 | 27.2 | 5.90 | 2648 | 20.1 | 8.24 | 4294 | 32.9 | 9.04 |
| Non-resident parent | 338 | 2.9 | 11.34 | 874 | 6.6 | 22.26 | 546 | 4.8 | 9.11 |
| Older sibling | 679 | 5.0 | 4.45 | 490 | 3.7 | 3.46 | 468 | 3.3 | 7.12 |
| Other relative | 861 | 6.1 | 4.44 | 624 | 4.7 | 5.33 | 917 | 7.1 | 6.16 |
| Friend/neighbour | 809 | 6.5 | 3.04 | 283 | 2.1 | 3.90 | 580 | 4.9 | 4.60 |
| Holiday club | -- | -- | - | -- | -- | -- | 1116 | 9.1 | 8.98 |

Note. Percentages and means are weighted for sampling and attrition. Obs ( N using) are not weighted.

## Conclusions

This chapter has summarised a wide range of data about children's experiences of schooling and childcare at age seven. In general, while many experiences are shared across the cohort there are some notable exceptions, related to the areas or families in which the children are growing up.

Mothers in Scotland were most likely to want their children to continue in school past leaving age, and their children were most likely to travel to school on foot. Children in Northern Ireland were less likely to have changed schools and their mothers were most likely to be very satisfied with their schools. Children in Northern Ireland were also more likely to travel to school by public transport or in a car and less likely to walk. Mothers in Wales were also more likely to report being very satisfied with their children's schools and their children were more likely to attend a breakfast or afterschool club.

Few children missed more than two weeks of school. Of those who did, the most common reason was illness, though nearly a quarter of those who missed two or more weeks did so because of a foreign holiday.
Mothers in families with higher parental qualifications, or a professional or managerial occupation, or not living in poverty were even more likely than others to want their children to continue in school past leaving age and attend university. However, aspirations for these outcomes were very high across the board. In fact, the percentage of mothers wanting their children to attend university is far higher than their own or current university attendance rates.

Higher parental qualifications, professional or managerial occupation status, and not living in poverty were also associated with a number of other variables, including higher maternal satisfaction with child's school, children being more likely to ride to school in a car, higher rates of tutoring and extra lessons, and higher rates of children attending breakfast or after-school clubs. Unexpectedly, higher parental
qualifications are associated with lower rates of children receiving help from someone at home with reading, writing and maths, although it is shown in Chapter 4 that they are positively associated with home learning activities like reading with the child.

The overarching impression from the parental interview is one of all families, right across the social spectrum, taking an interest in the Millennium Children's schooling and aspiring for them to do well, both in terms of attendance at parents' meetings at school and in terms of wanting their children to go university. This is not a picture of a general exclusion of disadvantaged families from educational engagement, or of inequalities in home background leading to inequalities in schooling at 7.

These analyses are purely descriptive and do not demonstrate any causality among the variables. More in-depth analyses will be needed to examine how family and child characteristics interact to affect schooling experiences and attainment. These analyses will be enriched for many of the MCS cases by the forthcoming linkage with school administrative data and the results of the MCS4 survey of teachers. Each of these will help relate the child's school and home background to the various strands of development being tracked in this study.

## References

Barnard, W. M. (2004) Parent involvement in elementary school and educational attainment. Children and Youth Services Review, 26(1), 39-42.

Hansen, K. (2003) Education and the crime age profile. British Journal of Criminology, 43 (1), 141-168

Lee, J. S. and Bowen, N. K. (2006) Parent involvement, cultural capital, and the achievement gap among elementary children. American Educational Research Journal, 43(2), 193-218.

## Chapter 7

## COGNITIVE DEVELOPMENT

Elizabeth M. Jones and Ingrid Schoon

## Chapter overview

This chapter looks at the cognitive development of the 7-year-old Millennium Cohort children as measured via three assessments:

- British Ability Scales Pattern Construction
- British Ability Scales Word Reading
- Progress in Mathematics

It also examines changes since age 5 and combines assessment scales to establish an overall cognitive ability index.

## Introduction

In this chapter we look at the cognitive development of 7-year-old children who are participants in the Millennium Cohort Study (MCS). We examine their scores on three cognitive assessments using a verbal and non-verbal subscale of the British Ability Scales as well as a maths test, and assess how these vary across a range of demographic and family characteristics.

Cognitive development in the early years is of great importance to later outcomes, and performance on cognitive assessments from as early as ages 3 and 5 has been found to be related to later school achievement, academic attainment and occupational outcomes (Caspi et al., 1998; Duncan et al., 2007), as well as adult health (Batty et al., 2007; Mirowsky and Ross, 2003). Poor cognitive performance early in life has also been found to be related to higher chances of unemployment, low qualifications and low income; this relationship is seen even when other factors are controlled for (Feinstein and Bynner, 2004). It is thus crucial to learn more about variations in early cognitive attainment which can be useful to effectively target interventions aiming to build up cognitive skills.

Differences in early cognitive outcomes associated with family socioeconomic and environmental characteristics are potentially of great interest to policy-makers and social scientists, as they can relate to inequalities that may persist throughout life if not tackled early. Children growing up in disadvantaged situations are at greater risk of performing poorly on cognitive assessments, which then can lead to the poorer outcomes later in life (Duncan and Brooks-Gunn, 1997; Schoon, 2006). However,
although academic attainment is largely stable throughout childhood, children do demonstrate both shifts and fluctuations in the development of these skills, particularly during early and middle schooling (Huston and Ripke, 2006; Pungello et al., 1996; Schoon, 2006). Furthermore, there is evidence showing promising effects of early intervention programmes, such as Sure Start, which can improve the life chances of young children and their families (Melhuish et al., 2008). The Effective Provision of Pre-school Education (EPPE) project in the UK was also able to observe beneficial effects of early education (Sylva, Melhuish, Sammons, Siraj-Blatchford and Taggart, 2004).

The aim of this chapter is to outline the evidence on socio-demographic variations in cognitive attainment of 7 -year-olds.

## Sample and data

The sample used in this chapter is drawn from children of families participating in the age 7 survey of MCS. Nearly 99 per cent of children completed the cognitive assessments administered to them at this fourth sweep. Of the 13,857 families with child cognitive data, we retained those in which the main respondent is the cohort member's mother and the partner respondent, if there is one, is the cohort member's father. These criteria were met by 13,244 families. In families with cohort members who were twins or triplets records for only one child per family were included, making the number of cohort members equal to the number of families. The exact number of observations reported in the following will vary due to missing data on outcome and demographic variables. All analyses were adjusted for the appropriate sampling and attrition weights.

Three scales were used for the cognitive assessment in the fourth MCS sweep. They are the Pattern Completion and Word Reading subscales from the British Ability Scales (BASII; Elliott, 1996; Hill, 2005) and the Progress in Maths assessment. All were directly administered to the children by interviewers who were specially trained, but were not professional psychologists. For the two subscales of the BAS agerelated starting points, decision points, and alternative stopping points were used to ensure that the motivation and self-esteem of the child were protected, that the testing focused on the most suitable items for the child, and that the assessment time was kept to a minimum (Hill, 2005).

Pattern Construction is a test of non-verbal reasoning and spatial visualisation in which children construct patterns using flat squares or solid cubes (BASII; Elliott, 1996; Hill, 2005). The raw score was transformed into an ability score, which was adjusted for the specific subset of items administered. The ability score was then transformed into a T-score, which is standardised based on the child's score relative to the average score of the BAS norming sample for children of the same age group. The T-score has a mean of 50 and standard deviation of 10. A child with a Pattern Construction T -score of 50 has a score equal to the average for his age group in the
norming sample; a child with a T-score of 60 has a score that is one standard deviation above the average for her age group in the norming sample.

The Word Reading scale is an assessment of children's verbal ability. The children are shown words on cards and asked to read them out. The test was also available in Welsh. Similar to the Pattern Construction scale, the raw score was converted to an ability score, which was transformed into a standard score that adjusts for a child's age. This standard score was then rescaled to be a T-score so that like the standardised score for Pattern Construction, the Word Reading T-score has a mean of 50 and standard deviation of 10.

The Progress in Mathematics (PiM) test assesses children's skills on all UK National Curricula mathematics content. Children complete a variety of mathematical problems covering numbers, shape, space, measures and data handling. The raw score, which had a range of 0 to 15 , was transformed into an internally-referenced T score. That is, a z-score was computed using the mean and standard deviation of the MCS sample, and this was then rescaled to have a mean of 50 and standard deviation of 10. Unlike the T-scores for the two BAS scores, the T-score for Progress in Maths is not adjusted for age at interview.

Tables 7.1 to 7.3 report descriptive statistics of these assessments. The first column reports the mean score. The standard error of the mean gives an idea of the precision of this estimate. The centile columns show the values of the score at various points in the distribution. For example, in Table 7.1 a T-score of 39 is the value which divides the bottom 10 per cent from the rest, and the values at the $90^{\text {th }}$ percentile, 67 is the threshold of the top 10 per cent. The tables also provide information regarding the following child and family variables: country of residence at the time of the interview, the child's gender and ethnicity, the relationship status of the main and partner respondents (mother and father), the combined work status of the parents, the highest qualification level of the parents, family poverty status and parental occupational status. For qualification and occupational status, the qualification and occupation used is whichever was higher of the father or the mother; in the case of a lone parent, it is the mother's qualification and status only.

In Wales, families had the option of the children doing the assessments in the Welsh language. One hundred and twenty-six children completed the Welsh-language reading assessment, whose scores, while available for separate analysis, are not covered in this chapter. In all, 82 completed the numeracy assessment in Welsh (for which a standardised Welsh version was available), and 49 completed Pattern Construction in Welsh (without a standardised translated versions). The latter two scores are incorporated in the data presented here.

Table 7.1: Means for BAS Pattern Construction


Family relationship status

| Married | 54.3 | 0.21 | 41 | 47 | 54 | 61 | 68 | 8184 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cohabiting | 52.5 | 0.28 | 39 | 45 | 53 | 60 | 66 | 2093 |
| Lone | 50.7 | 0.25 | 37 | 44 | 1 | 8 | 65 | 2851 |

Family work status

| No parent working | 48.8 | 0.31 | 35 | 42 | 49 | 56 | 63 | 2105 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| At least one parent working | 53.9 | 0.17 | 40 | 47 | 54 | 51 | 67 | 11448 |
| Highest parental qualification |  |  |  |  |  |  |  |  |
| None | 46.9 | 0.43 | 31 | 41 | 48 | 54 | 60 | 1039 |
| NVQ 1 | 49.1 | 0.47 | 36 | 42 | 49 | 56 | 62 | 623 |
| NVQ 2 | 51.6 | 0.23 | 38 | 45 | 52 | 58 | 65 | 2929 |
| NVQ 3 | 52.9 | 0.29 | 39 | 46 | 53 | 60 | 66 | 2187 |
| NVQ 4 | 55.2 | 0.21 | 42 | 49 | 55 | 62 | 68 | 4798 |
| NVQ 5 | 56.3 | 0.29 | 42 | 49 | 57 | 64 | 70 | 1743 |

Family poverty status

| Above poverty | 54.4 | 0.17 | 41 | 48 | 54 | 61 | 68 | 9627 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Below poverty | 49.9 | 0.27 | 36 | 42 | 51 | 57 | 64 | 4058 |
| Parental occupational status |  |  |  |  |  |  |  |  |
| Professional or managerial | 52.3 | 0.21 | 39 | 45 | 53 | 60 | 66 | 5470 |
| Other | 55.7 | 0.21 | 42 | 49 | 55 | 63 | 69 | 5497 |

## BAS Pattern Construction

Means for the non-verbal test, BAS Pattern Construction, are shown in Table 7.1. Children in Wales and Northern Ireland scored higher than children in England. The mean for children in Scotland was not significantly different from the means for children in the other countries. Girls scored higher than boys - this difference only just reached statistical significance, although the actual mean difference is less than one T-score point. White children scored significantly higher than children of all other ethnic groups other than Indian or 'other' ethnicity.

Each family marital status group scored significantly differently on the Pattern Construction task; children with married parents scored higher than those with cohabiting parents, who in turn scored higher than children living with lone parents. Children with at least one working parent scored higher than children with no working parent in the household, and children with parents who have higher qualifications scored higher than children of parents with lower qualification levels. Children living in families in poverty scored lower than children not living in poverty, and those with parents in professional or managerial roles scored higher than those with parents in other occupations.

## Changes since age 5: Pattern Construction

Pattern Construction had also been administered at age $5 .{ }^{18}$ The overall mean was slightly higher at age 7 than age 5 ( 52.8 versus 51.3 ). The differences among groups were generally larger at age 7 than they were at age 5 ; lower-scoring groups had similar means at the two surveys but the higher-scoring groups tended to have higher means at age 7, meaning that their progress between the two sweeps was faster than the progress of the children in the norming sample. For example, at age 5 , children of parents with no qualifications had a mean T -score of 46.4 , which is 88 per cent of the score for those with a parent with a higher degree (mean of 53.0). At age 7 the two groups (not necessarily the same children) had means of 46.9 and 56.3, meaning the children of parents with no qualifications had a mean score that is 83 per cent of the mean for children with a parent with a higher degree. This shows a slightly widening relative gap. The gap between children of different ethnic groups also widened slightly. At both sweeps, the groups with the lowest means (Pakistani and Bangladeshi, and black children) had scores around 46 or 47 , while the mean for the highest scoring group (white children) went from 52 at age 5 to 54 at age 7 . Children living in poverty had a mean of 48.8, and those not in poverty had a mean of 52.2 at age 5 ; their means at age 7 were 49.9 and 54.4 respectively. Those in poverty had a mean score that was 93 per cent of that of those not in poverty at age 5 ; and a mean score that was 92 per cent of the score for those not in poverty at age 7. Figure 7.1 shows the gaps in mean T -scores on Pattern Construction by gender, parental qualification and poverty at ages 5 and 7 , widening of some counts but not all.

[^15]Figure 7.1: Gaps in Pattern Construction Scores at Ages 5 and 7


## BAS Word Reading

The means, standard errors and centiles for BAS Word Reading are shown in Table 7.2. Children in England and Scotland scored significantly higher than children in Wales and Northern Ireland. Girls scored significantly higher than boys. This difference is larger than the gender difference on Pattern Construction, which is not surprising given past research showing that girls tend to outperform boys most strongly on verbal and language assessments (Maccoby and Jacklin 1974; Hopman et al.,1988).

Table 7.2: Means for BAS Word Reading

|  | Mean | Standard Error | Percentile |  |  |  |  | Obs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 10th | 25th | 50th | 75th | 90th |  |
| Full sample | 49.7 | 0.17 | 38 | 43 | 50 | 57 | 64 | 13591 |
| Country |  |  |  |  |  |  |  |  |
| England | 50.6 | 0.20 | 38 | 43 | 52 | 58 | 64 | 8846 |
| Wales | 47.1 | 0.59 | 34 | 40 | 47 | 54 | 61 | 1774 |
| Scotland | 49.4 | 0.38 | 38 | 43 | 50 | 56 | 63 | 1614 |
| Northern Ireland | 47.4 | 0.44 | 35 | 40 | 48 | 55 | 61 | 1357 |
| Cohort member gender |  |  |  |  |  |  |  |  |
| Male | 48.8 | 0.20 | 36 | 42 | 49 | 57 | 64 | 6852 |
| Female | 50.6 | 0.18 | 39 | 44 | 52 | 57 | 63 | 6739 |
| Cohort member ethnicity |  |  |  |  |  |  |  |  |
| White | 49.6 | 0.18 | 37 | 43 | 50 | 57 | 63 | 11302 |
| Mixed | 50.4 | 0.65 | 39 | 43 | 52 | 58 | 65 | 370 |
| Indian | 53.7 | 0.81 | 40 | 47 | 54 | 61 | 68 | 337 |
| Pakistani and Bangladeshi | 50.4 | 0.53 | 38 | 43 | 50 | 57 | 64 | 856 |


| Table 7.2: Means for BAS Word Reading |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Standard Error | Percentile |  |  |  |  | Obs |
|  |  |  | 10th | 25th | 50th | 75th | 90th |  |
| Continued |  |  |  |  |  |  |  |  |
| Black | 50.4 | 0.70 | 38 | 43 | 50 | 57 | 65 | 446 |
| Other | 50.2 | 1.09 | 38 | 45 | 53 | 58 | 64 | 179 |
| Family relationship status |  |  |  |  |  |  |  |  |
| Married | 51.3 | 0.19 | 39 | 44 | 52 | 58 | 64 | 8094 |
| Cohabiting | 48.4 | 0.28 | 37 | 42 | 49 | 55 | 63 | 2074 |
| Lone | 47.1 | 0.24 | 35 | 40 | 48 | 55 | 61 | 2847 |
| Family work status |  |  |  |  |  |  |  |  |
| No parent working | 45.1 | 0.30 | 32 | 38 | 45 | 53 | 59 | 2108 |
| At least one parent working | 50.6 | 0.17 | 39 | 43 | 51 | 58 | 64 | 11334 |
| Highest parental qualification |  |  |  |  |  |  |  |  |
| None | 43.5 | 0.45 | 32 | 37 | 43 | 51 | 58 | 1041 |
| NVQ 1 | 45.1 | 0.43 | 34 | 39 | 45 | 52 | 58 | 619 |
| NVQ 2 | 47.7 | 0.24 | 37 | 41 | 48 | 55 | 61 | 2920 |
| NVQ 3 | 49.4 | 0.26 | 38 | 43 | 50 | 56 | 63 | 2162 |
| NVQ 4 | 51.8 | 0.20 | 40 | 45 | 53 | 59 | 65 | 4739 |
| NVQ 5 | 53.9 | 0.28 | 42 | 49 | 55 | 61 | 66 | 1722 |
| Family poverty status |  |  |  |  |  |  |  |  |
| Above poverty | 51.1 | 0.17 | 39 | 44 | 52 | 58 | 64 | 9528 |
| Below poverty | 46.2 | 0.24 | 34 | 40 | 46 | 54 | 60 | 4046 |
| Parental occupational status |  |  |  |  |  |  |  |  |
| Professional or managerial | 52.8 | 0.20 | 41 | 47 | 53 | 59 | 66 | 5418 |
| Other | 48.6 | 0.17 | 37 | 42 | 49 | 55 | 62 | 5437 |

Note: T scores, mean = 50, SD =10. Means and standard errors are weighted for sample selection and attrition.
Centiles are weighted, but not adjusted for the clustered sampling design. Number of observations are unweighted.
Indian children scored higher than whites and all other ethnic groups (Indian children are 4 points ahead of white children, and have a mean score that is 108 per cent of the mean score for white children). The other ethnic groups also had mean scores above the whites, but with margins of error which meant the lead was not statistically significant. This pattern is different from the one seen for the non-verbal Pattern Construction task, where white children were the highest scoring group. This is a remarkable finding, suggesting that ethnic minority children demonstrate language ability that is at least as good white children. Although there was not an exactly equivalent reading test at earlier ages, the scores on naming vocabulary at ages 3 and 5 showed that ethnic minority children were initially well behind white children but were catching up by age 5 , with Indian children in the vanguard (Dearden and Sibieta, 2010).

The patterns for family relationship status, family work status, parental qualifications, family poverty status and parental occupational status with Word Reading are very similar to those observed for Pattern Construction. Children with married parents scored significantly higher than those with cohabiting parents, who scored higher than children living with a lone parent. Children with at least one working parent scored higher than children with no working parent. There was a strong trend for
parents with higher qualifications to have children who scored higher. Children in income poverty scored lower than children not in poverty, and children who have a parent in a professional or managerial occupation scored higher than children with parents in other occupations.

## Changes since age 5: Word Reading

Word Reading was not administered at age 5, but the Naming Vocabulary subscale of the BAS was. Though both scales measure verbal skills, Word Reading (WR) measures receptive language at age 7 and Naming Vocabulary (NV) expressive language at age 5 . Expressive skills require the child to say something, while receptive skills demonstrate an understanding of language. As such, the two scores are not strictly comparable. The correlation between Word Reading score at age 7 and Naming Vocabulary score at age 5 is 0.34 . Nevertheless the picture on verbal skills for ethnic groups is very different from age 5 . At the earlier sweep, white children scored the highest, with other ethnic groups significantly behind - Pakistani and Bangladeshi children the lowest. At age 7, white children were no longer the highest scoring group on receptive language (Word Reading); the highest scoring group was Indian children. This reversal could be due to actual changes in verbal ability, perhaps due to experience of schooling, or to the two scales assessing different skills, or both.

The gaps at age 7 by social variables such as parental education and income level are quite similar to, though slightly smaller than, the gaps at age 5 . The gap between children with parents with no qualifications and those with a parent with a higher degree was 12 at age 5 and 10 at age 7 - children of parents with no qualifications had a mean that was 79 per cent of the mean for those with parents with higher degrees at age 5 and that was 81 per cent of the mean for those with parents with higher degrees at age 7. The gap between those in poverty and those not in poverty was 6 at age 5 and 5 at age 7 - the mean for those in poverty was 89 and 90 per cent of the mean for those not in poverty at ages 5 and 7 , respectively.

## Progress in Mathematics

The mean scores for PiM are shown in Table 7.3. There are no significant differences in the means for children from different UK countries and also no significant difference between the scores for boys and girls.

Table 7.3: Means for Progress in Maths

|  |  | Standard | Percentile |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Error | 10th | 25th | 50th | 75th | 90th | Obs |  |
| Full sample | 49.9 | 0.22 | 37 | 44 | 51 | 59 | 62 | 13576 |  |
| Country |  |  |  |  |  |  |  |  |  |
| England | 49.9 | 0.26 | 37 | 44 | 51 | 59 | 62 | 8847 |  |
| Wales | 50.1 | 0.39 | 37 | 44 | 51 | 59 | 62 | 1936 |  |
| Scotland | 49.6 | 0.45 | 37 | 44 | 51 | 55 | 62 | 1611 |  |
| Northern Ireland | 50.5 | 0.40 | 37 | 44 | 51 | 59 | 62 | 1362 |  |

Table 7.3: Means for Progress in Maths


Note: Means and standard errors are weighted for sample selection and attrition. Centiles are weighted, but not adjusted for the clustered sampling design. Number of observations are unweighted.

Pakistani and Bangladeshi children scored lower than children from all other ethnic groups, except black children. There were no other significant differences among children of different ethnic groups.

There were significant differences for all of the remaining characteristics. Children of married parents scored higher than children of cohabiting or lone parents, and children of cohabiting parents scored higher than those of lone parents. Children who had at least one parent working scored higher than children who had no working parent. There is a strong trend for parental qualifications; the higher the parental qualification level, the higher the child's score. Children in families who are not in poverty scored higher than children in families in poverty, and children with a parent in a professional or managerial occupation scored higher than those with parents in other occupations.

There was no mathematics assessment administered at age 5, so we are unable to compare group differences on maths across the two sweeps.

## Overall cognitive ability index

The three assessment scales were combined into a single index using principal components analysis (PCA), as had been done with the scales at age 5 (Jones and Schoon, 2009). PCA analysis of the three scales confirmed the presence of a general underlying cognitive factor. The underlying factor accounted for 63 per cent of the total variance among the three tests.

We saved the scores for the Overall Cognitive Index, based on the first unrotated factor from the PCA. The scores were then standardised to a mean of 100 and a standard deviation of 15 . The means and centiles for this overall index are shown in Table 7.4.


| Table 7.4: Means for overall cognitive index |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Standard Error | Percentile |  |  |  |  | Obs |
|  |  |  | 10th | 25th | 50th | 75th | 90th |  |
| Continued |  |  |  |  |  |  |  |  |
| Family poverty status |  |  |  |  |  |  |  |  |
| Above poverty | 102.3 | 0.27 | 84 | 94 | 103 | 112 | 120 | 9446 |
| Below poverty | 93.9 | 0.38 | 73 | 84 | 95 | 105 | 114 | 3987 |
| Parental occupational status |  |  |  |  |  |  |  |  |
| Professional or managerial | 105.0 | 0.30 | 88 | 97 | 106 | 115 | 122 | 5400 |
| Other | 98.1 | 0.27 | 79 | 89 | 99 | 108 | 116 | 5366 |

Note: Means and standard errors are weighted for sample selection and attrition. Centiles are weighted, but not adjusted for the clustered sampling design. Number of observations are unweighted.

There were no significant differences among the four countries on the overall index. Girls had a statistically significantly higher score on the index than boys. Pakistani and Bangladeshi and black cohort members had lower scores than the other ethnic groups, but there were no other significant differences by ethnicity. As would be expected, the differences in the overall index followed the same patterns as for the scales that make it up: children of married parents, of working parents, of parents with higher qualifications, who were not in poverty, and of professional and managerial parents scored higher.

## Changes since age 5: Overall ability

We compare the gaps on the overall index at age 7 to the gaps on the overall index at age 5. It is important to remember that the indices at the two times include different scales. The age 5 index included three BAS scales: Picture Similarities, Naming Vocabulary and Pattern Construction. The age 7 index includes Pattern Construction, Word Reading and the mathematics assessment while the age 5 index does not include any assessment of mathematical or quantitative skills. Both indices have reasonably similar degrees of variation.

The gaps between ethnic groups were smaller at age 7 than they had been at age 5 . In the earlier sweep, the largest gap (between Pakistani and white cohort members) was 15 score points, or 86 per cent below whites. At age 7 the largest gap (between Indian, and Pakistani and Bangladeshi cohort members combined) was just under 9 points (equivalent to 9 per cent of the white children's score). This reduction may be due to the difference in the specific scales included, as some ethnic minority groups scored well on the Word Reading scale, but it could also reflect the benefit of schooling enabling the minority children to catch up.

The gap across parental qualification levels was very similar at the two times around 16 points at age 5 ( 91 for those with parents with no qualifications versus 106 for those with a parent with a higher degree) and 18 points at age 7 . The gap between those in poverty and those not was around 8 points at both age 5 and at age 7. The findings suggest persistent achievement gaps between different social groups, with ethnic minority groups catching up, especially Indians.

## Correlations with assessments at ages 3 and 5

To give an idea of the consistency in the cognitive assessment over the previous three sweeps, we report the correlations of the age 7 assessments with those administered at ages 3 and 5 . One of the assessments used at age 7 had also been administered at age 5: BAS Pattern Construction. The other assessments used at age 5 were also subscales of the BAS, namely the Picture Similarities and Naming Vocabulary subscales. Assessments at age 3 included the BAS Naming Vocabulary subscale and the Bracken School Readiness scale (Bracken, 2002).

The correlations among these assessments are shown in Table 7.5. Not surprisingly, some of the highest correlations were observed between the same scales administered at two time points - Pattern Construction at age 7 and $5(r=.54)$, and Naming Vocabulary at ages 5 and $3(r=.55)$. However, some of the other correlation coefficients were nearly as high. The Progress in Maths scale correlated close to . 50 with the age 7 BAS scales, which is actually higher than the correlation between the two BAS scales. The Bracken at age 3 was strongly associated with BAS Naming Vocabulary at both age 3 and age 5 . The correlations among the BAS subscales scales tend to be only moderate, suggesting that they tap into different domains of cognitive ability.

Table 7.5: Correlations of Age 7 Assessments with Age 3 and 5 Assessments

|  | Pattern <br> Constr. | Word <br> Reading | Progress <br> in Maths | Picture <br> Similarities | Naming <br> Vocab. | Pattern <br> Constr. | Naming <br> Vocab. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MCS4 Word Reading | 0.31 |  |  |  |  |  |  |
| MCS4 Progress in Maths | 0.47 | 0.49 |  |  |  |  |  |
| MCS3 Picture Similarities | 0.28 | 0.21 | 0.29 |  |  |  |  |
| MCS3 Naming Vocabulary | 0.30 | 0.34 | 0.36 | 0.29 |  |  |  |
| MCS3 Pattern Construction | 0.54 | 0.31 | 0.38 | 0.32 | 0.31 |  |  |
| MCS 2 Naming Vocabulary | 0.27 | 0.28 | 0.28 | 0.19 | 0.55 | 0.25 |  |
| MCS 2 Bracken | 0.33 | 0.42 | 0.37 | 0.24 | 0.50 | 0.31 | 0.58 |

Note: Correlation coefficients are weighted for sample selection and attrition.
Overall, the correlations of assessments at one time point with assessments at another time point range from 0.19 to 0.55 , which indicates that while there is some continuity, there is also a fair amount of change from one sweep to the next.

## Conclusions

Educational qualifications in the children's future are likely to be strongly associated with both verbal and non-verbal attainment and capabilities, as well as progress in maths. The findings suggest a persistent attainment gap for different social groups, although some ethnic minority groups appear to be catching up, especially Indians. The patterns of differences across child and family characteristics vary however across the different assessments. The patterns for differences across UK country were opposite for the two verbal and non-verbal BAS scales, with children in Wales and Northern Ireland scoring higher than children in England on Pattern

Construction, but children in England and Scotland scoring higher on Word Reading. On the maths assessment, there were no differences by country.

Girls scored higher than boys on both BAS subscales, but the difference was larger for Word Reading than for Pattern Construction. There was no significant gender difference for the maths test. This is in line with past research on gender differences, which has found that girls tend to score higher than boys on tests of verbal ability, and that there are generally smaller differences favouring boys or no significant difference on tests of quantitative ability (Machin and McNally, 2005; Nowell and Hedges, 1998; Strand et al., 2006).

Remarkably, the findings also suggest that children from ethnic minority groups, at age 7, tend to score higher on verbal skills (significantly so for Indian children), achieve a similar score in maths (except for Pakistani and Bangladeshi children), yet score slightly lower on the non-verbal task compared to white children. White children scored higher on the Pattern Construction task than most other groups. The findings suggest rapid progress of children from ethnic minorities, who continue to catch up with white children, following their progress already observed between ages 3 and 5 (Dearden and Sibieta, 2010). This finding is also echoed by the study of secondary schoolchildren in England in 2003 and 2006 by Cassen and Kingdon (2007), which found that Indian and Chinese pupils were most successful at avoiding academic failure, and that white working class boys were the ones falling behind.

At age 7, children growing up with parents who are well educated, have a professional job, or are living above the poverty line, are performing better than their less privileged peers, as they did at age 5. The patterns for these variables relationship between parents, work status, parental qualifications, poverty status and parental occupational status varied for the different assessments and for different indicators of socioeconomic resources, with the greatest gap apparent for differences in parental education. The findings thus suggest that the socioeconomic resources available to the family are consistently related to a range of cognitive outcomes, whereby parental education is a key dividing factor, more so than family status, gender, ethnicity, or even poverty. Future research will have to confirm this finding in a multivariate analysis.

It is important to keep in mind that these analyses can tell us nothing about causality. For example, lower average cognitive attainment for children below rather than above the poverty line do not tell us that poverty causes lower scores. Future research will have to examine in more detail the processes linking parental education, family poverty, family structure and ethnicity to levels of academic attainment. In addition, the above analyses do not explore the way in which characteristics of the child and family variables may interact to affect cognitive outcomes. Future research can investigate more fully changes (or stability) in cognitive development across the early years, and how child, family and environmental factors may interact to affect outcomes and changes in outcome over time and in different cultural contexts, i.e. for ethnic minority children. Interactions between cognitive and behavioural development and health should be another key focus of investigation.

## References

Batty, G.D., Deary, I.J., Schoon, I. and Gale, C.R. (2007) Mental ability in relation to risk factors for premature mortality in adult life: the 1970 British Cohort Study. Journal of Epidemiology and Community Health, 61, 997-1003.

Bracken, B. A. (2002) Bracken School Readiness Assessment Administration Manual. San Antonio, Texas: The Psychological Corporation.

Caspi, A., Moffitt, T.E., Wright, B.R.E. and Silva, P. A. (1998) Early failure in the labour market: childhood and adolescent predictors of unemployment in the transition to adulthood. American Sociological Review, 63, 424-451.

Cassen, R. and Kingdon, G. ( 2007) Tackling low educational achievement. York: Joseph Rowntree Foundation.

Dearden, L. and Sibieta, L. (2010) Ethnic Inequalities in Child Outcomes. In K. Hansen, H. Joshi and S. Dex (eds) Children of the $21^{\text {st }}$ Century, Volume 2: The first five years. Bristol: Policy Press, pp. 169-184.

Duncan, G. J., and Brooks-Gunn, J. (1997). Consequences of growing up poor. New York: Russell Sage Foundation Press.

Duncan, G.J., Dowsett, C.J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., Pagani, L., Feinstein, L., Engel, M., Brooks-Gunn, J., Sexton, H. and Duckworth, K. (2007) School readiness and later achievement. Developmental Psychology, 43(6), 1428-1446.

Elliott, C. D. (1996) The British Ability Scales II. Windsor, Berkshire: NFER-NELSON Publishing Company.

Feinstein, L. and Bynner, J. (2004) The importance of cognitive development in middle chilndhood for adulthood socioeconomic status, mental health, and problem behaviour. Child Development, 75(5), 1329-1339.

Hopman, R.M., Gerristen, F.M. and Talsma, P. (1988) Socioeconomic status and gender differences in language development of children aged 3 to 6 years.
Pedagogische Studien, 65, 437-450.
Hill, V. (2005) Through the past darkly: A review of the British Ability Scales Second Edition. Child and Adolescent Mental Health, 10, 87-98.

Huston, A. C. and Ripke, M. N. (2006) Developmental contexts in middle childhood. New York: Cambridge University Press.

Maccoby, E.E. and Jacklin, C.N. (1974) The psychology of sex differences. Stanford, CA: Stanford University Press.

Jones, E. and Schoon, I. (2008). Child behaviour and cognitive development. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Third Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.

Machin, S. and McNally, S. (2005) Gender and student achievement in English schools. Oxford Review of Economic Policy, 21 (3), 357-372.

Melhuish, E., Belsky, J., Leyland, A. H. and Barnes, J. (2008) Effects of fullyestablished Sure Start local programmes on 3-year-old children and their families living in England: A quasi-experimental observational study. Lancet, 372(9650), 1641-1647.

Mirowsky, J. and Ross, C.E. (2003) Education, social status, and health. New York: Aldine de Gruyter.

Nowell, A. and Hedges, L. V. (1998) Trends in gender difference in academic achievement from 1960 to 1994: an analysis of differences in mean, variance, and extreme score. Sex Roles, 39(112), 21-43.

Pungello, E. P., Kupersmidt, J. B., Burchinal, M. R. and Patterson, C. J. (1996) Environmental Risk Factors and Children's Achievement from Middle Childhood to Early Adolescence. Developmental Psychology, 32(4), 755-767.

Schoon, I. (2006) Risk and resilience. Adaptations in changing times. Cambridge: Cambridge University Press.

Strand, S., Deary, I. J. and Smith, P. (2006) Sex differences in Cognitive Abilities Test scores: a UK national picture. British Journal of Educational Psychology, 76, 463-480.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., and Taggart, B. (2004). The Effective Provision of Pre-School Education (EPPE) Project: Final Report. London: Institute of Education.

## Chapter 8

## CHILD BEHAVIOUR AT AGE 7

Matt Brown and Ingrid Schoon

## Chapter overview

This chapter provides a summary of child behaviour at age 7 as measured by the Strengths and Difficulties Questionnaire. It highlights:

- Behavioural differences between children from advantaged and disadvantaged backgrounds
- Fewer behavioural problems among children living in families with higher levels of parental qualifications or in families with two working families
- Behavioural differences between boys and girls
- Differences in behavioural problems between UK countries and between ethnic groups
- Risk/advantage associated with different family arrangements - two parent families, stepfamilies etc
- Whether behaviour problems have persisted since earlier surveys

There is ongoing concern regarding the behavioural adjustment and development of young children (Maughan et al., 2005; Maughan et al., 2004; Rutter and Smith, 1995). Epidemiological studies suggest that 8-22 per cent of pre-school children exhibit moderate to clinically significant emotional and behavioural problems (Campbell, 1995; Ford et al., 2003 and 2004) and prevalence rates for children living in poverty are particularly high (Feil et al., 2005; Parry-Langdon, 2008). Early behaviour problems can interfere with the ability to engage in classroom learning activities, can undermine early social behaviours (such as forming relationships with peers and teachers) and thus are a risk factor for future social and academic difficulties (Denham, 2006). Gaining a better understanding of appropriate and effective methods to address the social and emotional needs of today's vulnerable children and to identify which children are at greatest risk for behavioural maladjustment remains an ongoing challenge (Ford et al., 2004), especially as there is evidence that targeted parenting programmes can help parents to improve their relationship with their child and to improve their child's behaviour (NICE, 2007). The aim of this chapter is therefore to examine the demographic factors associated with behavioural adjustment in a contemporary sample of school-aged children.

## Sample and data

Drawing on data collected for the UK Millennium Cohort, child behavioural adjustment at age 7 was assessed via the Strengths and Difficulties Questionnaire (SDQ). The psychometric properties of the SDQ scale are good, and the SDQ has already been used in two previous sweeps of MCS (age 3 and age 5), enabling us to
assess stability and change in behavioural adjustment during early childhood. The SDQ is a 25 -item questionnaire, which was included in the self-completion section of the interview and completed by the main respondent (normally the child's mother). The SDQ is suitable for 3 to16-year-olds and has been well validated as a clinical tool for identifying emotional and behavioural disorders (Goodman, 1997, 2001; Goodman et al., 1998).

The 25 items of the SDQ generate scores for five subscales: emotional symptoms, conduct problems, hyperactivity, peer problems and pro-social behaviour, with scores for each subscale ranging between 0 and 10. Higher scores indicate greater presence of each particular behaviour. The scores for the four problematic behaviours (emotional symptoms, conduct problems, hyperactivity and peer problems) are then summed to produce an overall 'total difficulties' score which ranges between 0 and 40 . Scores between 14 and 16 are classified as borderline, and scores of 17 and above are classified as serious behaviour problems (Goodman, 2001).

The analyses reported in this chapter are based on parental reports on 13,489 children. In families with twins or triplets only data for the first listed child were used, making the number of cohort members equal to the number of families. All analyses were adjusted for sample weights, clustering of the sample design and attrition.

Sample sizes vary across the various subscales of the SDQ as a result of incomplete information. Pro-social scores could be calculated for 13,476 children whereas hyperactivity scores could only be calculated for 13,422 . 'Total difficulties’ scores were calculated for 13,363.

## Results

Table 8.1 shows the mean scores and standard errors for each of the SDQ scales. The mean score for total difficulties is 7.5 and hyperactivity was the problematic behaviour which seemed most prevalent, with the mean score on this subscale (3.4) being over double the mean scores for each of the other three problematic scales.

Table 8.1: Total SDQ scores, MCS4

|  | Emotional <br> symptoms | Conduct <br> problems | Hyper- <br> activity | Peer <br> problems | Pro-social | Total difficulties <br> (sum of four <br> problematic <br> behaviours) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Mean score | 1.5 | 1.4 | 3.4 | 1.2 | 8.6 | 7.5 |
| SE | $(0.0)$ | $(0.0)$ | $(0.0)$ | $(0.0)$ | $(0.0)$ | $(0.0)$ |
| Obs. | 13443 | 13472 | 13422 | 13452 | 13476 | 13363 |

Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets. Means and standard errors are weighted using dovweight2.

Figure 8.1 shows the proportions classified as 'normal', 'borderline' and showing 'serious behaviour problems'. In total 8 per cent of 7 -year-olds were classified as having serious behaviour problems with a further 6 per cent being classified as having borderline behaviour problems. The proportion of boys classified as showing
serious behaviour problems was around twice that of girls ( $10 \%$ compared with $5 \%$ ). The proportion of children classified with serious behaviour problems did not vary greatly between countries but the proportion of children in England classified as having borderline behaviour problems was significantly larger than in any of the other countries (7.2\% compared with 5.4\% in Wales, 4.8\% in Northern Ireland and 4.2\% in Scotland).

Figure 8.1: SDQ summary classifications by sex and by country


Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets. Means and standard errors for sex are weighted using dovweight2; means and standard errors for country are weighted using dovweight1.

Unweighted sample sizes: All ( $n=13,363$ ), Males $(n=6793)$, Females ( $n=6570$ ), England ( $n=8503$ ), Wales ( $n=1939$ ), Scotland ( $n=1586$ ), Northern Ireland ( $n=1335$ ).

Tables 8.2 to 8.5 show the mean scores, across the whole range $0-10$, for each subscale and 'total difficulties' broken down by various demographic and socioeconomic factors. Boys showed significantly more evidence of behavioural problems than girls with a mean total difficulties score of 8.2 compared with 6.8, and were significantly more likely to exhibit conduct problems, hyperactivity and peer problems. There was no difference between boys and girls in terms of emotional symptoms.

As was found at ages 3 and 5 , there was some variation by country, with children from Scotland and Northern Ireland having significantly lower mean scores of 6.9 and 7.1 than children from England and Wales (whose mean scores were 7.7 and 7.5).

The mothers of black African children reported the least amount of problematic behaviour on average with a mean total difficulties score of 6.3, considerably lower than the overall mean (a similar pattern was observed at age 3). White children had a
mean total difficulties score of 7.4, just fractionally less than the overall mean. The estimated means for each other ethnic group were considerably above the mean, with Pakistani and Bangladeshi children having the highest average total difficulties scores. The greatest proportion with particularly high scores was found amongst Black Caribbean children; 13 per cent were classified as having serious behavioural problems (Figure 8.2), although this group only differed significantly from Black African children. Children from homes in which English was the only language spoken showed significantly fewer behavioural problems than those in which other languages (in addition to English) are spoken (mean total difficulties score of 7.4 compared with 8.2). Children from homes in which English is not spoken at all were in between but because there are so few of these cases they were not found to differ significantly from either of the other groups.

Figure 8.2: SDQ summary classifications by ethnic group


Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets. Means and standard errors for sex are weighted using dovweight2; means and standard errors for country are weighted using dovweight1.

Unweighted sample sizes: White ( $n=11,317$ ), Mixed ( $n=363$ ), Indian ( $n=313$ ), Pakistani ( $n=523$ ), Bangladeshi ( $n=192$ ), Black Caribbean ( $n=150$ ), Black African ( $n=226$ ), Other ( $n=188$ ).

As was found at age 3 and age 5, children from families with two natural parents showed significantly fewer behavioural problems than those from lone-parent or stepfamilies (mean total difficulties score of 6.9 compared with 9.1 and 9.6 respectively). Amongst children from stepfamilies, 15 per cent were classified as showing serious behaviour problems, compared with 12 per cent of children with lone parents and 6 per cent living with both natural parents.

Children from families where parents had higher qualifications showed fewer behavioural problems than those whose parent(s) had no qualifications. Children
from families where the highest parental qualification was NVQ Level 4 or the academic equivalent (a first degree) had a mean total difficulties score of 6.1 and where the highest qualification was NVQ Level 5 (equivalent to a higher degree) the mean score was 6.4, whereas the children of parents with no qualifications had a mean total difficulties score of 10.6. Children from families with two working parents also showed fewer behavioural problems (mean total difficulties score of 6.4 compared with 10.2 amongst children with no working parent), as did those from households not classified as living in poverty (mean total difficulties score of 6.7 compared with 9.4 amongst children classified as living in poverty).

The overall mean pro-social score was 8.6 (out of a possible 10), suggesting that on the whole children are considerate, helpful and happy to share with others. Girls continue to show greater levels of pro-social behaviour than boys ( 8.9 compared with 8.3) and there are some other minor variations between the various groups but on the whole scores do not differ greatly.

In order to investigate the longitudinal consistency of child behaviour the total difficulties score at age 7 was correlated with scores from previous sweeps. There are strong associations between indicators of problematic behaviour at age 7 and the equivalent measures at age $5(r=0.70)$ and age $3(r=0.55)$ suggesting that behavioural problems are relatively stable over time.

Strong associations were also found between pro-social behaviour at age 7 and prosocial behaviour at age 5 (0.52) and age 3 (0.37), although the associations were not as marked as for problem behaviours.

Table 8.2: SDQ scores by sex, country and ethnicity, MCS4

|  |  | Emotional symptoms | Conduct problems | Hyperactivity | Peer problems | Pro-social | Total difficulties (sum of four problem behaviours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |
| Male | Mean Score SE <br> Obs. | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 6833 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.0) \\ 6847 \end{gathered}$ | $\begin{gathered} \hline 3.8 \\ (0.0) \\ 6826 \end{gathered}$ | $\begin{gathered} \hline 1.3 \\ (0.0) \\ 6839 \end{gathered}$ | $\begin{gathered} \hline 8.3 \\ (0.0) \\ 6851 \end{gathered}$ | $\begin{gathered} \hline 8.2 \\ (0.1) \\ 6793 \end{gathered}$ |
| Female | Mean Score SE Obs. | $\begin{gathered} 1.6 \\ (0.0) \\ 6610 \end{gathered}$ | $\begin{gathered} 1.2 \\ (0.0) \\ 6625 \end{gathered}$ | $\begin{gathered} \hline 2.9 \\ (0.0) \\ 6596 \end{gathered}$ | $\begin{gathered} 1.1 \\ (0.0) \\ 6613 \end{gathered}$ | $\begin{gathered} 8.9 \\ (0.0) \\ 6625 \end{gathered}$ | $\begin{gathered} \hline 6.8 \\ (0.1) \\ 6570 \end{gathered}$ |
| Country |  |  |  |  |  |  |  |
| England | Mean Score SE <br> Obs. | $\begin{gathered} \hline 1.6 \\ (0.0) \\ 8561 \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.0) \\ 8586 \end{gathered}$ | $\begin{gathered} \hline 3.4 \\ (0.0) \\ 8543 \end{gathered}$ | $\begin{gathered} \hline 1.3 \\ (0.0) \\ 8572 \end{gathered}$ | $\begin{gathered} 8.6 \\ (0.0) \\ 8590 \end{gathered}$ | $\begin{gathered} \hline 7.7 \\ (0.1) \\ 8503 \end{gathered}$ |
| Wales | Mean Score SE Obs. | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 1950 \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.0) \\ 1952 \end{gathered}$ | $\begin{gathered} \hline 3.4 \\ (0.1) \\ 1949 \end{gathered}$ | $\begin{gathered} \hline 1.2 \\ (0.0) \\ 1945 \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.0) \\ 1950 \end{gathered}$ | $\begin{gathered} \hline 7.5 \\ (0.1) \\ 1939 \end{gathered}$ |
| Scotland | Mean Score SE Obs. | $\begin{gathered} 1.4 \\ (0.0) \\ 1591 \end{gathered}$ | $\begin{gathered} 1.3 \\ (0.0) \\ 1593 \end{gathered}$ | $\begin{gathered} \hline 3.2 \\ (0.1) \\ 1591 \end{gathered}$ | $\begin{gathered} \hline 1.1 \\ (0.0) \\ 1592 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.0) \\ 1593 \end{gathered}$ | $\begin{gathered} 6.9 \\ (0.1) \\ 1586 \end{gathered}$ |

Table 8.2: SDQ scores by sex, country and ethnicity, MCS4

|  |  | Emotional symptoms | Conduct problems | Hyperactivity | Peer problems | Pro-social | Total difficulties (sum of four problem behaviours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |  |
| Northern Ireland | $\begin{aligned} & \text { Mean Score } \\ & \text { SE } \\ & \text { Obs. } \end{aligned}$ | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 1341 \end{gathered}$ | $\begin{gathered} \hline 1.3 \\ (0.0) \\ 1341 \end{gathered}$ | $\begin{gathered} \hline 3.2 \\ (0.1) \\ 1339 \end{gathered}$ | $\begin{gathered} \hline 1.1 \\ (0.0) \\ 1343 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.0) \\ 1343 \end{gathered}$ | $\begin{gathered} \hline 7.1 \\ (0.1) \\ 1335 \end{gathered}$ |
| Ethnicity |  |  |  |  |  |  |  |
| White | Mean Score SE <br> Obs. | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 11359 \end{gathered}$ | $\begin{gathered} \hline 1.4 \\ (0.0) \\ 11377 \end{gathered}$ | $\begin{gathered} \hline 3.4 \\ (0.0) \\ 11355 \end{gathered}$ | $\begin{gathered} 1.1 \\ (0.0) \\ 11362 \end{gathered}$ | $\begin{gathered} \hline 8.6 \\ (0.0) \\ 11377 \end{gathered}$ | $\begin{gathered} \hline 7.4 \\ (0.1) \\ 11317 \end{gathered}$ |
| Mixed | Mean Score SE <br> Obs. | $\begin{gathered} 1.6 \\ (0.1) \\ 363 \end{gathered}$ | $\begin{gathered} 1.5 \\ (0.1) \\ 365 \end{gathered}$ | $\begin{gathered} 3.5 \\ (0.1) \\ 364 \end{gathered}$ | $\begin{gathered} 1.5 \\ (0.1) \\ 365 \end{gathered}$ | $\begin{gathered} 8.5 \\ (0.1) \\ 365 \end{gathered}$ | $\begin{gathered} 8.0 \\ (0.3) \\ 363 \end{gathered}$ |
| Indian | Mean Score SE <br> Obs. | $\begin{gathered} \hline 1.6 \\ (0.1) \\ 317 \end{gathered}$ | $\begin{gathered} \hline 1.4 \\ (0.1) \\ 317 \end{gathered}$ | $\begin{gathered} \hline 3.4 \\ (0.1) \\ 316 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.1) \\ 315 \end{gathered}$ | $\begin{gathered} \hline 8.6 \\ (0.1) \\ 318 \end{gathered}$ | $\begin{gathered} \hline 8.0 \\ (0.3) \\ 313 \end{gathered}$ |
| Pakistani | Mean Score SE Obs. | $\begin{gathered} \hline 2.1 \\ (0.1) \\ 543 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.1) \\ 550 \end{gathered}$ | $\begin{gathered} \hline 3.9 \\ (0.1) \\ 534 \end{gathered}$ | $\begin{gathered} \hline 2.0 \\ (0.1) \\ 547 \end{gathered}$ | $\begin{gathered} 8.3 \\ (0.1) \\ 553 \end{gathered}$ | $\begin{gathered} 9.4 \\ (0.2) \\ 523 \end{gathered}$ |
| Bangladesh i | Mean Score SE Obs. | $\begin{gathered} \hline 2.2 \\ (0.1) \\ 200 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1.3 \\ (0.1) \\ 201 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.6 \\ (0.2) \\ 195 \end{gathered}$ | $\begin{gathered} \hline 2.0 \\ (0.1) \\ 200 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8.3 \\ (0.1) \\ 202 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 9.1 \\ (0.4) \\ 192 \end{gathered}$ |
| Black Caribbean | Mean Score SE Obs. | $\begin{gathered} 1.7 \\ (0.2) \\ 151 \end{gathered}$ | $\begin{gathered} \hline 1.5 \\ (0.1) \\ 151 \end{gathered}$ | $\begin{gathered} \hline 3.8 \\ (0.2) \\ 150 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.1) \\ 152 \end{gathered}$ | $\begin{gathered} \hline 8.8 \\ (0.1) \\ 152 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.5) \\ 150 \end{gathered}$ |
| Black African | Mean Score SE Obs. | $\begin{gathered} 1.3 \\ (0.1) \\ 229 \end{gathered}$ | $\begin{gathered} 1.1 \\ (0.1) \\ 229 \end{gathered}$ | $\begin{gathered} \hline 2.6 \\ (0.1) \\ 227 \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.1) \\ 228 \end{gathered}$ | $\begin{gathered} 8.7 \\ (0.1) \\ 227 \end{gathered}$ | $\begin{gathered} 6.3 \\ (0.3) \\ 226 \end{gathered}$ |
| Other | Mean Score SE Obs. | $\begin{gathered} 1.9 \\ (0.1) \\ 188 \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.1) \\ 189 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.5 \\ (0.2) \\ 189 \end{gathered}$ | $\begin{gathered} 1.7 \\ (0.1) \\ 189 \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.1) \\ 188 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.4) \\ 188 \end{gathered}$ |

Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets. For country-specific analyses means and standard errors are weighted by dovweight1, for all other analyses dovweight2 is used.

Table 8.3: SDQ scores by ethnicity within gender, MCS4

|  |  | Emotional symptoms | Conduct problems | Hyperactivity | Peer problems | Prosocial | Total difficulties (sum of four problematic behaviours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White male | Mean score SE <br> Obs. | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 5785 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 5794 \end{gathered}$ | $\begin{gathered} \hline 3.8 \\ (0.0) \\ 5785 \end{gathered}$ | $\begin{gathered} \hline 1.2 \\ (0.0) \\ 5786 \end{gathered}$ | $\begin{gathered} \hline 8.3 \\ (0.0) \\ 5796 \end{gathered}$ | $\begin{gathered} \hline 8.0 \\ (0.1) \\ 5766 \end{gathered}$ |
| Mixed male | Mean score SE Obs. | $\begin{gathered} \hline 1.5 \\ (0.1) \\ 173 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.1) \\ 174 \end{gathered}$ | $\begin{gathered} 4.0 \\ (0.2) \\ 174 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.1) \\ 174 \end{gathered}$ | $\begin{gathered} \hline 8.1 \\ (0.1) \\ 174 \end{gathered}$ | $\begin{gathered} \hline 8.8 \\ (0.4) \\ 173 \end{gathered}$ |
| Indian male | Mean score SE <br> Obs. | $\begin{gathered} 1.8 \\ (0.2) \\ 167 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.1) \\ 166 \end{gathered}$ | $\begin{gathered} \hline 3.9 \\ (0.2) \\ 166 \end{gathered}$ | $\begin{gathered} 1.7 \\ (0.1) \\ 166 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.1) \\ 167 \end{gathered}$ | $\begin{gathered} \hline 9.0 \\ (0.4) \\ 165 \end{gathered}$ |
| Pakistani male | Mean score SE Obs. | $\begin{gathered} \hline 2.1 \\ (0.1) \\ 265 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1.8 \\ (0.1) \\ 270 \end{gathered}$ | $\begin{gathered} \hline 4.3 \\ (0.1) \\ 261 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2.1 \\ (0.1) \\ 268 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8.0 \\ (0.1) \\ 271 \end{gathered}$ | $\begin{aligned} & \hline 10.2) \\ & (0.3) \\ & 253 \\ & \hline \end{aligned}$ |
| Bangladeshi male | Mean score SE Obs. | $\begin{gathered} \hline 2.1 \\ (0.2) \\ 92 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.2) \\ 92 \end{gathered}$ | $\begin{gathered} \hline 4.0 \\ (0.2) \\ 90 \end{gathered}$ | $\begin{gathered} \hline 2.2 \\ (0.2) \\ 93 \end{gathered}$ | $\begin{gathered} \hline 7.8 \\ (0.2) \\ 93 \end{gathered}$ | $\begin{gathered} 9.9 \\ (0.6) \\ 89 \end{gathered}$ |
| Black Carib. male | Mean score SE Obs. | $\begin{gathered} \hline 1.6 \\ (0.2) \\ 84 \end{gathered}$ | $\begin{gathered} \hline 1.7 \\ (0.2) \\ 83 \end{gathered}$ | $\begin{gathered} \hline 4.3 \\ (0.3) \\ 83 \end{gathered}$ | $\begin{gathered} 1.5 \\ (0.2) \\ 84 \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.2) \\ 84 \end{gathered}$ | $\begin{gathered} 9.1 \\ (0.7) \\ 83 \end{gathered}$ |
| Black African male | Mean score SE Obs. | $\begin{gathered} \hline 1.4 \\ (0.2) \\ 120 \end{gathered}$ | $\begin{gathered} \hline 1.2 \\ (0.1) \\ 120 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2.9 \\ (0.2) \\ 118 \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (0.2) \\ 119 \end{gathered}$ | $\begin{gathered} \hline 8.4 \\ (0.1) \\ 118 \end{gathered}$ | $\begin{gathered} \hline 7.0 \\ (0.5) \\ 117 \end{gathered}$ |
| Other male | Mean score SE Obs. | $\begin{gathered} \hline 2.0 \\ (0.2) \\ 97 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1.5 \\ (0.2) \\ 98 \end{gathered}$ | $\begin{gathered} \hline 3.7 \\ (0.3) \\ 98 \end{gathered}$ | $\begin{gathered} \hline 1.8 \\ (0.2) \\ 98 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.2) \\ 97 \end{gathered}$ | $\begin{gathered} \hline 9.1 \\ (0.6) \\ 97 \end{gathered}$ |
| White female | Mean score SE Obs. | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 5574 \end{gathered}$ | $\begin{gathered} 1.2 \\ (0.0) \\ 5583 \end{gathered}$ | $\begin{gathered} \hline 2.9 \\ (0.0) \\ 5570 \end{gathered}$ | $\begin{gathered} 1.0 \\ (0.0) \\ 5576 \end{gathered}$ | $\begin{gathered} 8.9 \\ (0.0) \\ 5581 \end{gathered}$ | $\begin{gathered} 6.7 \\ (0.1) \\ 5551 \\ \hline \end{gathered}$ |
| Mixed female | Mean score SE Obs. | $\begin{gathered} \hline 1.7 \\ (0.1) \\ 190 \end{gathered}$ | $\begin{gathered} \hline 1.3 \\ (0.1) \\ 191 \end{gathered}$ | $\begin{gathered} \hline 3.0 \\ (0.2) \\ 190 \end{gathered}$ | $\begin{gathered} \hline 1.4 \\ (0.1) \\ 191 \end{gathered}$ | $\begin{gathered} \hline 8.9 \\ (0.1) \\ 191 \end{gathered}$ | $\begin{gathered} \hline 7.3 \\ (0.4) \\ 190 \end{gathered}$ |
| Indian female | Mean score SE Obs. | $\begin{gathered} 1.4 \\ (0.1) \\ 150 \end{gathered}$ | $\begin{gathered} 1.1 \\ (0.1) \\ 151 \end{gathered}$ | $\begin{gathered} \hline 2.9 \\ (0.2) \\ 150 \end{gathered}$ | $\begin{gathered} \hline 1.5 \\ (0.1) \\ 149 \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.1) \\ 151 \end{gathered}$ | $\begin{gathered} 6.9 \\ (0.4) \\ 148 \end{gathered}$ |
| Pakistani female | Mean score SE Obs. | $\begin{gathered} \hline 2.0 \\ (0.1) \\ 278 \end{gathered}$ | $\begin{gathered} \hline 1.4 \\ (0.1) \\ 280 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.5 \\ (0.1) \\ 273 \end{gathered}$ | $\begin{gathered} \hline 1.9 \\ (0.1) \\ 279 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.1) \\ 282 \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.3) \\ 270 \end{gathered}$ |
| Bangladeshi female | Mean score SE Obs. | $\begin{gathered} 2.2 \\ (0.2) \\ 108 \\ \hline \end{gathered}$ | $\begin{gathered} 1.1 \\ (0.1) \\ 109 \end{gathered}$ | $\begin{gathered} \hline 3.3 \\ (0.2) \\ 105 \end{gathered}$ | $\begin{gathered} 1.9 \\ (0.2) \\ 107 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.2) \\ 109 \\ \hline \end{gathered}$ | $\begin{gathered} 8.3 \\ (0.5) \\ 105 \end{gathered}$ |
| Black Carib. female | Mean score SE Obs. | $\begin{gathered} 1.9 \\ (0.2) \\ 67 \end{gathered}$ | $\begin{gathered} \hline 1.2 \\ (0.2) \\ 68 \end{gathered}$ | $\begin{gathered} \hline 3.1 \\ (0.3) \\ 67 \end{gathered}$ | $\begin{gathered} 1.7 \\ (0.2) \\ 68 \end{gathered}$ | $\begin{gathered} \hline 8.9 \\ (0.2) \\ 68 \end{gathered}$ | $\begin{gathered} \hline 7.8 \\ (0.6) \\ 67 \end{gathered}$ |
| Black <br> African <br> female | Mean score SE Obs. | $\begin{gathered} \hline 1.2 \\ (0.2) \\ 109 \end{gathered}$ | $\begin{gathered} 1.0 \\ (0.1) \\ 109 \end{gathered}$ | $\begin{gathered} \hline 2.3 \\ (0.2) \\ 109 \end{gathered}$ | $\begin{gathered} 1.2 \\ (0.1) \\ 109 \end{gathered}$ | $\begin{gathered} 9.1 \\ (0.1) \\ 109 \end{gathered}$ | $\begin{gathered} 5.7 \\ (0.4) \\ 109 \end{gathered}$ |
| Other female | Mean score SE Obs. | $\begin{gathered} \hline 1.9 \\ (0.2) \\ 91 \end{gathered}$ | $\begin{gathered} \hline 1.3 \\ (0.2) \\ 91 \end{gathered}$ | $\begin{gathered} \hline 3.2 \\ (0.2) \\ 91 \end{gathered}$ | $\begin{gathered} 1.6 \\ (0.2) \\ 91 \end{gathered}$ | $\begin{gathered} \hline 8.9 \\ (0.2) \\ 91 \end{gathered}$ | $\begin{gathered} \hline 8.0 \\ (0.6) \\ 91 \end{gathered}$ |

Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets. Means and standard errors are weighted using dovweight2

Table 8.4: SDQ scores by languages spoken in home, family structure and parental qualifications, MCS4

|  |  | Emotional symptoms | Conduct problems | Hyperactivity | Peer problems | Prosocial | Total difficulties (sum of four problematic behaviours) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Languages spoken in home |  |  |  |  |  |  |  |
| English only | Mean score SE Obs. | $\begin{gathered} 1.5 \\ (0.0) \\ 11764 \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.0) \\ 11783 \end{gathered}$ | $\begin{gathered} 3.4 \\ (0.0) \\ 11759 \end{gathered}$ | $\begin{gathered} 1.2 \\ (0.0) \\ 11768 \end{gathered}$ | $\begin{gathered} 8.6 \\ (0.0) \\ 11786 \end{gathered}$ | $\begin{gathered} 7.4 \\ (0.1) \\ 11718 \end{gathered}$ |
| English and other language | Mean score SE Obs. | $\begin{gathered} 1.8 \\ (0.0) \\ 1606 \\ \hline \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.0) \\ 1616 \\ \hline \end{gathered}$ | $\begin{gathered} 3.5 \\ (0.1) \\ 1591 \\ \hline \end{gathered}$ | $\begin{gathered} 1.6 \\ (0.0) \\ 1611 \\ \hline \end{gathered}$ | $\begin{gathered} 8.5 \\ (0.0) \\ 1617 \\ \hline \end{gathered}$ | $\begin{gathered} 8.2 \\ (0.1) \\ 1573 \\ \hline \end{gathered}$ |
| Other language only | Mean score SE Obs. | $\begin{gathered} 1.4 \\ (0.2) \\ 73 \\ \hline \end{gathered}$ | $\begin{gathered} 1.5 \\ (0.2) \\ 73 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.4 \\ (0.3) \\ 72 \\ \hline \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.2) \\ 73 \\ \hline \end{gathered}$ | $\begin{gathered} 8.3 \\ (0.2) \\ 73 \\ \hline \end{gathered}$ | $\begin{gathered} 7.7 \\ (0.6) \\ 72 \\ \hline \end{gathered}$ |
| Family structure |  |  |  |  |  |  |  |
| Two natural parents | Mean score SE Obs. | $\begin{gathered} \hline 1.4 \\ (0.0) \\ 9687 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1.2 \\ (0.0) \\ 9705 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.1 \\ (0.0) \\ 9669 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1.1 \\ (0.0) \\ 9687 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8.6 \\ (0.0) \\ 9704 \end{gathered}$ | $\begin{gathered} \hline 6.9 \\ (0.1) \\ 9628 \\ \hline \end{gathered}$ |
| Lone parent | Mean score SE Obs. | $\begin{gathered} 1.8 \\ (0.0) \\ 2814 \\ \hline \end{gathered}$ | $\begin{gathered} 1.8 \\ (0.0) \\ 2825 \end{gathered}$ | $\begin{gathered} 3.9 \\ (0.0) \\ 2811 \\ \hline \end{gathered}$ | $\begin{gathered} 1.6 \\ (0.0) \\ 2824 \end{gathered}$ | $\begin{gathered} 8.4 \\ (0.0) \\ 2829 \end{gathered}$ | $\begin{gathered} 9.1 \\ (0.1) \\ 2795 \end{gathered}$ |
| Stepfamily | Mean score SE Obs. | $\begin{gathered} 1.8 \\ (0.1) \\ 883 \end{gathered}$ | $\begin{gathered} \hline 1.9 \\ (0.1) \\ 883 \\ \hline \end{gathered}$ | $\begin{gathered} 4.3 \\ (0.1) \\ 883 \end{gathered}$ | $\begin{gathered} 1.6 \\ (0.1) \\ 882 \end{gathered}$ | $\begin{gathered} \hline 8.4 \\ (0.1) \\ 884 \end{gathered}$ | $\begin{gathered} 9.6 \\ (0.2) \\ 881 \end{gathered}$ |
| Other | Mean score SE Obs. | $\begin{gathered} 1.9 \\ (0.3) \\ 59 \\ \hline \end{gathered}$ | $\begin{gathered} 2.0 \\ (0.2) \\ 59 \\ \hline \end{gathered}$ | $\begin{gathered} 4.5 \\ (0.3) \\ 59 \\ \hline \end{gathered}$ | $\begin{gathered} 1.9 \\ (0.2) \\ 59 \\ \hline \end{gathered}$ | $\begin{gathered} 8.3 \\ (0.2) \\ 59 \\ \hline \end{gathered}$ | $\begin{gathered} 10.4) \\ (0.8) \\ 59 \\ \hline \end{gathered}$ |
| Highest parental qualification |  |  |  |  |  |  |  |
| NVQ Level 1 | Mean score SE Obs. | $\begin{gathered} 1.8 \\ (0.1) \\ 1470 \\ \hline \end{gathered}$ | $\begin{gathered} 1.7 \\ (0.0) \\ 1470 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.9 \\ (0.1) \\ 1466 \\ \hline \end{gathered}$ | $\begin{gathered} 1.5 \\ (0.0) \\ 1469 \\ \hline \end{gathered}$ | $\begin{gathered} 8.5 \\ (0.0) \\ 1474 \end{gathered}$ | $\begin{gathered} \hline 8.8 \\ (0.2) \\ 1456 \\ \hline \end{gathered}$ |
| NVQ Level 2 | Mean score SE Obs. | $\begin{gathered} 1.5 \\ (0.0) \\ 4824 \\ \hline \end{gathered}$ | $\begin{gathered} 1.4 \\ (0.0) \\ 4832 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.5 \\ (0.0) \\ 4817 \\ \hline \end{gathered}$ | $\begin{gathered} 1.2 \\ (0.0) \\ 4829 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8.6 \\ (0.0) \\ 4834 \end{gathered}$ | $\begin{gathered} \hline 7.7 \\ (0.1) \\ 4804 \\ \hline \end{gathered}$ |
| NVQ Level 3 | Mean score SE Obs. | $\begin{gathered} 1.4 \\ (0.0) \\ 2188 \\ \hline \end{gathered}$ | $\begin{gathered} 1.3 \\ (0.0) \\ 2192 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3.3 \\ (0.1) \\ 2187 \\ \hline \end{gathered}$ | $\begin{gathered} 1.2 \\ (0.0) \\ 2188 \\ \hline \end{gathered}$ | $\begin{gathered} 8.6 \\ (0.0) \\ 2191 \\ \hline \end{gathered}$ | $\begin{gathered} 7.2 \\ (0.1) \\ 2179 \\ \hline \end{gathered}$ |
| NVQ Level 4 | Mean score SE Obs. | $\begin{gathered} 1.3 \\ (0.0) \\ 3349 \end{gathered}$ | $\begin{gathered} \hline 1.1 \\ (0.0) \\ 3358 \end{gathered}$ | $\begin{gathered} \hline 2.8 \\ (0.0) \\ 3349 \end{gathered}$ | $\begin{gathered} 1.0 \\ (0.0) \\ 3350 \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.0) \\ 3357 \end{gathered}$ | $\begin{gathered} \hline 6.1 \\ (0.1) \\ 3335 \end{gathered}$ |
| NVQ Level 5 | Mean score SE Obs. | $\begin{gathered} \hline 1.3 \\ (0.1) \\ 467 \end{gathered}$ | $\begin{gathered} \hline 1.1 \\ (0.1) \\ 467 \end{gathered}$ | $\begin{gathered} \hline 2.9 \\ (0.1) \\ 465 \end{gathered}$ | $\begin{gathered} 1.0 \\ (0.1) \\ 466 \end{gathered}$ | $\begin{gathered} \hline 8.5 \\ (0.1) \\ 465 \end{gathered}$ | $\begin{gathered} \hline 6.4 \\ (0.2) \\ 464 \\ \hline \end{gathered}$ |
| Overseas or other qual. only | Mean score SE Obs. | $\begin{gathered} \hline 2.2 \\ (0.1) \\ 263 \end{gathered}$ | $\begin{gathered} \hline 2.0 \\ (0.1) \\ 263 \end{gathered}$ | $\begin{gathered} \hline 4.4 \\ (0.2) \\ 259 \end{gathered}$ | $\begin{gathered} \hline 2.0 \\ (0.1) \\ 262 \end{gathered}$ | $\begin{gathered} \hline 8.0 \\ (0.1) \\ 265 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 10.5 \\ & (0.4) \\ & 254 \end{aligned}$ |
| No qualifications | Mean score SE Obs. | $\begin{gathered} \hline 2.2 \\ (0.1) \\ 881 \end{gathered}$ | $\begin{gathered} \hline 2.2 \\ (0.1) \\ 889 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4.3 \\ (0.1) \\ 878 \\ \hline \end{gathered}$ | $\begin{gathered} 1.9 \\ (0.1) \\ 887 \end{gathered}$ | $\begin{gathered} \hline 8.2 \\ (0.1) \\ 889 \\ \hline \end{gathered}$ | $\begin{aligned} & 10.6) \\ & (0.2) \\ & 870 \end{aligned}$ |

Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets.
Means and standard errors are weighted using dovweight2.
NVQ = National Vocational Qualification. Levels range from 1 (basic work activities that are routine and predictable) to 5 (senior management). Also includes academic qualifications (and Scottish equivalents), with NVQ1 being equivalent to some basic school-leaving qualifications and NVQ5 being equivalent to a postgraduate qualification or higher degree. Variable is qualification level of whichever parent has the higher qualification.

Table 8.5: SDQ scores by parental employment and poverty status, MCS4
$\left.\begin{array}{|l|l|l|l|l|l|l|l|}\hline & & & & & \begin{array}{l}\text { Emotional } \\ \text { symptoms }\end{array} & \begin{array}{l}\text { Conduct } \\ \text { difficulties } \\ \text { problems }\end{array} \\ \text { (sum of } \\ \text { four } \\ \text { problematic } \\ \text { behaviours) }\end{array}\right\}$

| Parental employment |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Two parents employed | Mean score SE Obs. | $\begin{gathered} 1.3 \\ (0.0) \\ 6550 \end{gathered}$ | $\begin{gathered} 1.1 \\ (0.0) \\ 6555 \end{gathered}$ | $\begin{gathered} 3.0 \\ (0.0) \\ 6549 \end{gathered}$ | $\begin{aligned} & (0.9) \\ & (0.0) \\ & 6544 \end{aligned}$ | $\begin{gathered} 8.7 \\ (0.0) \\ 6554 \end{gathered}$ | $\begin{gathered} \hline 6.4 \\ (0.1) \\ 6531 \end{gathered}$ |
| One parent employed | Mean score SE <br> Obs. | $\begin{gathered} \hline 1.6 \\ (0.0) \\ 4680 \end{gathered}$ | $\begin{gathered} \hline 1.5 \\ (0.0) \\ 4690 \end{gathered}$ | $\begin{gathered} \hline 3.5 \\ (0.0) \\ 4669 \end{gathered}$ | $\begin{gathered} \hline 1.4 \\ (0.0) \\ 4685 \end{gathered}$ | $\begin{gathered} \hline 8.6 \\ (0.0) \\ 4689 \end{gathered}$ | $\begin{gathered} \hline 7.9 \\ (0.1) \\ 4649 \end{gathered}$ |
| No parent employed | Mean score SE Obs. | $\begin{gathered} \hline 2.1 \\ (0.0) \\ 2213 \end{gathered}$ | $\begin{gathered} \hline 2.1 \\ (0.0) \\ 2227 \end{gathered}$ | $\begin{gathered} \hline 4.2 \\ (0.1) \\ 2204 \end{gathered}$ | $\begin{gathered} \hline 1.8 \\ (0.0) \\ 2223 \end{gathered}$ | $\begin{gathered} \hline 8.2 \\ (0.0) \\ 2233 \end{gathered}$ | $\begin{aligned} & \hline 10.2) \\ & (0.1) \\ & 2183 \end{aligned}$ |
| Poverty status |  |  |  |  |  |  |  |
| Above 60\% Median | Mean score SE <br> Obs. | $\begin{gathered} \hline 1.4 \\ (0.0) \\ 9516 \end{gathered}$ | $\begin{gathered} \hline 1.2 \\ (0.0) \\ 9529 \end{gathered}$ | $\begin{gathered} \hline 3.1 \\ (0.0) \\ 9511 \end{gathered}$ | $\begin{gathered} \hline 1.0 \\ (0.0) \\ 9514 \end{gathered}$ | $\begin{gathered} \hline 8.7 \\ (0.0) \\ 9525 \end{gathered}$ | $\begin{gathered} \hline 6.7 \\ (0.1) \\ 9484 \end{gathered}$ |
| Below 60\% Median | Mean score SE Obs. | $\begin{gathered} \hline 2.0 \\ (0.0) \\ 3922 \end{gathered}$ | $\begin{gathered} 1.8 \\ (0.0) \\ 3938 \end{gathered}$ | $\begin{gathered} 4.0 \\ (0.0) \\ 3906 \end{gathered}$ | $\begin{gathered} 1.7 \\ (0.0) \\ 3933 \end{gathered}$ | $\begin{gathered} 8.3 \\ (0.0) \\ 3946 \end{gathered}$ | $\begin{gathered} 9.4 \\ (0.1) \\ 3874 \end{gathered}$ |

Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets. Means and standard errors are weighted using dovweight2.

## Overall behavioural difficulties

In addition to the above, parents were also asked to report whether overall, they thought that their child had difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with people.

Table 8.6 shows that in total just over a quarter felt that their child had minor difficulties, 5 per cent felt their child had definite difficulties and 2 per cent felt their child had severe difficulties. In almost six in ten cases (57\%) where the parent indicated that their child had some form of difficulty this problem had been present for over a year. Difficulties which had arisen only recently were relatively rare (Table 8.7).

SDQ scores were very much related to responses to this overall question (Table 8.8). Children whose parents suggested they had severe difficulties in at least one of the areas listed in the general question had a mean SDQ score of 21.4 compared with a mean score of 5.3 amongst children whose parents suggested they had no difficulties.

Table 8.6: Parental assessment of whether child has difficulties in one or more of the following areas - emotions, concentration, behaviour or being able to get on with people, MCS4

|  | Obs | (\%) |
| :--- | :---: | :---: |
| No | 8992 | $(66.0)$ |
| Yes, minor difficulties | 3476 | $(26.1)$ |
| Yes, definite difficulties | 681 | $(5.4)$ |
| Yes, severe difficulties | 182 | $(1.5)$ |
| Can't say | 156 | $(1.1)$ |
| Unweighted sample size <br> Weighted observations | 13487 | $(100.0)$ |

Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets.
Means and standard errors are weighted using dovweight2.

Table 8.7: Parental assessment of how long difficulties have been present, MCS4

|  | Obs | (\%) |
| :--- | :--- | :--- |
| Less than a month | 216 | $(5.1)$ |
| $1-5$ months | 329 | $(7.3)$ |
| 6-12 months | 565 | $(13.9)$ |
| Over a year | 2459 | $(57.0)$ |
| Can't say | 770 | $(16.7)$ |
| Unweighted sample size <br> Weighted observations | 4339 | 4462 |

Notes: Sample includes all cohort members whose mothers report some difficulty (excluding second and third children in families with twins and triplets). Means and standard errors are weighted using dovweight2.

Table 8.8: SDQ Total Difficulty Score by parental assessment of whether child has difficulties, MCS4

|  |  | SDQ Total Difficulty Score |
| :--- | :--- | :---: |
| No difficulties | Mean score | 5.3 |
|  | SE | $(0.0)$ |
|  | Obs. | 8955 |
| Minor difficulties | Mean score | 10.7 |
|  | SE | $(0.1)$ |
|  | Obs. | 3440 |
| Definite difficulties | Mean score | 17.0 |
|  | SE | $(0.2)$ |
|  | Obs. | 675 |
| Severe difficulties | Mean score | 21.4 |
|  | SE | $(0.4)$ |
|  | Obs. | 175 |

Notes: Sample includes all cohort members excluding second and third children in families with twins and triplets. Means and standard errors are weighted using dovweight2.

## Conclusions

This chapter has provided a summary of child behaviour at age 7 as measured by the Strengths and Difficulties Questionnaire (SDQ). As was observed at both age 3 and age 5 there are some striking differences between children from advantaged and disadvantaged backgrounds. Significantly fewer behavioural problems are reported for children living in families with higher levels of parental qualifications or in families with two working parents. There is also a significant difference between boys and girls, as also seen in the previous sweeps of the study. Boys were twice as likely as girls to display serious behaviour problems. Boys were significantly more likely to exhibit conduct problems, peer problems and hyperactivity. Children in England showed higher rates of borderline problems than children growing up in Scotland, Northern Ireland or Wales. There were also differences between ethnic groups, with mothers of black African children reporting the lowest rates of problematic behaviour and black Caribbean mothers the highest. Children living in two-parent families showed fewer behaviour problems than those in other family arrangements, whereby children in stepfamilies appear to be most at risk for serious behaviour problems (see also Parry-Langdon, 2008).

The findings suggest that there are multiple influences on behavioural adjustment among school-aged children, and future studies might examine in more detail the role of parental characteristics and parent-child interactions, as well as characteristics of the school environment and the neighbourhood (Ford et al., 2003).

Behavioural problems at age 7 were also found to be strongly associated with earlier problems (at age 3 and age 5) indicating that these problems are fairly consistent over time (Parry-Langdon, 2008), although turning points and reversal of behaviour trends might also be possible.

## References

Campbell, S.B. (1995) Behavior problems in preschool children: A review of recent research. Journal of Child Psychology and Psychiatry and Allied Disciplines, 36, 113-149.

Denham, S.A. (2006) Social-emotional competence as support for school readiness: What it is and how do we assess it? Early Education and Development 17(1), 57-89.

Feil, E.J., Small, J.W., Forness, S.R., Serna, L.A., Kaiser, A.P., Hancock, T.B, Brooks-Gunn, J., Bryant, D., Kuperschmidt, J., Burchinal, M.R., Boyce, C.A. and Lopez, M.L. (2005) Using different measures, informants, and clinical cut-off points to estimate prevalence of emotional or behavioral disorders in preschoolers: Effects on age, gender, and ethnicity. Behavioral Disorders, 30(4), 375-391.

Goodman, R. (1997) The Strengths and Difficulties Questionnaire: A Research Note. Journal of Child Psychology and Psychiatry, 38, 581-586.

Goodman, R. (2001) Psychometric properties of the Strengths and Difficulties Questionnaire (SDQ). Journal of the American Academy of Child and Adolescent Psychiatry, 40, 1337-1345.

Goodman, R., Meltzer, H. and Bailey, V. (1998) The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. European Child and Adolescent Psychiatry, 7, 125-130.

Ford, T., Goodman, R. and Meltzer, H. (2003) The British child and adolescent mental health survey 1999: The prevalence of dsm-iv disorders. Journal of the American Academy of Child and Adolescent Psychiatry, 42(10), 1203-1211.

Ford, T., Goodman, R. and Meltzer, H. (2004) The relative importance of child, family, school and neighbourhood correlates of childhood psychiatric disorder. Social Psychiatry and Psychiatric Epidemiology, 39(6), 487-496.

NICE (2007) Parent-training/education programmes in the management of children with conduct disorders. London: National Institute for Health and Clinical Excellence. http://www.nice.org.uk/nicemedia/live/11584/33426/33426.pdf

Maughan, B., Iervolino, A. C and Collishaw, S. (2005) Time trends in child and adolescent mental disorders. Current Opinion in Psychiatry, 18(4), 381-385.

Maughan, B., Rowe, R., Messer, J., Goodman, R. and Meltzer, H. (2004) Conduct disorder and oppositional defiant disorder in a national sample: Developmental epidemiology. Journal of Child Psychology and Psychiatry, 45(3), 609-621.

Parry-Langdon, N. (2008) Three years on: Survey of the emotional development and well-being of children and young people. London: HSMO.

Rutter, M. and Smith, D. (1995) Psychosocial disorders in young people: Time trends and their causes. Chichester: Wiley.

## Chapter 9

## CHILD HEALTH

Dylan Kneale

## Chapter overview

This chapter examines the health of MCS children at age 7 and the patterns that emerge in relation to country at birth, gender, ethnicity, mother's age, family type, family work status, parental education and socioeconomic status. The chapter is divided into two parts:

- Part 1 is about health, illness and disability and looks at general health, longstanding conditions, allergies and accidents.
- Part 2 is about fitness, lifestyle and health and looks at physical activity and sport, diet, body mass and sleeping habits, and how these may interrelate.


## Introduction

The Millennium Cohort Study (MCS) provides a resource for examining children's health, illnesses and development in the context of their family and environs. This chapter examines the health of MCS children at age 7 in 2008. Previous sweeps at ages 9 months, 3 and 5 years have found the majority of parents happy with their child's health and development. At 9 months, over 90 per cent of mothers were untroubled by their child's development (Dezateux et al., 2004). At 3 years almost 85 per cent of mothers reported no longstanding illness (Dezateux et al., 2007); dropping at age 5 to 81 per cent (Sullivan and Joshi, 2008). However, these reports also showed that illness was patterned by ethnic and socioeconomic characteristics, with children from more disadvantaged families having more longer-standing illness and lower levels of general health. This chapter examines the extent to which these inequalities have persisted, as well as looking at the overall picture of child health at age 7. The MCS is ideally placed to do this, as it provides the largest sample of children of this particular age group in the UK as well as a sample structure that allows for analysis within subgroups.

This chapter will report on general and longstanding health, longstanding conditions and disability, and infectious diseases by country at birth, gender, ethnicity, mother's age, family type and socioeconomic status. However, the chapter also covers several topics of current concern to policy-makers: children's diet, measures of obesity, activity levels, sleeping habits and allergies. The analysis is descriptive and offers mainly two-way cross-sectional comparisons that do not constitute evidence of causal relationships. A further caveat is that most of the information presented in this chapter is based on reports from cohort members' parents ( $97 \%$ of whom are mothers) and may not necessarily represent confirmed medical diagnosis. This
chapter analyses information for the first child only in multiple births, and uses data from all main respondents, unless otherwise specified. The chapter has two parts. The first examines childhood health, accidents, illness and disability, and the second behavioural and lifestyle health factors and the relationship with body mass.

## Part 1: Health, illness and disability

## General health

Most children aged 7 were reported to be in excellent or very good health (87\%), a slight improvement compared with health status at age 5 (84\%) (Sullivan and Joshi, 2008). Less than half of 1 per cent of children were reported to be in poor health, and in total 3 per cent were described as being in fair or poor health (poor and fair are collapsed into a single category from now on). These figures represent the main respondents' (usually the mother's) perception of child health. In a Scottish study of 11-year-olds, 47 per cent of boys and girls described their health as 'good' (the highest rating in this particular survey; 'excellent' is the highest in the MCS) while their parents rated 77 per cent of boys' and 79 per cent of girls' health as good (Sweeting and West, 1998). Parental assessment therefore may not necessarily reflect the child's perception of their own health, although this may not necessarily be directly applicable to the 7 -year-olds studied here. General health varied by most background characteristics with the exception of country (Table 9.4) - this differs from age 5 where children outside England were reported to have higher levels of excellent health. Boys were less likely to have excellent or very good health as were children of younger mothers, and children from reconstituted or lone-parent families (Tables 9.2 and 9.5). Non-white children (with the exception of black African children, whose health does not differ significantly from that of white children (Figure 9.1)) and children from families with low qualifications were also more often reported in poorer health (Table 9.1). There was a strong socioeconomic gradient to children's health children whose family income was under 60 per cent of the median income were twice as likely to have only good or fair/poor health compared to children from better off families (Table 9.6) - similar differentials were observed with family social class (Table 9.7), and family work status (Table 9.3). Children of younger mothers were most likely to be in poor health (Table 9.5), although there was little difference between teenage mothers and mothers who gave birth in their twenties. The benefit to child health associated with older motherhood peaks at the mid thirties.

Table 9.1: Child's general health by Highest Parental Qualification (both parents combined) MCS41

|  | No Quals | Overseas/ other Quals | $\begin{aligned} & \text { NVQ L1 } \\ & \text { (<5 } \\ & \text { GCSE A- } \\ & \text { C) } \end{aligned}$ | NVQ L2 $(5$ GCSE A-C/ 1 A-Level) | NVQ L3 $(2+A-$ <br> Level) | NVQ L4 <br> (Degree Level) | NVQ L5 <br> (Higher <br> Degree Level) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Excellent | $\begin{array}{r} 452 \\ (46.8) \\ \hline \end{array}$ | $\begin{array}{r} 132 \\ (46.0) \\ \hline \end{array}$ | $\begin{array}{r} 309 \\ (48.8) \\ \hline \end{array}$ | $\begin{array}{r} 1649 \\ (54.8) \\ \hline \end{array}$ | $\begin{array}{r} 1310 \\ (59.9) \\ \hline \end{array}$ | $\begin{array}{r} 3121 \\ (65.2) \\ \hline \end{array}$ | $\begin{array}{r} 1191 \\ (68.8) \\ \hline \end{array}$ | $\begin{array}{r} 8164 \\ (59.8) \\ \hline \end{array}$ |
| Very Good | $\begin{array}{r} 328 \\ (32.9) \end{array}$ | $\begin{array}{r} 82 \\ (27.1) \end{array}$ | $\begin{array}{r} 235 \\ (34.4) \end{array}$ | $\begin{array}{r} 885 \\ (28.9) \end{array}$ | $\begin{array}{r} 617 \\ (27.5) \end{array}$ | $\begin{array}{r} 1254 \\ (25.7) \end{array}$ | $\begin{array}{r} 412 \\ (23.4) \end{array}$ | $\begin{array}{r} 3813 \\ (27.5) \end{array}$ |
| Good | $\begin{array}{r} 145 \\ (14.1) \\ \hline \end{array}$ | $\begin{array}{r} 57 \\ (19.8) \\ \hline \end{array}$ | $\begin{array}{r} 84 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 375 \\ (12.1) \\ \hline \end{array}$ | $\begin{array}{r} 211 \\ (9.6) \\ \hline \end{array}$ | $\begin{array}{r} 378 \\ (7.6) \\ \hline \end{array}$ | $\begin{array}{r} 116 \\ (6.4) \\ \hline \end{array}$ | $\begin{aligned} & \hline 1366 \\ & (9.8) \\ & \hline \end{aligned}$ |
| Fair/Poor | $\begin{array}{r} 75 \\ (6.2) \end{array}$ | $\begin{array}{r} 21 \\ (7.1) \end{array}$ | $\begin{array}{r} 33 \\ (4.9) \end{array}$ | $\begin{array}{r} 122 \\ (4.2) \end{array}$ | $\begin{array}{r} 80 \\ (3.0) \end{array}$ | $\begin{array}{r} 82 \\ (1.5) \end{array}$ | $\begin{array}{r} 24 \\ (1.3) \end{array}$ | $\begin{array}{r} 437 \\ (3.0) \end{array}$ |
| Total Per Cent | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Observed <br> Number <br> Weighted <br> Number | $\begin{gathered} 1000 \\ (1016) \end{gathered}$ | $\begin{gathered} 292 \\ (270) \\ \hline \end{gathered}$ | $\begin{gathered} 661 \\ (728) \\ \hline \end{gathered}$ | $\begin{gathered} 3031 \\ (3216) \\ \hline \end{gathered}$ | $\begin{gathered} 2218 \\ (2185) \\ \hline \end{gathered}$ | $\begin{gathered} 4835 \\ (4745) \\ \hline \end{gathered}$ | $\begin{gathered} 1743 \\ (1623) \end{gathered}$ | $\begin{gathered} 13780 \\ (13783) \end{gathered}$ |
|  |  |  |  |  |  |  |  | $\mathrm{p}=0.17$ |

Note: Cells display unweighted cell size and weighted percentage in parentheses. Weighted cell counts are shown in the bottom row. The weights are dovwt2 to allow for sample design in a UK sample and attrition to Sweep 4. Sample includes first child only (excluding second or third twin/triplet).
${ }^{1}$ Highest Parental Qualification is the highest qualification between the two parents in couples, and the highest qualification of either the lone mother or the lone father in one-parent families. Because of difficulty in reconciling overseas qualifications with UK equivalents, any UK qualification is taken as the highest. This assumption is made throughout the chapter and affects 650 families.

Table 9.2: Child's general health by Family Type MCS4

|  | Two Natural Parents | Reconstituted and other Families | Lone-parent Families | Total |
| :---: | :---: | :---: | :---: | :---: |
| Excellent | $\begin{array}{r} 6049 \\ (62.2) \\ \hline \end{array}$ | $\begin{array}{r} 534 \\ (56.3) \\ \hline \end{array}$ | $\begin{array}{r} 1581 \\ (55.6) \\ \hline \end{array}$ | $\begin{array}{r} 8164 \\ (60.2) \\ \hline \end{array}$ |
| Very Good | $\begin{array}{r} 2696 \\ (26.7) \\ \hline \end{array}$ | $\begin{array}{r} 269 \\ (27.9) \\ \hline \end{array}$ | $\begin{array}{r} 849 \\ (28.9) \\ \hline \end{array}$ | $\begin{array}{r} 3814 \\ (27.3) \\ \hline \end{array}$ |
| Good | $\begin{array}{r} \hline 936 \\ (8.7) \\ \hline \end{array}$ | $\begin{array}{r} 108 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 322 \\ (11.0) \\ \hline \end{array}$ | $\begin{aligned} & 1366 \\ & (9.5) \\ & \hline \end{aligned}$ |
| Fair/Poor | $\begin{array}{r} 265 \\ (2.4) \end{array}$ | $\begin{array}{r} 39 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 133 \\ (4.5) \\ \hline \end{array}$ | $\begin{array}{r} 437 \\ (3.0) \\ \hline \end{array}$ |
| Total Percentage | 100 | 100 | 100 | 100 |
| Observed Number Weighted Number | $\begin{array}{r} 9946 \\ (9570) \\ \hline \end{array}$ | $\begin{array}{r} 950 \\ (1108) \\ \hline \end{array}$ | $\begin{array}{r} 2885 \\ (3099) \\ \hline \end{array}$ | $\begin{array}{r} 13781 \\ (13777) \\ \hline \end{array}$ |

Notes: As Table 9.1.

Table 9.3: Child's general health by Family Work Status MCS4

|  | No Parent <br> Working - 2 <br> Parent/ <br> Other <br> Family | No Parent Working -Lone-parent Family | One Parent Working - 2 Parent/ Other Family | One Parent Working -Lone-parent Family | Two Parents Working | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Excellent | $\begin{array}{r} 304 \\ (46.4) \\ \hline \end{array}$ | $\begin{array}{r} 713 \\ (50.4) \\ \hline \end{array}$ | $\begin{array}{r} 1824 \\ (56.9) \\ \hline \end{array}$ | $\begin{array}{r} 868 \\ (61.2) \\ \hline \end{array}$ | $\begin{array}{r} 4361 \\ (65.5) \\ \hline \end{array}$ | $\begin{array}{r} 8070 \\ (60.3) \\ \hline \end{array}$ |
| Very Good | $\begin{array}{r} 224 \\ (31.2) \\ \hline \end{array}$ | $\begin{array}{r} 465 \\ (31.2) \\ \hline \end{array}$ | $\begin{array}{r} 948 \\ (27.8) \\ \hline \end{array}$ | $\begin{array}{r} 384 \\ (26.4) \\ \hline \end{array}$ | $\begin{array}{r} 1754 \\ (25.9) \\ \hline \end{array}$ | $\begin{array}{r} 3775 \\ (27.3) \\ \hline \end{array}$ |
| Good | $\begin{array}{r} 128 \\ (17.3) \\ \hline \end{array}$ | $\begin{array}{r} 203 \\ (12.8) \\ \hline \end{array}$ | $\begin{array}{r} 407 \\ (11.5) \\ \hline \end{array}$ | $\begin{array}{r} 119 \\ (9.1) \\ \hline \end{array}$ | $\begin{array}{r} 493 \\ (7.0) \\ \hline \end{array}$ | $\begin{aligned} & 1350 \\ & (9.5) \end{aligned}$ |
| Fair/Poor | $\begin{array}{r} 41 \\ (5.1) \\ \hline \end{array}$ | $\begin{array}{r} 90 \\ (5.6) \\ \hline \end{array}$ | $\begin{array}{r} 140 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 43 \\ (3.3) \\ \hline \end{array}$ | $\begin{array}{r} 115 \\ (1.6) \\ \hline \end{array}$ | $\begin{array}{r} 429 \\ (3.0) \\ \hline \end{array}$ |
| Total Percentage | 100 | 100 | 100 | 100 | 100 | 100 |
| Observed Number Weighted Number | $\begin{array}{r} 697 \\ (693) \end{array}$ | $\begin{array}{r} 1471 \\ (1591) \end{array}$ | $\begin{array}{r} 3319 \\ (3258) \end{array}$ | $\begin{array}{r} 1414 \\ (1501) \end{array}$ | $\begin{array}{r} 6723 \\ (6582) \end{array}$ | $\begin{array}{r} 13624 \\ (13625) \end{array}$ |
| $\mathrm{p}<0.01$ |  |  |  |  |  |  |

Notes: As Table 9.1.

Table 9.4: Child's general health by Country MCS4

|  | England | Wales | Scotland | Northern Ireland | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 5078 | 1259 | 1024 | 803 | 8164 |
| Excellent | $(59.3)$ | $(63.2)$ | $(62.3)$ | $(59.3)$ | $(60.2)$ |
|  | 2471 | 525 | 430 | 388 | 3814 |
| Very Good | $(27.6)$ | $(26.0)$ | $(26.8)$ | $(28.1)$ | $(27.3)$ |
|  | 952 | 165 | 123 | 126 | 1366 |
| Good | $(10.0)$ | $(8.0)$ | $(8.4)$ | $(9.7)$ | $(9.5)$ |
|  | 299 | 60 | 36 | 42 | 437 |
| Fair/Poor | $(3.1)$ | $(2.9)$ | $(2.5)$ | $(2.9)$ | $(3.0)$ |
| Total Percentage | 100 | 100 | 100 | 100 | 100 |
| Observed Number | 8800 | 2009 | 1613 | 1359 | 13781 |
| Weighted Number | $(8797)$ | $(2009)$ | $(1613)$ | $(1358)$ | $(13777)$ |
|  |  |  |  |  |  |

Notes: As Table 9.1

Table 9.5: Child's general health by Mother's Age at Birth of Cohort Member Child MCS4


Notes: Notes: As Table 9.1.Includes all mothers, regardless of whether main or partner respondent.

Table 9.6: Child's general health by Poverty Status MCS4

|  | Above 60\% of median income | Below 60\% of median <br> income | Total |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: |
| Excellent | 6120 | 2040 | 8160 |  |  |
|  | $(64.1)$ | $(51.0)$ | $(60.2)$ |  |  |
| Very Good | 2549 | 1261 | 3810 |  |  |
|  | $(26.0)$ | $(30.3)$ | $(27.3)$ |  |  |
| Good | 757 | 608 | 1365 |  |  |
|  | $(7.7)$ | $(13.7)$ | $(9.5)$ |  |  |
| Fair/Poor | 202 | 235 | 437 |  |  |
|  | $(2.1)$ | $(5.0)$ | $(3.0)$ |  |  |
| Total Per Cent | 100 | 100 | 100 |  |  |
| Observed Number | 9628 | 4144 | 13772 |  |  |
| Weighted Number | $(9755)$ | $(4022)$ | $(13777)$ |  |  |
|  |  |  |  |  | $\mathrm{p}<0.01$ |

Notes: As Table 9.1.

Table 9.7: Child's general health by Highest Parental Social Class MCS4

|  | Professional/ Managerial Occupation | Lower than Professional/ Managerial Occupation | No Job or Unclassified | Total |
| :---: | :---: | :---: | :---: | :---: |
| Excellent | $\begin{array}{r} 3696 \\ (68.3) \\ \hline \end{array}$ | $\begin{array}{r} 3107 \\ (57.8) \end{array}$ | $\begin{array}{r} 1343 \\ (50.3) \end{array}$ | $\begin{array}{r} 8146 \\ (60.3) \\ \hline \end{array}$ |
| Very Good | $\begin{array}{r} 1319 \\ (24.0) \\ \hline \end{array}$ | $\begin{array}{r} 1604 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 870 \\ (30.7) \\ \hline \end{array}$ | $\begin{array}{r} 3793 \\ (27.2) \\ \hline \end{array}$ |
| Good | $\begin{array}{r} 365 \\ (6.3) \\ \hline \end{array}$ | $\begin{array}{r} 567 \\ (10.2) \\ \hline \end{array}$ | $\begin{array}{r} 431 \\ (14.0) \\ \hline \end{array}$ | $\begin{aligned} & 1363 \\ & (9.5) \\ & \hline \end{aligned}$ |
| Fair/Poor | $\begin{array}{r} 77 \\ (1.3) \\ \hline \end{array}$ | $\begin{array}{r} 197 \\ (3.5) \\ \hline \end{array}$ | $\begin{array}{r} 160 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 434 \\ (3.0) \\ \hline \end{array}$ |
| Total Per Cent | 100 | 100 | 100 | 100 |
| Observed Number Weighted Number | $\begin{array}{r} 5457 \\ (5418) \\ \hline \end{array}$ | $\begin{array}{r} 5475 \\ (5417) \\ \hline \end{array}$ | $\begin{array}{r} 2804 \\ (2888) \\ \hline \end{array}$ | $\begin{array}{r} 13736 \\ (13724) \\ \hline \end{array}$ |
| $\mathrm{p}<0.01$ |  |  |  |  |

Notes: As Table 9.1.

Figure 9.1: Child's general health by ethnicity and by gender MCS4


Notes: As Table 9.1. Numbers on the horizontal axis are unweighted sample sizes
Overall, the picture was of improved general health status between age 5 and age 7 with some children experiencing rapid gain; for example 16 per cent of those described as being in fair or poor health at age 5 were said to be in excellent health at age 7 (Table 9.8). Health among more disadvantaged children was the most changeable. Children who were Pakistani, Bangladeshi; with young mothers; or poorly qualified parents were most likely to have falling parental-rated health. These groups were also most likely to experience improved health status between sweeps (no table shown).

Table 9.8: Child's general health from Age 5 to Age 7 (MCS3 and 4)

|  |  | Age 5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excellent | Very Good | Good | Fair/Poor | Total |
| Age 7 | Excellent | $\begin{array}{r} 5336 \\ (80.2) \end{array}$ | $\begin{array}{r} 1925 \\ (49.9) \end{array}$ | $\begin{array}{r} 450 \\ (28.3) \end{array}$ | $\begin{array}{r} 91 \\ (16.4) \end{array}$ | $\begin{gathered} 7802 \\ (62.1) \end{gathered}$ |
|  | Very Good | $\begin{array}{r} 1147 \\ (16.0) \\ \hline \end{array}$ | $\begin{array}{r} 1630 \\ (38.8) \\ \hline \end{array}$ | $\begin{array}{r} 678 \\ (40.6) \\ \hline \end{array}$ | $\begin{array}{r} 162 \\ (27.0) \\ \hline \end{array}$ | $\begin{array}{r} 3617 \\ (26.5) \\ \hline \end{array}$ |
|  | Good | $\begin{array}{r} 266 \\ (3.3) \end{array}$ | $\begin{array}{r} 431 \\ (9.4) \end{array}$ | $\begin{array}{r} 432 \\ (25.1) \end{array}$ | $\begin{array}{r} 161 \\ (30.6) \end{array}$ | $\begin{aligned} & 1290 \\ & (8.9) \end{aligned}$ |
|  | Fair/Poor | $\begin{array}{r} 49 \\ (0.6) \\ \hline \end{array}$ | $\begin{array}{r} 87 \\ (1.9) \\ \hline \end{array}$ | $\begin{array}{r} 109 \\ (6.0) \\ \hline \end{array}$ | $\begin{array}{r} 162 \\ (26.0) \\ \hline \end{array}$ | $\begin{array}{r} \hline 407 \\ (2.6) \end{array}$ |
|  | Total Per Cent | 100 | 100 | 100 | 100 | 100 |
|  | Observed Number Weighted Number | $\begin{array}{r} 6798 \\ (7238) \end{array}$ | $\begin{array}{r} 4073 \\ (4235) \\ \hline \end{array}$ | $\begin{array}{r} 1669 \\ (1668) \end{array}$ | $\begin{array}{r} 576 \\ (508) \end{array}$ | $\begin{array}{r} 13116 \\ (13650) \end{array}$ |
|  | $\mathrm{p}<0.01$ |  |  |  |  |  |

Notes: As Table 9.1. Sample includes only those with valid responses at both sweeps. Analysis that uses information from different sweeps in this chapter uses original sample weight (weight2); results were cross-checked using latest attrition weights with the overall trends remaining.

## III-health

Main respondents were asked about longstanding conditions (illness, disability or infirmity) that affected the cohort child. These conditions were subjective in nature and defined by the parents; no parameters were set on the severity of the condition except that longstanding was defined as having affected the cohort child for some time, or was likely to do so. These conditions are grouped in Table 9.13. In total, 21 per cent of boys and 17 per cent of girls were reported to be suffering from such a condition. This is lower than has been found for other surveys of similar age groups. Data from the General Household Survey and Family Fund Trust's register of applicants combined, suggest that, among children aged 5-9 years, 25 per cent of boys and 18 per cent of girls had a longstanding illness or disability in 2000 (parental reports; parents were asked identical questions). However, the rates of longstanding serious conditions were lower among these 5-9 year olds ( 12 per cent of boys and 5 per cent of girls) (Nessa, 2004) compared to the rates of limiting conditions among the MCS. The disparity in these MCS data between the proportion of children who had fair or poor health ( $3 \%$ ) and the proportion with at least one longstanding condition (19\%) suggests that many of the longstanding conditions are not necessarily limiting activity. Here, we are interested in the number of long-term conditions as well as the nature of those conditions. Approximately 15 per cent of children had one long-term condition and 4 per cent had two or more. Longstanding conditions are socially patterned in much the same way as general health. However, the strength of the relationships is noticeably weaker, and in some cases changes direction. There were no significant country differentials in the prevalence of longterm conditions (not shown).

Table 9.9: Longstanding Conditions among Cohort Member Children by Highest Parental Qualification (both parents combined) MCS4

|  | No Quals | Overseas Quals | $\begin{gathered} \text { NVQ L1 } \\ \text { (<5 } \\ \text { GCSE A- } \\ \text { C) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { NVQ L2 } \\ \text { (5 GCSE } \\ \text { A-C/1 A- } \\ \text { Level) } \\ \hline \end{gathered}$ | NVQ L3 <br> (2+ A- <br> Level) | NVQ L4 <br> (Degree Level) | NVQ L5 <br> (Higher <br> Degree <br> Level) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No condition | $\begin{array}{r} 780 \\ (77.0) \end{array}$ | $\begin{array}{r} 231 \\ (77.4) \end{array}$ | $\begin{array}{r} 525 \\ (79.4) \end{array}$ | $\begin{array}{r} 2431 \\ (79.7) \end{array}$ | $\begin{array}{r} 1804 \\ (81.4) \end{array}$ | $\begin{array}{r} 3971 \\ (81.8) \end{array}$ | $\begin{array}{r} 1452 \\ (83.4) \end{array}$ | $\begin{aligned} & 11194 \\ & (80.9) \end{aligned}$ |
| One condition | $\begin{array}{r} 163 \\ (17.7) \\ \hline \end{array}$ | $\begin{array}{r} 43 \\ (16.2) \\ \hline \end{array}$ | $\begin{array}{r} 107 \\ (16.8) \\ \hline \end{array}$ | $\begin{array}{r} 462 \\ (15.8) \\ \hline \end{array}$ | $\begin{array}{r} 311 \\ (13.8) \\ \hline \end{array}$ | $\begin{array}{r} 684 \\ (14.3) \\ \hline \end{array}$ | $\begin{array}{r} 228 \\ (12.9) \\ \hline \end{array}$ | $\begin{array}{r} 1998 \\ (14.8) \\ \hline \end{array}$ |
| Two or more conditions | $\begin{array}{r} 56 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ (6.4) \\ \hline \end{array}$ | $\begin{array}{r} 29 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 136 \\ (4.5) \\ \hline \end{array}$ | $\begin{array}{r} 102 \\ (4.8) \\ \hline \end{array}$ | $\begin{array}{r} 180 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 62 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 583 \\ (4.3) \\ \hline \end{array}$ |
| Total Per Cent | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Observed Number Weighted Number | $\begin{array}{r} 999 \\ (1015) \end{array}$ | $\begin{array}{r} 292 \\ (270) \end{array}$ | $\begin{array}{r} 661 \\ (728) \end{array}$ | $\begin{array}{r} 3029 \\ (3213) \end{array}$ | $\begin{array}{r} 2217 \\ (2184) \end{array}$ | $\begin{array}{r} 4835 \\ (4745) \end{array}$ | $\begin{array}{r} 1742 \\ (1622) \end{array}$ | $\begin{array}{r} 13775 \\ (13778) \end{array}$ |
| $\mathrm{p}=0.03$ |  |  |  |  |  |  |  |  |

Notes: As Table 9.1.

A trend corresponding to decreasing rates of longstanding conditions among children whose parents had higher qualifications was observed (Table 9.9). Children whose parents had no qualifications were most likely to have one longstanding condition (18\%), or more than one (5\%), while those whose parents had higher degrees or equivalent (NVQ5) had the lowest rates ( $13 \%$ and $4 \%$ respectively). Children from lone-parent families were more likely than others to be reported as having more than
one longstanding condition (6\%, Figure 9.2), particularly where the parent was not working ( $7 \%$ ). Socioeconomic differentials were also observed when examining poverty indicators and highest parental social class (Table 9.10). Mother's age played only a weak and statistically insignificant role in patterning rates of longstanding conditions (not shown). The child's ethnicity was significantly associated with longstanding conditions, although did not correspond directly with previous results (Table 9.11). A higher proportion of black Caribbean children had at least one longstanding condition than any other ethnic group (26\%). Despite lower levels of reported good general health, Bangladeshi and Pakistani children had noticeably low levels of longstanding conditions (under 15\%). Black African children had the lowest levels of longstanding condition of any group (11\%).

Table 9.10: Child's general health by Poverty Status and Highest Parental Social Class MCS4

|  | Poverty Status |  |  | Highest Parental Social Class |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Above 60\% of median income | Below 60\% of median income | Total | Professional/ Managerial Occupation | Lower than Professional/ Managerial Occupation | No Job or Unclassified | Total |
| No condition | $\begin{gathered} 7949 \\ (82.4) \end{gathered}$ | $\begin{array}{r} 3237 \\ (77.0) \end{array}$ | $\begin{aligned} & 11186 \\ & (80.9) \end{aligned}$ | $\begin{array}{r} 4533 \\ (82.8) \end{array}$ | $\begin{array}{r} 4503 \\ (81.7) \end{array}$ | $\begin{array}{r} 2126 \\ (75.7) \end{array}$ | $\begin{aligned} & 11162 \\ & (80.9) \end{aligned}$ |
| One condition | $\begin{array}{r} 1314 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 683 \\ (17.5) \\ \hline \end{array}$ | $\begin{array}{r} 1997 \\ (14.8) \\ \hline \end{array}$ | $\begin{array}{r} 739 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 754 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 494 \\ (17.8) \\ \hline \end{array}$ | $\begin{array}{r} 1987 \\ (14.8) \\ \hline \end{array}$ |
| Two or more conditions | $\begin{array}{r} 362 \\ (3.9) \\ \hline \end{array}$ | $\begin{array}{r} 222 \\ (5.5) \\ \hline \end{array}$ | $\begin{array}{r} 584 \\ (4.3) \\ \hline \end{array}$ | $\begin{array}{r} 183 \\ (3.5) \\ \hline \end{array}$ | $\begin{array}{r} 217 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 182 \\ (6.6) \\ \hline \end{array}$ | $\begin{array}{r} 582 \\ (4.3) \\ \hline \end{array}$ |
| Total Per Cent | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Observed <br> Number <br> Weighted <br> Number | $\begin{array}{r} 9625 \\ (9753) \\ \hline \end{array}$ | $\begin{array}{r} 4142 \\ (4019) \\ \hline \end{array}$ | $\begin{array}{r} 13767 \\ (13772) \\ \hline \end{array}$ | $\begin{array}{r} 5455 \\ (5418) \\ \hline \end{array}$ | $\begin{array}{r} 5474 \\ (5416) \\ \hline \end{array}$ | $\begin{array}{r} 2802 \\ (2885) \\ \hline \end{array}$ | $\begin{array}{r} 13731 \\ (13719) \\ \hline \end{array}$ |
| $\mathrm{p}<0.01$ |  |  |  | $\mathrm{p}<0.01$ |  |  |  |

Notes: As Table 9.1.

Table 9.11: Longstanding Conditions among Cohort Members by Child's Ethnicity MCS4

|  | ¢ | $\begin{aligned} & \text { ס } \\ & \dot{x} \\ & \dot{x} \end{aligned}$ | $\begin{aligned} & \text { 드증 } \\ & \text { 든 } \end{aligned}$ |  |  |  |  |  | $\stackrel{\text { ¢10 }}{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No condition | $\begin{array}{r} 9279 \\ (80.6) \\ \hline \end{array}$ | $\begin{array}{r} 293 \\ (77.0) \\ \hline \end{array}$ | $\begin{array}{r} 287 \\ (82.7) \\ \hline \end{array}$ | $\begin{array}{r} 518 \\ (85.8) \\ \hline \end{array}$ | $\begin{array}{r} 207 \\ (85.1) \end{array}$ | $\begin{array}{r} 116 \\ (74.5) \\ \hline \end{array}$ | $\begin{array}{r} 232 \\ (89.6) \\ \hline \end{array}$ | $\begin{array}{r} 180 \\ (81.6) \\ \hline \end{array}$ | $\begin{aligned} & 11112 \\ & (80.9) \\ & \hline \end{aligned}$ |
| One condition | $\begin{array}{r} 1695 \\ (15.0) \\ \hline \end{array}$ | $\begin{array}{r} 63 \\ (19.6) \end{array}$ | $\begin{array}{r} 39 \\ (13.1) \end{array}$ | $\begin{array}{r} 77 \\ (9.9) \\ \hline \end{array}$ | $\begin{array}{r} 33 \\ (12.7) \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ (19.2) \end{array}$ | $\begin{array}{r} 20 \\ (8.1) \end{array}$ | $\begin{array}{r} 29 \\ (13.6) \end{array}$ | $\begin{array}{r} 1986 \\ (14.8) \\ \hline \end{array}$ |
| Two or more conditions | $\begin{array}{r} 494 \\ (4.4) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ (4.2) \end{array}$ | $\begin{array}{r} 25 \\ (4.3) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (2.1) \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ (6.3) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ (4.7) \\ \hline \end{array}$ | $\begin{array}{r} 577 \\ (4.3) \\ \hline \end{array}$ |
| Total Per Cent | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Observed Number Weighted Number | $\begin{array}{r} 11468 \\ (11675) \\ \hline \end{array}$ | $\begin{array}{r} 370 \\ (447) \end{array}$ | $\begin{array}{r} 339 \\ (263) \\ \hline \end{array}$ | $\begin{array}{r} 620 \\ (476) \end{array}$ | $\begin{array}{r} 245 \\ (160) \end{array}$ | $\begin{array}{r} 154 \\ (163) \\ \hline \end{array}$ | $\begin{array}{r} 257 \\ (249) \\ \hline \end{array}$ | $\begin{array}{r} 222 \\ (216) \\ \hline \end{array}$ | $\begin{array}{r} 13675 \\ (13649) \\ \hline \end{array}$ |
| $\mathrm{p}=0.03$ |  |  |  |  |  |  |  |  |  |

Notes: As Table 9.1.

Figure 9.2: Longstanding Conditions among Cohort Member Children by Family Type and Family Work Status MCS4

Notes: As Table 9.1.


A substantial number of children developed longstanding conditions between age 5 and age 7 although even more were no longer suffering from these conditions (Table 9.12). In terms of seeking treatment (for long-standing conditions), of those reporting longstanding conditions, under half ( $45 \%$ ) were taking regular medication. This suggests that either the longstanding conditions are not severe, or that many of the longstanding conditions are undiagnosed medically reflecting the subjectivity of the question. Respondents were asked to describe the nature of the longstanding condition, which was coded and then grouped according to World Health Organization ICD-10 categories (World Health Organization 2004). We examine the first condition stated here; most longstanding illnesses were respiratory conditions, with skin and ear/eye conditions also being relatively common (Table 9.13). These nevertheless occurred too rarely for further analyses. However, there were indications that black Caribbean and mixed ethnicity children were more heavily burdened by respiratory conditions, which may account for elevated rates of longstanding conditions among both groups.

Table 9.12: Longstanding Conditions among Cohort Member Children Age 5 to Age 7 (MCS 3 and4 )

|  | Age 5 |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | One or more condition | No condition | Total |  |
|  | 1090 | 9571 | 10661 |  |
| No condition | $(41.7)$ | $(90.9)$ | $(81.4)$ |  |
|  | 1475 | 2444 |  |  |
| One or more conditions | $(58.3)$ | 969 | $(18.6)$ |  |
| Total per cent | 100 | 100 | 100 |  |
| Observed number | 2565 | 100 | 13105 |  |
| Weighted number | $(2654)$ | 10540 | $(10984)$ |  |

Notes: As Table 9.8. Sample includes only those with valid responses at both sweeps.

Table 9.13: Longstanding Illness by type MCS4

|  | Unweighted Number | Weighted Percentage |
| :--- | ---: | ---: |
| No illness | 11194 | $80.9 \%$ |
| Respiratory conditions | 976 | $7.0 \%$ |
| Skin disease | 330 | $2.4 \%$ |
| Eye and ear conditions | 272 | $2.0 \%$ |
| Mental and behavioural disorders | 162 | $1.3 \%$ |
| Unclassified | 156 | $1.2 \%$ |
| Digestive diseases | 107 | $0.8 \%$ |
| Congenital defects | 94 | $0.8 \%$ |
| Nervous system diseases | 83 | $0.7 \%$ |
| Injuries, poisoning etc | 87 | $0.6 \%$ |
| Musculo-skeletal system diseases | 83 | $0.6 \%$ |
| Genito-urinary diseases | 60 | $0.5 \%$ |
| Endocrinal diseases | 46 | $0.4 \%$ |
| Blood disorders | 31 | $0.2 \%$ |
| Other less common | 30 | $0.2 \%$ |
| Undiagnosed conditions | 21 | $0.2 \%$ |


| Table 9.13: Longstanding Illness by type MCS4 |  |  |  |
| :--- | ---: | ---: | :---: |
| Continued | 23 | $0.2 \%$ |  |
| Circulatory diseases | 12 | $0.1 \%$ |  |
| Infectious diseases | 7 | $0.0 \%$ |  |
| Neoplasms | 13774 |  |  |
| Total |  |  |  |

Notes: As Table 9.1. Sample and includes only those with valid responses at both sweeps. This table displays first reported condition - it does not show how many suffer from two or more conditions

We now turn to data collected at age 7 on the lifetime incidence of a number of conditions, both longstanding and acute, that could have occurred at any time so far. Most conditions showed the familiar social gradient seen in longstanding illness and general health. However, some conditions showed elevated rates among more advantaged children - eczema and hay fever for example. ${ }^{19}$

Hay fever, asthma and allergies are usually linked with each other in the literature (Kaila et al., 2009; Pujades-Rodríguez et al., 2009; Victorino and Gauthier, 2009). In a Finnish cohort of children, children with allergies at age 5 were eight times more likely to have an allergy at age 18 and seven times more likely to have asthma (Kaila et al., 2009). In other child data (5-9 years), asthma was identified as the most common longstanding illness (Nessa, 2004). MCS shows a similar profile with 16 per cent of children having suffered from asthma at some point, although more children had experience of acute conditions such as wheezing and measles. Despite their links in the literature, asthma and eczema have different social profiles in these data. Suffering from eczema at any point is more likely to be reported by children from advantaged homes. The reverse is true for asthma. For example, children of parents who held degrees had high levels of eczema ( $38 \%$ ) compared to those whose parents had no or low qualifications (26\%). In the case of asthma, the contrast was reversed - 14 per cent of children with parents who were graduates had experienced asthma compared to 19 per cent of children whose parents had no or low qualifications (Table 9.16). In fact, asthma appears to have a complex social profile in bivariate analysis. Having an older mother, usually an indicator of social advantage, was associated with higher levels of asthma (Table 9.15). Black Caribbean and mixed ethnicity were also associated with higher levels of asthma (Table 9.14), corroborating earlier results (Dezateux et al., 2007 for age 3). Being black Caribbean, black African or of mixed ethnicity was associated with particularly high rates of hay fever, almost twice the rates of white children. Boys were more likely to suffer from asthma, eczema and hay fever (Table 9.15) as has been found elsewhere (Nessa, 2004). Children in Northern Ireland were the least likely to suffer from eczema (26\%) and hay fever (13\%), while children in England were the most likely (35\% and 16\% respectively) - (not shown).

In the previous sweep, just 0.8 per cent of children had ever been diagnosed with Attention Deficit and Hyperactivity Disorder (ADHD) (Sullivan and Joshi, 2008). By age 7 this had almost doubled to 1.4 per cent representing 180 cases (unweighted).

[^16]ADHD was associated with disadvantaged children. Children from families where parents had no qualifications were twice as likely to have been diagnosed with ADHD as those from families where a parent had a degree level qualification ( $2.1 \%$ compared to $1.0 \%$ ) - similar differentials were observed with social class and poverty. ADHD is said to begin during pre-school years and continue throughout the lifecourse, although the symptoms may vary with age (Schmidt and Petermann, 2009). As all MCS children would have started school, the symptoms should now be apparent outside the family. However, given that the prevalence among the MCS is much lower than in other comparison populations - for example Schmidt and Petermann report a prevalence of 5-7 per cent amongst a cohort of German school age children - this total could be expected to rise. Despite ADHD having a strong genetic component, there were no significant ethnic differences in its prevalence among MCS children; however there were indications of country differences which achieved borderline statistical significance. Northern Irish children were twice as likely to have been diagnosed as Welsh children (2.4\% vs $1.2 \%$ ). As elsewhere in the literature, boys suffered a heavier burden of ADHD than girls.

Tables 10.14 to 10.16 include the proportion of cohort members whose schools have told parents that they have Special Education Needs (SEN). As set out by the 1996 Education Act, 'children have special educational needs if they have a learning difficulty which calls for special educational provision to be made for them. Children have a learning difficulty if they:
a) Have more significant delay in learning than children of the same age.
b) Have a disability which prevents or hinders them from making use of educational facilities generally provided for children of the same age in schools within the area of the local education authority.
c) Are under compulsory school age and fall within the definitions a) or b) above, or would do so if special educational provision was not made for them. (Lindsay et al., 2006)

Under this definition, besides being a measure of child development and educational adjustment, SEN can be informative about physical health. We see many of the patterns for general health and ill-health repeated in SEN. More advantaged children - those from homes where parents hold higher qualifications and from homes where both biological parents are present - are those least likely to have SEN. For example children whose lone parent is not working are almost twice as likely to have SEN as those whose parents are a dual-earner couple (14\% compared to 7\%). Unlike other studies (for example Lindsay et al., 2006), no significant ethnic differences were found. However, these bivariate analyses group SEN into a single category - many of the specific ethnic differences that have been found relate to specific domains of SEN.

Table 9.14: Experience of Illnesses and other conditions among Cohort Member Children by Ethnicity MCS4

|  |  | $\begin{aligned} & \overline{0} \\ & \dot{x} \\ & \dot{x} \end{aligned}$ | $\begin{aligned} & \text { 듳 } \\ & \text { 흘 } \end{aligned}$ |  |  |  |  |  | ٪ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ever had wheezing (\%) | 27.3 | 30.2 | 23.2 | 23.2 | 16.3 | 39.2 | 18.5 | 18.9 | 26.9 |
| Observed Number | 11473 | 369 | 338 | 620 | 245 | 154 | 257 | 222 | 13678 |
| Weighted Number | 11681 | 445 | 262 | 476 | 160 | 163 | 249 | 216 | 13652 |
| $\mathrm{p}<0.01$ |  |  |  |  |  |  |  |  |  |
| Ever had Asthma (\%) | 16.2 | 21.4 | 15.7 | 16.8 | 15.3 | 22.8 | 10.0 | 14.1 | 16.3 |
| Observed Number | 11448 | 366 | 339 | 620 | 244 | 154 | 257 | 222 | 13650 |
| Weighted Number | 11652 | 439 | 263 | 476 | 159 | 163 | 249 | 216 | 13617 |
| $\mathrm{p}=0.05$ |  |  |  |  |  |  |  |  |  |
| Ever had Eczema (\%) | 35.3 | 38.0 | 32.4 | 22.2 | 19.9 | 39.1 | 37.1 | 29.7 | 34.7 |
| Observed Number | 11467 | 370 | 339 | 620 | 245 | 154 | 257 | 222 | 13674 |
| Weighted Number | 11675 | 447 | 263 | 476 | 160 | 163 | 249 | 216 | 13648 |
| $\mathrm{p}<0.01$ |  |  |  |  |  |  |  |  |  |
| Ever had Hay fever (\%) | 14.7 | 26.1 | 23.0 | 13.5 | 13.9 | 28.0 | 29.3 | 18.2 | 15.6 |
| Observed Number | 11419 | 368 | 338 | 620 | 245 | 153 | 257 | 221 | 13621 |
| Weighted Number | 11621 | 444 | 262 | 476 | 160 | 162 | 249 | 215 | 13590 |
| $\mathrm{p}<0.01$ |  |  |  |  |  |  |  |  |  |
| Ever had Measles (\%) | 2.7 | 3.7 | 2.0 | 5.3 | 3.9 | 2.8 | 3.0 | 3.8 | 2.9 |
| Observed Number | 10968 | 347 | 324 | 579 | 234 | 146 | 244 | 213 | 13055 |
| Weighted Number | 11186 | 413 | 250 | 444 | 154 | 153 | 235 | 210 | 13044 |
| $\mathrm{p}=0.21$ |  |  |  |  |  |  |  |  |  |
| Ever had Whooping Cough (\%) | 1.1 | 1.0 | 0.2 | 1.3 | 1.8 | 0.0 | 0.0 | 0.5 | 1.0 |
| Observed Number | 11248 | 363 | 337 | 601 | 240 | 153 | 256 | 220 | 13418 |
| Weighted Number | 11456 | 441 | 262 | 459 | 158 | 162 | 247 | 215 | 13401 |
| $\mathrm{p}=0.62$ |  |  |  |  |  |  |  |  |  |
| Ever had ADHD (\%) | 1.5 | 1.1 | 0.7 | 1.2 | 0.2 | 0.8 | 0.4 | 0.2 | 1.4 |
| Observed Number | 11444 | 367 | 338 | 620 | 245 | 154 | 257 | 222 | 13647 |
| Weighted Number | 11653 | 444 | 262 | 476 | 160 | 163 | 249 | 216 | 13623 |
| $\mathrm{p}=0.21$ |  |  |  |  |  |  |  |  |  |
| Ever had Autism/Behavioural |  |  |  |  |  |  |  |  |  |
| (\%) | 1.8 | 2.2 | 0.2 | 1.1 | 0.9 | 0.0 | 3.5 | 1.7 | 1.7 |
| Observed Number | 11454 | 369 | 339 | 620 | 245 | 154 | 257 | 222 | 13660 |
| Weighted Number | 11658 | 447 | 263 | 476 | 160 | 163 | 249 | 216 | 13631 |
| $\mathrm{p}=0.52$ |  |  |  |  |  |  |  |  |  |
| Ever had Eye Condition (\%) | 17.4 | 18.3 | 15.2 | 17.5 | 13.9 | 16.3 | 9.1 | 11.9 | 17.1 |
| Observed Number | 11469 | 370 | 339 | 620 | 245 | 154 | 257 | 222 | 13676 |
| Weighted Number | 11676 | 447 | 263 | 476 | 160 | 163 | 249 | 216 | 13650 |
| $\mathrm{p}=0.03$ |  |  |  |  |  |  |  |  |  |
| Ever had Ear Condition (\%) | 13.1 | 8.9 | 11.3 | 9.5 | 4.1 | 3.3 | 5.9 | 3.1 | 12.3 |
| Observed Number | 11468 | 370 | 339 | 620 | 245 | 154 | 257 | 222 | 13675 |
| Weighted Number | 11673 | 447 | 263 | 476 | 160 | 163 | 249 | 216 | 13646 |
| $\mathrm{p}<0.01$ |  |  |  |  |  |  |  |  |  |
| Night Bedwetting (\%) | 15.2 | 15.0 | 7.8 | 8.8 | 5.5 | 29.1 | 21.3 | 11.0 | 14.9 |
| Observed Number | 11473 | 370 | 339 | 618 | 244 | 154 | 257 | 222 | 13677 |
| Weighted Number | 11681 | 447 | 263 | 474 | 160 | 163 | 249 | 216 | 13652 |
| $\mathrm{p}<0.01$ |  |  |  |  |  |  |  |  |  |
| Special Education Needs (\%) | 9.2 | 7.5 | 4.6 | 5.3 | 4.5 | 8.2 | 6.2 | 10.2 | 8.8 |
| Observed Number | 11455 | 366 | 339 | 620 | 245 | 153 | 256 | 222 | 13656 |
| Weighted Number | 11658 | 442 | 263 | 476 | 160 | 162 | 248 | 216 | 13624 |
| $\mathrm{p}=0.13$ |  |  |  |  |  |  |  |  |  |

Notes: As Table 9.1.


Notes: As Table 9.1.

Table 9.16 Experience of IlInesses and other conditions among Children by Parental Education, Poverty and Social Class MCS4


Notes: As Table 9.1.

Childhood asthma and other respiratory conditions can be linked with maternal smoking during pregnancy and also parental smoking at any subsequent point during childhood (Pattenden et al., 2006). Table 9.17 shows an association between mothers' current smoking and children's asthma. Almost 20 per cent of children whose mothers smoked had experienced asthma, compared to 15 per cent where mothers did not smoke. The association between paternal smoking and asthma was weaker but also significant, as was that between any person smoking close to the cohort member. While these factors suggest a link, bivariate analyses such as these do not adjust for the role of socioeconomic factors, which predict both childhood asthma (Table 9.17) and parental smoking (Chapter 10).

Table 9.17: Experience of asthma among Cohort Member Children by Adult Smoking MCS4

|  | Does Anyone Smoke Near Cohort Member? |  |  | Does Mother Currently Smoke? |  |  | Does Father Currently Smoke? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Yes | Total | No | Yes | Total | No | Yes | Total |
| Never experienced asthma | $\begin{array}{r} 10019 \\ 84.0 \end{array}$ | $\begin{array}{r} 1454 \\ 81.2 \end{array}$ | $\begin{array}{r} 11473 \\ 83.7 \end{array}$ | $\begin{array}{r} 8431 \\ 85.0 \end{array}$ | $\begin{array}{r} 2869 \\ 80.3 \end{array}$ | $\begin{array}{r} 11300 \\ 83.6 \end{array}$ | $\begin{array}{r} 5624 \\ 85.3 \end{array}$ | $\begin{array}{r} 2103 \\ 83.1 \end{array}$ | $\begin{gathered} 7727 \\ 84.7 \end{gathered}$ |
| Has experienced Asthma | $\begin{array}{r} 1946 \\ 16.0 \end{array}$ | $\begin{array}{r} 323 \\ 18.8 \end{array}$ | $\begin{array}{r} 2269 \\ 16.4 \end{array}$ | $\begin{array}{r} 1523 \\ 15.0 \end{array}$ | $\begin{array}{r} 719 \\ 19.8 \end{array}$ | $\begin{array}{r} 2242 \\ 16.4 \end{array}$ | $\begin{gathered} 991 \\ 14.7 \end{gathered}$ | $\begin{gathered} 429 \\ 17.0 \end{gathered}$ | $\begin{array}{r} 1420 \\ 15.3 \end{array}$ |
| Total per cent | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Observed number Weighted number | $\begin{aligned} & 11965 \\ & 11871 \end{aligned}$ | $\begin{aligned} & 1777 \\ & 1865 \end{aligned}$ | $\begin{aligned} & 13742 \\ & 13736 \end{aligned}$ | $\begin{aligned} & 9954 \\ & 9697 \end{aligned}$ | 3588 3787 | 13542 13484 | 6615 6395 | $\begin{aligned} & 2532 \\ & 2612 \end{aligned}$ | 9147 9007 |
|  |  |  | $\mathrm{p}=0.01$ |  |  | $\mathrm{p}<0.01$ |  |  | $\mathrm{p}=0.020$ |

Notes: As Table 9.1. Sample includes only those with valid responses at both sweeps.

## Accidents

Main respondents were asked about the number of accidents the child had suffered since the last interview that required hospital or local surgical treatment. The average number for the whole cohort stood at 0.317, or just over three accidents per 10 children and varied significantly according to the characteristics plotted in Figure 9.3. As may be expected, boys had higher levels of accidents (3.6 out 10) than girls (2.7). Children in Wales had the highest number of accidents ( 3.5 per 10 children) and Northern Ireland the lowest (2.5). Children whose parents had medium, low or no qualifications experienced more accidents, as did other less advantaged groups presented in Figure 9.3. The highest rate in Figure 9.3 is 4.2 accidents per 10 children in the small group of mainly stepfamilies. The lowest is for the Bangladeshi children with 1.6 accidents per 10 children. These relationships are also found elsewhere in the literature, although with some variation. In particular, the higher levels of accidents among white children in MCS directly contrast with the findings from another UK-based study of children at a similar age (ALSPAC, age 5: Reading et al., 2008), although this source is not nationally representative.

Figure 9.3: Average number of accidents needing outside treatment per child by selected background characteristics MCS4


Notes: As Table 9.1. Weight dovwt1 is used for country.

## Part 2: Fitness, lifestyle and health

This second part of the chapter takes an initial look at physical activity and diet. Exercise and diet have become the focus for interventions aimed at preventing children becoming overweight and obese. These campaigns include Change4Life, launched as a grass-roots social marketing movement to support families to eat better, live better and be more active (Johnson, 2009). This campaign operates in

England only, although similar interventions were launched or were already in place in Wales (Healthy Challenge Wales), Scotland (Take Life On and Healthy Weight Communities) and Northern Ireland (Get a Life, Get Active) (Department of Health, 2009). By December 2009, over 410,000 families had joined the Change4Life campaign, which focuses on 'fat in the body' rather than 'fat bodies' and makes clear the link between fat and preventable illnesses. It also pins the blame on modern life rather than parenting practices. It encourages parents to give smaller portions of food to children, to limit between-meals snacking and to keep to regular meal times. It also suggests parents encourage children to have up to 60 active minutes per day and to avoid sedentary lifestyles (Department of Health, 2009). Its initial focus has been on young families - we could therefore expect to see more pronounced differences in physical and lifestyle behaviours and diet by mother's age in the future if the campaign is successful. The consequences of taking no action are said to be grave, with up to 90 per cent of today's children being at risk of obesity by 2050 (Donaldson and Beasley, 2008). In this chapter, we present some results on the proportion of MCS 7 -year-old children who are already obese. We turn first to physical activity and lifestyle behaviour, and then to diet.

## Physical activity and sport

Main respondents were asked about how often their children did organised sport or exercise outside school classroom hours (whether the child went to a club or class to do sport); questions elsewhere examined outdoor play. Around two-thirds of children did engage in organised sport or physical activity at least once a week. However, of the remaining third, the vast majority ( $95 \%$ ) were reported as doing no sport at all. This varied significantly by social background. Beginning with country differences, Table 9.18 shows English children had the most doing little sport or physical activity ( $34 \%$ doing either never or less than once a week) and the lowest proportion who partook in sport very frequently (four times a week and more, $7 \%$ ). Scottish children were reported as the most active, with just 27 per cent who did sport or physical activity less than once a week and almost 10 per cent who partook in sport very frequently. There was a strong disadvantage gradient in frequency of physical activity (Tables 9.19 and 9.20). Children from disadvantaged homes had the lowest reported rates of frequent after-school physical activity and sport (Figure 9.4). For example, compared to children in families with both natural parents present, children from loneparent families and from reconstituted and other families took part in after-school sport less than once a week (in $45 \%$ and $48 \%$ of cases respectively compared to $28 \%$ among families with two biological parents present). They also had the lowest level of partaking in sport very frequently ( $5 \%$ and $4 \%$ respectively compared to $9 \%$ ). Similar results were observed with family social class and poverty status. Children from families with an income above 60 per cent of the poverty line were over twice as likely to be partaking in sport two or more times a week compared to children from families with an income below this level ( $49 \%$ compared to $20 \%$ ). There were also significant differences with parental education and child's gender.

Table 9.18: Frequency of Organised After-School and Weekend Physical Activity/Sport among Cohort Member Children by Country MCS4

|  | England | Wales | Scotland | Northern Ireland | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4-5+ times a week | $\begin{array}{r} 604 \\ (7.2) \end{array}$ | $\begin{array}{r} \hline 162 \\ (8.5) \end{array}$ | $\begin{array}{r} 170 \\ (9.6) \end{array}$ | $\begin{array}{r} 90 \\ (6.1) \end{array}$ | $\begin{aligned} & 1026 \\ & (7.6) \end{aligned}$ |
| 2-3 times a week | $\begin{array}{r} 2808 \\ (33.0) \end{array}$ | $\begin{array}{r} 678 \\ (33.7) \end{array}$ | $\begin{array}{r} 653 \\ (38.5) \\ \hline \end{array}$ | $\begin{array}{r} 450 \\ (32.0) \\ \hline \end{array}$ | $\begin{array}{r} 4589 \\ (33.6) \end{array}$ |
| 1 day a week | $\begin{array}{r} 2261 \\ (25.8) \end{array}$ | $\begin{array}{r} 577 \\ (28.6) \\ \hline \end{array}$ | $\begin{array}{r} 392 \\ (24.4) \end{array}$ | $\begin{array}{r} 402 \\ (30.3) \end{array}$ | $\begin{gathered} 3632 \\ (26.5) \end{gathered}$ |
| Less than one day a week/never | $\begin{array}{r} 3130 \\ (34.0) \end{array}$ | $\begin{array}{r} 594 \\ (29.2) \end{array}$ | $\begin{array}{r} 399 \\ (27.4) \end{array}$ | $\begin{array}{r} 417 \\ (31.5) \end{array}$ | $\begin{array}{r} 4540 \\ (32.3) \end{array}$ |
| Total per cent | 100 | 100 | 100 | 100 | 100 |
| Observed number Weighted number | $\begin{array}{r} 8803 \\ (8801) \\ \hline \end{array}$ | $\begin{array}{r} 2011 \\ (2011) \end{array}$ | $\begin{array}{r} 1614 \\ (1614) \\ \hline \end{array}$ | $\begin{array}{r} 1359 \\ (1358) \\ \hline \end{array}$ | $\begin{array}{r} 13787 \\ (13785) \\ \hline \end{array}$ |
| p<0.01 |  |  |  |  |  |

Notes: As Table 9.1.

Table 9.19: Frequency of Organised After-School and Weekend Physical Activity/Sport among Cohort Member Children by Highest Parental Qualification (both parents combined) MCS4


Notes: As Table 9.1.

Table 9.20: Frequency of Organised After-School and Weekend Physical Activity/Sport among Cohort Member Children by Mother's Age at Survey MCS4

|  | Teenage at CM Birth | 20-24 yrs at CM Birth | $\begin{gathered} \text { 25-29 yrs at } \\ \text { CM Birth } \end{gathered}$ | 30-34 yrs at CM Birth | Over 35 yrs at CM Birth | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4-5+ times a week | $\begin{array}{r} 34 \\ (5.3) \end{array}$ | $\begin{array}{r} 132 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 260 \\ (7.0) \\ \hline \end{array}$ | $\begin{array}{r} 371 \\ (8.8) \\ \hline \end{array}$ | $\begin{array}{r} 225 \\ (9.4) \\ \hline \end{array}$ | $\begin{aligned} & 1022 \\ & (7.5) \\ & \hline \end{aligned}$ |
| 2-3 times a week | $\begin{array}{r} 192 \\ (19.2) \\ \hline \end{array}$ | $\begin{array}{r} 539 \\ (22.2) \\ \hline \end{array}$ | $\begin{array}{r} 1203 \\ (33.0) \\ \hline \end{array}$ | $\begin{array}{r} 1669 \\ (40.7) \\ \hline \end{array}$ | $\begin{array}{r} 965 \\ (41.1) \\ \hline \end{array}$ | $\begin{array}{r} 4568 \\ (33.7) \\ \hline \end{array}$ |
| 1 day a week | $\begin{array}{r} 247 \\ (26.6) \\ \hline \end{array}$ | $\begin{array}{r} 626 \\ (25.6) \\ \hline \end{array}$ | $\begin{array}{r} 1011 \\ (27.5) \\ \hline \end{array}$ | $\begin{array}{r} 1098 \\ (26.2) \\ \hline \end{array}$ | $\begin{array}{r} 620 \\ (24.0) \\ \hline \end{array}$ | $\begin{array}{r} 3602 \\ (26.1) \\ \hline \end{array}$ |
| Less than one day a week/never | $\begin{array}{r} 445 \\ (49.0) \\ \hline \end{array}$ | $\begin{array}{r} 1059 \\ (46.9) \\ \hline \end{array}$ | $\begin{array}{r} 1226 \\ (32.5) \\ \hline \end{array}$ | $\begin{array}{r} 1060 \\ (24.3) \\ \hline \end{array}$ | $\begin{array}{r} 657 \\ (25.5) \\ \hline \end{array}$ | $\begin{array}{r} 4447 \\ (32.7) \\ \hline \end{array}$ |
| Total percentage | 100 | 100 | 100 | 100 | 100 | 100 |
| Observed number Weighted number | $\begin{array}{r} 918 \\ (1069) \end{array}$ | $\begin{array}{r} 2356 \\ (2426) \end{array}$ | $\begin{array}{r} 3700 \\ (3732) \\ \hline \end{array}$ | $\begin{array}{r} 4198 \\ (3999) \\ \hline \end{array}$ | $\begin{array}{r} 2467 \\ (2373) \\ \hline \end{array}$ | $\begin{array}{r} 13639 \\ (13600) \end{array}$ |
| $\mathrm{p}<0.01$ |  |  |  |  |  |  |

Notes: As Table 9.1.

Figure 9.4: Frequency of After-School and Weekend Physical Activity/Sport among Cohort Member Children by Family Type and Family Social Class and Family Poverty MCS4


Perhaps some of the starkest differences in comparing frequency of organised physical exercise are by ethnicity. Some of the contrasts were not evident until we split the sample by gender (Table 9.21). Pakistani and Bangladeshi parents reported the lowest rates of physical activity/sport for their children. Over three-quarters of Bangladeshi boys and girls alike rarely or never did any after-school sport or physical activity (79-78\%); among Pakistanis, 66 per cent of boys and 72 per cent of girls rarely or never did any after-school sport or physical activity. Black Caribbean boys were the most active group in the sample. Only a quarter were reported as rarely partaking in sport/physical activity while one in six was reported as doing such activity as frequently as $4-5$ times a week. Black Caribbean girls showed a very different profile from boys, with very few partaking very frequently in sport and over half never or very infrequently/rarely doing so. In the MCS as a whole, there was little difference in frequency of partaking in sport by gender.

Table 9.21: Frequency of Organised After-School and Weekend Physical Activity/Sport among Children by Ethnicity MCS4

|  |  | پ! | $\begin{aligned} & \text { ס } \\ & \dot{x} \\ & \dot{x} \end{aligned}$ | $\begin{aligned} & \text { 등 } \\ & \text { 흥 } \end{aligned}$ |  |  |  |  |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\hat{\sim}_{0}^{n}$ | 4-5+ times a week | $\begin{array}{r} 515 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ (6.7) \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ (0.8) \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ (1.9) \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ (16.3) \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ (2.2) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 567 \\ (8.3) \\ \hline \end{array}$ |
|  | 2-3 times a week | $\begin{array}{r} 2147 \\ (35.5) \end{array}$ | $\begin{array}{r} 52 \\ (30.6) \end{array}$ | $\begin{array}{r} 50 \\ (30.8) \end{array}$ | $\begin{array}{r} 32 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ (5.2) \\ \hline \end{array}$ | $\begin{array}{r} 25 \\ (32.1) \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ (18.0) \end{array}$ | $\begin{array}{r} 26 \\ (20.1) \\ \hline \end{array}$ | $\begin{array}{r} 2363 \\ (33.6) \end{array}$ |
|  | 1 day a week | $\begin{array}{r} 1501 \\ (25.3) \\ \hline \end{array}$ | $\begin{array}{r} 49 \\ (27.5) \end{array}$ | $\begin{array}{r} 49 \\ (28.1) \end{array}$ | $\begin{array}{r} 64 \\ (20.3) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (14.2) \end{array}$ | $\begin{array}{r} 22 \\ (27.4) \end{array}$ | $\begin{array}{r} 45 \\ (32.1) \end{array}$ | $\begin{array}{r} 27 \\ (18.8) \end{array}$ | $\begin{array}{r} 1771 \\ (25.2) \end{array}$ |
|  | Less than one day a week/never | $\begin{array}{r} 1678 \\ (30.3) \\ \hline \end{array}$ | $\begin{array}{r} 62 \\ (35.2) \\ \hline \end{array}$ | $\begin{array}{r} 68 \\ (35.8) \\ \hline \end{array}$ | $\begin{array}{r} 205 \\ (65.6) \\ \hline \end{array}$ | $\begin{array}{r} 85 \\ (78.7) \\ \hline \end{array}$ | $\begin{array}{r} 24 \\ (24.3) \\ \hline \end{array}$ | $\begin{array}{r} 60 \\ (47.7) \\ \hline \end{array}$ | $\begin{array}{r} 61 \\ (57.2) \\ \hline \end{array}$ | $\begin{array}{r} 2243 \\ (32.9) \\ \hline \end{array}$ |
|  | Total percentage | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
|  | Observed number | $\begin{array}{r} 5841 \\ (6016) \\ \hline \end{array}$ | $\begin{array}{r} 176 \\ (219) \\ \hline \end{array}$ | $\begin{array}{r} 178 \\ (144) \\ \hline \end{array}$ | $\begin{array}{r} 304 \\ (234) \\ \hline \end{array}$ | $\begin{aligned} & \hline 110 \\ & (73) \end{aligned}$ | $\begin{array}{r} 84 \\ (92) \\ \hline \end{array}$ | $\begin{array}{r} 132 \\ (125) \\ \hline \end{array}$ | $\begin{array}{r} 119 \\ (111) \\ \hline \end{array}$ | $\begin{array}{r} 6944 \\ (7013) \\ \hline \end{array}$ |
|  | $\mathrm{p}<0.01$ |  |  |  |  |  |  |  |  |  |
|  | 4-5+ times a week | $\begin{array}{r} 424 \\ (7.1) \end{array}$ | $\begin{array}{r} 8 \\ (3.4) \end{array}$ | $\begin{array}{r} 7 \\ (6.8) \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ (0.5) \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ (4.1) \end{array}$ | $\begin{array}{r} 1 \\ (1.0) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ (5.7) \\ \hline \end{array}$ | $\begin{array}{r} \hline 454 \\ (6.6) \end{array}$ |
|  | 2-3 times a week | $\begin{array}{r} 2021 \\ (36.0) \\ \hline \end{array}$ | $\begin{array}{r} 62 \\ (31.3) \end{array}$ | $\begin{array}{r} 36 \\ (24.2) \end{array}$ | $\begin{array}{r} 21 \\ (7.7) \end{array}$ | $\begin{array}{r} 7 \\ (4.1) \end{array}$ | $\begin{array}{r} 15 \\ (19.1) \end{array}$ | $\begin{array}{r} 21 \\ (15.1) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (16.3) \\ \hline \end{array}$ | $\begin{array}{r} 2200 \\ (33.3) \end{array}$ |
|  | 1 day a week | $\begin{array}{r} 1566 \\ (27.2) \end{array}$ | $\begin{array}{r} 55 \\ (29.9) \end{array}$ | $\begin{array}{r} 54 \\ (35.5) \end{array}$ | $\begin{array}{r} 60 \\ (19.5) \end{array}$ | $\begin{array}{r} 17 \\ (14.2) \end{array}$ | $\begin{array}{r} 19 \\ (24.4) \end{array}$ | $\begin{array}{r} 36 \\ (27.5) \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ (25.5) \\ \hline \end{array}$ | $\begin{array}{r} 1837 \\ (26.9) \end{array}$ |
|  | Less than one day a week/never | $\begin{array}{r} 1626 \\ (29.7) \\ \hline \end{array}$ | $\begin{array}{r} 69 \\ (35.4) \end{array}$ | $\begin{array}{r} 64 \\ (33.5) \end{array}$ | $\begin{array}{r} 233 \\ (72.3) \\ \hline \end{array}$ | $\begin{array}{r} 108 \\ (77.7) \end{array}$ | $\begin{array}{r} 35 \\ (55.5) \\ \hline \end{array}$ | $\begin{array}{r} 63 \\ (48.6) \\ \hline \end{array}$ | $\begin{array}{r} 53 \\ (52.5) \\ \hline \end{array}$ | $\begin{array}{r} 2251 \\ (33.1) \end{array}$ |
|  | Total percentage | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
|  | Observed number <br> Weighted number | $\begin{array}{r} 5637 \\ (5671) \\ \hline \end{array}$ | $\begin{array}{r} 194 \\ (228) \\ \hline \end{array}$ | $\begin{array}{r} 161 \\ (119) \end{array}$ | $\begin{array}{r} 317 \\ (243) \\ \hline \end{array}$ | $\begin{aligned} & \hline 135 \\ & (87) \end{aligned}$ | $\begin{array}{r} 70 \\ (71) \end{array}$ | $\begin{array}{r} 125 \\ (124) \end{array}$ | $\begin{array}{r} 103 \\ (105) \\ \hline \end{array}$ | $\begin{array}{r} 6742 \\ (6648) \\ \hline \end{array}$ |
|  | $\mathrm{p}<0.01$ |  |  |  |  |  |  |  |  |  |

Notes: As Table 9.1.
One aim of the Change4Life campaign was to encourage parents and children to engage in physical activity/sport together with the hope of encouraging children to go on to exercise independently (Department of Health, 2009). Among MCS families, these data corroborate a strong link between the activity levels of families and children, particularly among families who either jointly take part in physical exercise or sport frequently and those who do so seldom if at all (Table 9.22). There was also a significant relationship between physical activity and television viewing (Table 9.23). Those who watched television most frequently reported less physical activity or sport. Two-thirds of children with a television in their own bedroom partook in afterschool sports less than two times a week compared to half of those without a television in the bedroom. The results presented so far indicate a socioeconomic gradient in doing after-school sports and physical activities, with lack of money possibly serving as a barrier. However it should also be noted that disadvantaged children were also more likely to have a television in the bedroom - for example twothirds of those from families with income 60 per cent below the median had a television in the bedroom (66\%), compared to just under half (49\%) of those with family income above this level (not shown). Similar social gradients were observed with parental qualifications, social class and family work status. The children's own
account of their activities reported in Chapter 5 puts another perspective on a similar picture.

Table 9.22: Frequency of Organised After-School and Weekend Physical Activity/Sport among Children by Frequency of Physical Activity/Sport as a family MCS4

|  |  | Frequency of Physical Activity/Sport as a family |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Everyday/ several times a week | Once a week | Once a month | Less than once a month/never | Total |
|  | 4-5+ times a week | $\begin{array}{r} 496 \\ (8.8) \end{array}$ | $\begin{array}{r} 372 \\ (7.4) \end{array}$ | $\begin{array}{r} 98 \\ (6.4) \end{array}$ | $\begin{array}{r} 60 \\ (3.6) \end{array}$ | $\begin{aligned} & 1026 \\ & (7.4) \end{aligned}$ |
|  | 2-3 times a week | $\begin{array}{r} 2020 \\ (35.1) \end{array}$ | $\begin{array}{r} 1770 \\ (37.1) \end{array}$ | $\begin{array}{r} 482 \\ (31.8) \end{array}$ | $\begin{array}{r} 316 \\ (19.1) \\ \hline \end{array}$ | $\begin{array}{r} 4588 \\ (33.4) \end{array}$ |
|  | Once a week | $\begin{array}{r} 1454 \\ (25.1) \end{array}$ | $\begin{array}{r} 1363 \\ (27.7) \\ \hline \end{array}$ | $\begin{array}{r} 439 \\ (27.7) \\ \hline \end{array}$ | $\begin{array}{r} 375 \\ (23.0) \\ \hline \end{array}$ | $\begin{array}{r} 3631 \\ (26.0) \\ \hline \end{array}$ |
|  | Less than one day a week/never | $\begin{array}{r} 1742 \\ (31.0) \\ \hline \end{array}$ | $\begin{array}{r} 1354 \\ (27.8) \\ \hline \end{array}$ | $\begin{array}{r} 533 \\ (34.1) \\ \hline \end{array}$ | $\begin{array}{r} 909 \\ (54.3) \\ \hline \end{array}$ | $\begin{array}{r} 4538 \\ (33.2) \\ \hline \end{array}$ |
|  | Total percentage (col) | 100 | 100 | 100 | 100 | 100 |
|  | Total percentage (row) | (42.2) | (34.3) | (11.1) | (12.4) | (100.0) |
|  | Observed number Weighted number | $\begin{array}{r} 5712 \\ (5814) \end{array}$ | $\begin{array}{r} 4859 \\ (4734) \end{array}$ | $\begin{array}{r} 1552 \\ (1531) \end{array}$ | $\begin{array}{r} 1660 \\ (1709) \end{array}$ | $\begin{array}{r} 13783 \\ (13787) \end{array}$ |
|  | $\mathrm{p}<0.01$ |  |  |  |  |  |

Notes: As Table 9.1.

Table 9.23: Frequency of Daily Television Viewing among Cohort Member Children by After-School and Weekend Physical Activity/Sport among Cohort Member Children and Having a Television in the Bedroom MCS4

|  |  | Cohort Member Daily Television Viewing Frequency |  |  |  |  |  | Presence of Television in Cohort Member's Bedroom |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | None | Less than 1 hra day | 1-3 hrs <br> a day | $\begin{gathered} 3-5 \mathrm{hrs} \\ \text { a day } \\ \hline \end{gathered}$ | 5+ hrs a day | Total | No | Yes | Total |
|  | 4-5+ times a week | $\begin{array}{r} 29 \\ (10.1) \end{array}$ | $\begin{array}{r} 244 \\ (10.3) \end{array}$ | $\begin{array}{r} 636 \\ (7.0) \end{array}$ | $\begin{array}{r} 67 \\ (5.1) \end{array}$ | $\begin{array}{r} 50 \\ (6.5) \end{array}$ | $\begin{aligned} & 1026 \\ & (7.4) \end{aligned}$ | $\begin{array}{r} 545 \\ (8.5) \end{array}$ | $\begin{array}{r} 481 \\ (6.5) \end{array}$ | $\begin{aligned} & 1026 \\ & (7.4) \end{aligned}$ |
|  | 2-3 times a week | $\begin{array}{r} 97 \\ (41.5) \end{array}$ | $\begin{array}{r} 958 \\ (40.2) \end{array}$ | $\begin{array}{r} 2933 \\ (33.3) \end{array}$ | $\begin{array}{r} 384 \\ (24.5) \end{array}$ | $\begin{array}{r} 216 \\ (28.2) \end{array}$ | $\begin{array}{r} 4588 \\ (33.4) \end{array}$ | $\begin{array}{r} 2522 \\ (39.9) \end{array}$ | $\begin{array}{r} 2067 \\ (27.8) \end{array}$ | $\begin{array}{r} 4589 \\ (33.4) \end{array}$ |
|  | 1 day a week | $\begin{array}{r} 65 \\ (26.8) \end{array}$ | $\begin{array}{r} 606 \\ (24.0) \end{array}$ | $\begin{array}{r} 2456 \\ (27.2) \end{array}$ | $\begin{array}{r} 353 \\ (25.1) \end{array}$ | $\begin{array}{r} 150 \\ (19.2) \end{array}$ | $\begin{array}{r} 3630 \\ (26.0) \end{array}$ | $\begin{array}{r} 1672 \\ (25.4) \end{array}$ | $\begin{array}{r} 1958 \\ (26.5) \end{array}$ | $\begin{array}{r} 3630 \\ (26.0) \end{array}$ |
|  | Less than one day a week/ never | $\begin{array}{r} 64 \\ (21.6) \end{array}$ | $\begin{array}{r} 659 \\ (25.5) \end{array}$ | $\begin{array}{r} 2835 \\ (32.5) \end{array}$ | $\begin{array}{r} 676 \\ (45.2) \end{array}$ | $\begin{array}{r} 302 \\ (46.1) \end{array}$ | $\begin{array}{r} 4536 \\ (33.1) \end{array}$ | $\begin{array}{r} 1823 \\ (26.2) \end{array}$ | $\begin{array}{r} 2716 \\ (39.2) \end{array}$ | $\begin{array}{r} 4539 \\ (33.2) \end{array}$ |
|  | Total percentage (col) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
|  | Total percentage (row) | (1.8) | (17.5) | (64.8) | (11.1) | (4.8) | (100.0) | (36.8) | (63.2) | (100.0) |
|  | Observed <br> Number <br> Weighted <br> Number | $\begin{array}{r} 255 \\ (251) \end{array}$ | $\begin{array}{r} 2467 \\ (2407) \end{array}$ | $\begin{array}{r} 8860 \\ (8932) \end{array}$ | $\begin{array}{r} 1480 \\ (1532) \end{array}$ | $\begin{array}{r} 718 \\ (662) \end{array}$ | $\begin{array}{r} 13780 \\ (13783 \end{array}$ | $\begin{array}{r} 6562 \\ (6415) \end{array}$ | $\begin{array}{r} 7222 \\ (7373) \end{array}$ | $\begin{array}{r} 13784 \\ (13788) \end{array}$ |
|  |  | $\mathrm{p}<0.01$ |  |  |  |  |  | $\mathrm{p}<0.01$ |  |  |

[^17]Figure 9.5: Percentage of Cohort Member Children Consuming Three or More Portions of Fruit per day by selected background characteristics MCS4


Notes: As Table 9.1. Weight dovwt1 was used for country analyses.

## Diet

It was not practicable to collect comprehensive data on nutrition at MCS4. There were several questions put to parents on the children's eating habits, to which we will return in the section on body mass below. Here we look at the number of portions of fruit consumed by children per day. This is a key indicator of healthy eating as having five portions of fruit or vegetables a day has been shown to be associated with lower rates of cancer and cardiovascular diseases in later life as well as being important sources of vitamins for development and wellbeing (Ransley et al., 2006). In a sample of UK children of similar age (4-6 years) an average of 1.8 pieces of fruit were consumed daily (Ransley et al., 2006). In another study, less than 4 per cent of 4 to 6 -year-olds ate the recommended portions of five fruit and vegetables per day (Nessa and Gallagher, 2004). Among MCS children, the highest consumption recorded on the questionnaire was 'three or more' pieces a day. Even without knowing how many had over three portions, average consumption appears relatively high at 2.2 pieces. Given that both the aforementioned studies were carried out some time ago, the high levels could reflect recent interventions. However, consumption still varied significantly by each social background characteristic. Here, we present in Figure 9.5 the proportion of children who were reported to consume three or more pieces daily. Children who were in England, female, who were white or of mixed ethnicity, who lived with two natural parent families or who had older mothers were associated with more fruit consumption. The starkest group difference was found by parental qualifications. Those whose parents had higher degrees were twice as likely to consume three or more pieces of fruit as those whose parents had no qualifications ( $61 \%$ compared to $33 \%$ ). Diet is one risk factor for children being overweight or obese. Other risk factors include a lack of sleep, a lack of physical exercise and a sedentary lifestyle as well as genetic factors (Wardle et al., 2008; Forshee et al., 2009; Kleiser et al., 2009). We present the prevalence of obese and overweight children next against a range of background socioeconomic and demographic characteristics.

## Body mass

Children's weight, and particularly obesity, has become a focus for policy-makers in recent years. The extent of current childhood obesity varies. One other UK study (Nessa and Gallagher, 2004) found 26 per cent of boys and 40 per cent of girls aged 7 were classified as overweight or obese in 2000. In another study in 2006, 19 per cent of boys and 25 per cent of girls were classed as being overweight or obese (Nessa and Gallagher, 2004; Scholes and Heeks, 2008). Other recent estimates for children aged 2-11 years in 2000-07 placed around 14 per cent of boys and 10 per cent of girls in the obese category, and a further 17 per cent of boys and girls in the overweight category (McPherson et al., 2009). As with previous MCS reports, in this chapter we use the Obesity Task Force (OTF) definitions of overweight and obese (for 7 -year-olds). ${ }^{20}$ These definitions are based on cut-off points of body mass index

[^18](BMI: weight in kilograms divided by height in metres squared). Among 7-year-olds a BMI value exceeding 17.9 for boys and 17.7 for girls is equivalent to being overweight, while values above 20.6 for boys and 20.5 for girls denote obesity (Cole et al., 2000; Brown et al., 2009).

At age 7, 6 per cent of MCS boys were classed as obese and 7 per cent of MCS girls; a further 16 per cent of boys and 14 per cent of girls were classed as overweight. We can informally class 7.5 per cent of MCS boys and 9.3 per cent of girls as underweight. ${ }^{21}$ However, because there is no standard definition for this age group, we do not distinguish underweight children in the remainder of this report.

As may be expected, given the social differentials found for the risk factors of being overweight/obese (physical activity, sleep and diet), there were socioeconomic gradients in the proportions of children classified as obese or overweight (Table 9.24). A strong example is that those whose parents had no qualifications were almost twice as likely to be classed as obese compared to those whose parents had degree level qualifications. However, the socioeconomic gradient appeared weaker against other socioeconomic indicators, such as family poverty status and family social class, where differences were significant but not substantial. Additionally, while the Change4Life programme initially targeted families headed by young parents, these data do not provide a basis for this strategy, as obesity rates varied little by mother's age (not statistically significant and not shown).

There were significant, although not necessarily substantial, country differences in BMI, with slightly higher frequencies of Welsh and Northern Irish children being classed as overweight or obese compared to English and Scottish children. There were also strong ethnic differences (Figure 9.6). Those from 'Other' ethnic groups, which includes a few Chinese and other Far Eastern ethnicities, had the lowest rates of being obese or overweight (17\%), followed by white ( $20 \%$ ) and Pakistani children ( $21 \%$ ). There were high frequencies of obesity alone among black African (17\%), Bangladeshi (16\%) and black Caribbean (13\%) children, although Bangladeshi children were the only group where there were higher frequencies of obese children than overweight children. Mixed ethnicity boys had high levels of being overweight although not necessarily of being obese. While there were no gender differences for the cohort as a whole, examining ethnicity and gender groups simultaneously revealed that black African girls in particular suffered from problems with weight almost half had BMI over the problematic threshold and almost a quarter were obese. While these results do suggest that some minority ethnic groups are at higher risk of problems with weight, it should also be noted that BMI is not an equivalent measure of the percentage body fat for each race-sex group, and maturation stage and distribution of body fat will vary significantly, which may contribute to some of the observed differences (Daniels et al., 1997).

[^19]Table 9.24: Body Mass of Cohort Children by selected background characteristics MCS4

|  | Not Overweight | Overweight | Obese | Total |
| :---: | :---: | :---: | :---: | :---: |
| Professional/Managerial | $\begin{array}{r} 4411 \\ (82.2) \end{array}$ | $\begin{array}{r} 761 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 251 \\ (4.1) \\ \hline \end{array}$ | $\begin{array}{r} 5423 \\ (100.0) \\ \hline \end{array}$ |
| Lower/Unclassified | $\begin{array}{r} 6366 \\ (78.3) \\ \hline \end{array}$ | $\begin{array}{r} 1223 \\ (14.9) \\ \hline \end{array}$ | $\begin{array}{r} 576 \\ (6.8) \\ \hline \end{array}$ | $\begin{array}{r} 8165 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 10777 \\ (79.8) \\ \hline \end{array}$ | $\begin{array}{r} 1984 \\ (14.5) \\ \hline \end{array}$ | $\begin{array}{r} 827 \\ (5.7) \\ \hline \end{array}$ | $\begin{array}{r} 13588 \\ (100.0) \\ \hline \end{array}$ |
| Above 60\% Median Income | $\begin{array}{r} 7654 \\ (80.5) \\ \hline \end{array}$ | $\begin{array}{r} 1380 \\ (14.4) \\ \hline \end{array}$ | $\begin{array}{r} 524 \\ (5.1) \\ \hline \end{array}$ | $\begin{array}{r} 9558 \\ (100.0) \\ \hline \end{array}$ |
| Below 60\% Median Income | $\begin{array}{r} 3146 \\ (78.2) \\ \hline \end{array}$ | $\begin{array}{r} 609 \\ (14.5) \\ \hline \end{array}$ | $\begin{array}{r} 305 \\ (7.3) \\ \hline \end{array}$ | $\begin{array}{r} 4060 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 10800 \\ (10877) \\ \hline \end{array}$ | $\begin{array}{r} 1989 \\ (1972) \\ \hline \end{array}$ | $\begin{array}{r} 829 \\ (777) \end{array}$ | $\begin{array}{r} 13618 \\ (13626) \\ \hline \end{array}$ |
| $\mathrm{p}<0.01$ |  |  |  |  |
| No UK Quals/ NVQ L1 | $\begin{array}{r} 1431 \\ (75.8) \\ \hline \end{array}$ | $\begin{array}{r} 314 \\ (16.1) \\ \hline \end{array}$ | $\begin{array}{r} 164 \\ (8.0) \\ \hline \end{array}$ | $\begin{array}{r} 1909 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L2/3 (5 GCSE - 2 ALevel) | $\begin{array}{r} 4044 \\ (78.3) \\ \hline \end{array}$ | $\begin{array}{r} 790 \\ (15.2) \\ \hline \end{array}$ | $\begin{array}{r} 350 \\ (6.5) \\ \hline \end{array}$ | $\begin{array}{r} 5184 \\ (100.0) \\ \hline \end{array}$ |
| NVQ 4/5+ (Degree and Higher) | $\begin{array}{r} 5335 \\ (82.3) \\ \hline \end{array}$ | $\begin{array}{r} 888 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 317 \\ (4.3) \\ \hline \end{array}$ | $\begin{array}{r} 6540 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 10810 \\ (10885) \\ \hline \end{array}$ | $\begin{array}{r} 1992 \\ (1974) \\ \hline \end{array}$ | $\begin{array}{r} 831 \\ (780) \\ \hline \end{array}$ | $\begin{array}{r} 13633 \\ (13638) \\ \hline \end{array}$ |
| $\mathrm{p}<0.01$ |  |  |  |  |
| 2 biological parents | $\begin{array}{r} 7878 \\ (80.4) \\ \hline \end{array}$ | $\begin{array}{r} 1406 \\ (14.1) \\ \hline \end{array}$ | $\begin{array}{r} 576 \\ (5.4) \\ \hline \end{array}$ | $\begin{array}{r} 9860 \\ (100.0) \\ \hline \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 754 \\ (81.9) \\ \hline \end{array}$ | $\begin{array}{r} 134 \\ (13.1) \\ \hline \end{array}$ | $\begin{array}{r} 55 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 943 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 2179 \\ (77.1) \\ \hline \end{array}$ | $\begin{array}{r} 452 \\ (16.0) \\ \hline \end{array}$ | $\begin{array}{r} 200 \\ (6.9) \\ \hline \end{array}$ | $\begin{array}{r} 2831 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 10811 \\ (10885) \\ \hline \end{array}$ | $\begin{array}{r} 1992 \\ (1974) \\ \hline \end{array}$ | $\begin{array}{r} 831 \\ (780) \\ \hline \end{array}$ | $\begin{array}{r} 13634 \\ (13639) \\ \hline \end{array}$ |
| $\mathrm{p}=0.01$ |  |  |  |  |
| Male | $\begin{array}{r} 5650 \\ (82.3) \\ \hline \end{array}$ | $\begin{array}{r} 870 \\ (12.7) \\ \hline \end{array}$ | $\begin{array}{r} 374 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 6894 \\ (100.0) \\ \hline \end{array}$ |
| Female | $\begin{array}{r} 5161 \\ (77.2) \\ \hline \end{array}$ | $\begin{array}{r} 1122 \\ (16.3) \\ \hline \end{array}$ | $\begin{array}{r} 457 \\ (6.5) \\ \hline \end{array}$ | $\begin{array}{r} 6740 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (79.8) | (14.5) | (5.7) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10811 \\ (10885) \\ \hline \end{array}$ | $\begin{array}{r} 1992 \\ (1974) \\ \hline \end{array}$ | $\begin{array}{r} 831 \\ (780) \\ \hline \end{array}$ | $\begin{array}{r} 13634 \\ (13639) \\ \hline \end{array}$ |
| p<0.01 |  |  |  |  |
| England | $\begin{array}{r} 6960 \\ (80.1) \\ \hline \end{array}$ | $\begin{array}{r} 1230 \\ (14.2) \end{array}$ | $\begin{array}{r} 525 \\ (5.7) \\ \hline \end{array}$ | $\begin{array}{r} 8715 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 1532 \\ (77.1) \\ \hline \end{array}$ | $\begin{array}{r} 316 \\ (15.9) \\ \hline \end{array}$ | $\begin{array}{r} 138 \\ (7.0) \\ \hline \end{array}$ | $\begin{array}{r} 1986 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 1289 \\ (80.7) \\ \hline \end{array}$ | $\begin{array}{r} 228 \\ (15.0) \\ \hline \end{array}$ | $\begin{array}{r} 70 \\ (4.4) \\ \hline \end{array}$ | $\begin{array}{r} 1587 \\ (100.0) \\ \hline \end{array}$ |
| NI | $\begin{array}{r} 1030 \\ (75.6) \\ \hline \end{array}$ | $\begin{array}{r} 218 \\ (16.8) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (7.5) \\ \hline \end{array}$ | $\begin{array}{r} 1346 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (79.3) | (14.8) | (5.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10811 \\ (10802) \\ \hline \end{array}$ | $\begin{array}{r} 1992 \\ (2018) \\ \hline \end{array}$ | $\begin{array}{r} 831 \\ (806) \\ \hline \end{array}$ | $\begin{array}{r} 13634 \\ (13626) \\ \hline \end{array}$ |

[^20]Figure 9.6: Body Mass of Cohort Children by Gender and Ethnicity MCS4


Notes: As Table 9.1. Numbers on left hand labels represent unweighted sample size of boys and girls respectively
Physical activity, sleep and diet: bivariate relationships with body mass
We now move to examine the associations between these and other risk factors with being obese or overweight.

## Dietary factors

When we compare daily fruit consumption and between-meal snacks we see little relationship between these factors and children's body mass. There was also very little correlation between children's weight category and consumption of betweenmeals drinks (not shown). However, there were strong associations with weight category of children being on specific types of diets as well as fussy eating. Children who were reported to eat most things (not fussy eaters) were those most likely to have problematic weight (not shown). The small numbers of children on meat free diets were those least likely to be overweight or obese (8\%). Table 9.25 also shows that those who were on diets for religious reasons had relatively high rates of being overweight or obese ( $25 \%$ ). Unsurprisingly, those on diets for weight loss purposes had high rates of obesity and being overweight. However, almost one-quarter (23\%) of the 144 cases said to be on diets for the purposes of putting on weight were also obese or overweight.

Table 9.25: BMI of cohort child by whether child is on a diet at age 7: MCS4


Notes: As Table 9.1.
One of the most consistent associations between dietary factors and weight was seen with children eating breakfast regularly (Table 9.26). Those who ate breakfast regularly were more likely to be in the 'normal' weight category than those who did not ( $79 \%$ to $72 \%$ ). However, this association was even stronger when looking at eating breakfast at age 5 and body mass at age 7 . Eighty one per cent of those who ate breakfast regularly at age 5 had no weight problems at age 7 , compared to 70 per cent of those who did not. Furthermore, the proportion of obese children who did not eat breakfast regularly at the age 5 survey was double that of those who did eat breakfast regularly ( $9 \%$ compared to $5 \%$ ).

Table 9.26: Weight of Cohort Child at age 7 by Eating Breakfast at Age 5 and at Age 7

|  | Does Cohort Member Eat Breakfast Every Day? (Age 5) |  |  | Does Cohort Member Eat Breakfast Every Day? (Age 7) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BMI at age 7 | No | Yes | Total | No | Yes | Total |
| Normal | $\begin{array}{r} 752 \\ (69.6) \\ \hline \end{array}$ | $\begin{array}{r} 9559 \\ (81.4) \\ \hline \end{array}$ | $\begin{aligned} & 10311 \\ & (80.6) \end{aligned}$ | $\begin{array}{r} 645 \\ (71.6) \\ \hline \end{array}$ | $\begin{aligned} & 10114 \\ & (80.3) \end{aligned}$ | $\begin{array}{r} 10759 \\ (79.8) \\ \hline \end{array}$ |
| Overweight | $\begin{array}{r} 216 \\ (21.6) \end{array}$ | $\begin{array}{r} 1666 \\ (13.6) \end{array}$ | $\begin{array}{r} 1882 \\ (14.1) \end{array}$ | $\begin{array}{r} 180 \\ (19.1) \end{array}$ | $\begin{gathered} 1804 \\ (14.2) \end{gathered}$ | $\begin{array}{r} 1984 \\ (14.5) \end{array}$ |
| Obese | $\begin{array}{r} 100 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 683 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 783 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 86 \\ (9.4) \\ \hline \end{array}$ | $\begin{array}{r} 742 \\ (5.5) \\ \hline \end{array}$ | $\begin{array}{r} 828 \\ (5.7) \\ \hline \end{array}$ |
| Total Percentage (col) | 100 | 100 | 100 | 100 | 100 | 100 |
| Total Percentage (row) | (6.2) | (93.8) | (100.0) | (6.2) | (93.8) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 1068 \\ (951) \\ \hline \end{array}$ | $\begin{array}{r} 11908 \\ (12587) \end{array}$ | $\begin{array}{r} 12976 \\ (13538) \\ \hline \end{array}$ | $\begin{array}{r} 911 \\ (844) \\ \hline \end{array}$ | $\begin{array}{r} 12660 \\ (12743) \\ \hline \end{array}$ | $\begin{array}{r} 13571 \\ (13587) \\ \hline \end{array}$ |
|  | $\begin{aligned} & \mathrm{p}<0.01 \\ & \mathrm{~F}=29.5 \end{aligned}$ |  |  | $\mathrm{p}<0.01$$\mathrm{~F}=15.5$ |  |  |

Notes: As Table 9.1 for Age 7 panel and 9.8 for Age 5 panel. Age 5 data is weighted by weight weight2 (original
sampling weight) and includes only children present at age 5 and 7 yrs.

## Exercise and sleep

Statistically, there was a significant association between children's frequency of afterschool physical exercise and weight category. However, this link was not necessarily substantial, consistent or clear. Children who never exercised or did so less than once a week were the most likely to be obese or overweight (Table 9.27), although the difference was not of the same magnitude as with background social factors, examined earlier. We investigated longitudinal evidence on the frequency of doing an after-school sport or physical activity at age 5 and weight category at both age 5 and age 7 years (Table 9.28). This suggests a complex relationship between sport and weight that cannot be isolated necessarily from bivariate analyses alone.

Correspondingly, we also observed a relationship with television viewing and having a television in the bedroom and BMI (not shown in tables). For example, 23 per cent of those who had a television in the bedroom were overweight or obese compared to 17 per cent of those who did not. Once again, however, while the relationships were statistically significant, the sizes of the effects were relatively moderate. However, one factor which did have a significant and relatively sizeable association with BMI category was the sleeping patterns of children. Normal sleep is crucial for brain function, behaviour and metabolism. Sleep loss has been linked to behavioural and attention problems, impaired learning and memory, psychiatric disorders and child obesity (Lipton et al., 2008; Forshee et al., 2009; Smaldone et al., 2009). Here, among children who went to bed early (before 7.30 pm ), fewer were overweight or obese compared to children who went to bed at or after 8.30pm ( $16 \%$ compared to $27 \%)$ : the later the bedtime, the greater the frequency of obese children (not shown). The relationship between bedtime and obesity may reflect a more general pattern of well-organised family life and meals. Parents who send their children to bed at an earlier time may also feed their children better (full analyses of sleep are included in Chapter 4).

| Activity at Age 7 | Not Overweight | Overweight | Obese | Total |
| :---: | :---: | :---: | :---: | :---: |
| 4-5 times a week | $\begin{array}{r} 849 \\ (7.7) \\ \hline \end{array}$ | $\begin{array}{r} 131 \\ (7.3) \\ \hline \end{array}$ | $\begin{array}{r} 38 \\ (5.1) \end{array}$ | $\begin{aligned} & 1018 \\ & (7.5) \\ & \hline \end{aligned}$ |
| 2-3 times a week | $\begin{array}{r} 3644 \\ (34.1) \\ \hline \end{array}$ | $\begin{array}{r} 657 \\ (32.5) \\ \hline \end{array}$ | $\begin{array}{r} 236 \\ (27.7) \\ \hline \end{array}$ | $\begin{array}{r} 4537 \\ (33.5) \\ \hline \end{array}$ |
| Once a week | $\begin{array}{r} 2832 \\ (25.9) \\ \hline \end{array}$ | $\begin{array}{r} 502 \\ (25.3) \\ \hline \end{array}$ | $\begin{array}{r} 252 \\ (30.2) \\ \hline \end{array}$ | $\begin{array}{r} 3586 \\ (26.1) \\ \hline \end{array}$ |
| Less than once a week/never | $\begin{array}{r} 3445 \\ (32.3) \\ \hline \end{array}$ | $\begin{array}{r} 695 \\ (34.9) \\ \hline \end{array}$ | $\begin{array}{r} 302 \\ (37.0) \\ \hline \end{array}$ | $\begin{array}{r} 4442 \\ (32.9) \\ \hline \end{array}$ |
| Total Percentage (col) | 100 | 100 | 100 | 100 |
| Total Percentage (row) | (79.8) | (14.5) | (5.7) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10770 \\ (10854) \end{array}$ | $\begin{array}{r} 1985 \\ (1969) \end{array}$ | $\begin{array}{r} 828 \\ (776) \end{array}$ | $\begin{array}{r} 13583 \\ (13599) \end{array}$ |
| $\mathrm{p}<0.01$ |  |  |  |  |

Notes: As Table 9.1.

Table 9.28: BMI category at age 5 and age 7 by frequency of exercise at age 5 (MCS 3 \& MCS4)

| Activity at Age 5 |  |  |  |  |  |  |  |  |  | $\stackrel{\square}{\square}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Partake in sport once a week or more | $\begin{array}{r} 5029 \\ (58.0) \end{array}$ | $\begin{array}{r} 537 \\ (59.1) \end{array}$ | $\begin{array}{r} 216 \\ (46.0) \end{array}$ | $\begin{array}{r} 372 \\ (54.5) \end{array}$ | $\begin{array}{r} 27 \\ (53.0) \end{array}$ | $\begin{array}{r} 117 \\ (55.9) \end{array}$ | $\begin{array}{r} 417 \\ (58.6) \end{array}$ | $\begin{array}{r} 33 \\ (46.6) \end{array}$ | $\begin{array}{r} 81 \\ (53.7) \end{array}$ | $\begin{array}{r} 6829 \\ (57.3) \end{array}$ |
| Partake in sport less once a week or never | $\begin{array}{r} 4426 \\ (42.0) \end{array}$ | $\begin{array}{r} 440 \\ (40.9) \end{array}$ | $\begin{array}{r} 267 \\ (54.0) \end{array}$ | $\begin{array}{r} 373 \\ (45.5) \end{array}$ | $\begin{array}{r} 43 \\ (47.0) \end{array}$ | $\begin{array}{r} 114 \\ (44.1) \end{array}$ | $\begin{array}{r} 378 \\ (41.4) \end{array}$ | $\begin{array}{r} 34 \\ (53.4) \end{array}$ | $\begin{array}{r} 80 \\ (46.3) \end{array}$ | $\begin{array}{r} 6155 \\ (42.7) \end{array}$ |
| Total Percentage (col) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total Percentage (row) | (74.0) | (7.4) | (3.3) | (5.6) | (0.5) | (1.5) | (6.1) | (0.5) | (1.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 9455 \\ (1002 \\ 0) \\ \hline \end{array}$ | $\begin{array}{r} 977 \\ (997) \end{array}$ | $\begin{array}{r} 483 \\ (450) \end{array}$ | $\begin{array}{r} 745 \\ (753) \end{array}$ | $\begin{array}{r} 70 \\ (62) \end{array}$ | $\begin{array}{r} 231 \\ (203) \end{array}$ | $\begin{array}{r} 795 \\ (832) \end{array}$ | $\begin{array}{r} 67 \\ (63) \end{array}$ | $\begin{array}{r} 161 \\ (163) \end{array}$ | $\begin{array}{r} 12984 \\ (13542) \end{array}$ |
|  |  |  |  |  |  |  |  |  |  | p<0.01 |

Notes: As Table 9.8.

In these data, we see mixed results in terms of the association of body mass with diet and physical activity. Several of the hypothesised relationships in the literature which have become the foci for recent interventions have not been confirmed in the tables presented in this chapter. However, the method bivariate analysis - two-way tables has its limitations. It may be necessary to take a number of other factors, including evidence from earlier surveys into account. This is particularly true of conditions such as obesity, which result from a complex interplay between genetics, lifestyle factors and resources. While we are unable to measure a genetic component here, we do see that there is strong intergenerational component to body mass, even during childhood. Children of obese mothers are nearly three times more likely to be obese themselves than children whose mothers are not overweight or obese (Table 9.29). More generally, we see that most children remained within the same weight category
longitudinally (85\%), with $11 \%$ remaining in overweight or obese categories (Figure 9.7). Around as many children made a positive movement to a healthier category (7.8\%) as made a negative movement 7.5\% .

Table 9.29: Body Mass of Child at age 7 by Mother's Weight, MCS4

|  |  | Mother's Weight Category |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Normal | Overweight | Obese | Total |
|  | Normal | $\begin{array}{r} 5261 \\ (60.2) \\ \hline \end{array}$ | $\begin{array}{r} 638 \\ (40.7) \end{array}$ | $\begin{array}{r} 189 \\ (29.2) \end{array}$ | $\begin{array}{r} 6088 \\ (55.9) \\ \hline \end{array}$ |
|  | Overweight | $\begin{array}{r} 2391 \\ (26.2) \\ \hline \end{array}$ | $\begin{array}{r} 533 \\ (34.9) \\ \hline \end{array}$ | $\begin{array}{r} 215 \\ (34.1) \\ \hline \end{array}$ | $\begin{array}{r} 3139 \\ (27.8) \\ \hline \end{array}$ |
|  | Obese | $\begin{array}{r} 1225 \\ (13.6) \\ \hline \end{array}$ | $\begin{array}{r} 382 \\ (24.4) \\ \hline \end{array}$ | $\begin{array}{r} 232 \\ (36.7) \\ \hline \end{array}$ | $\begin{array}{r} 1839 \\ (16.3) \\ \hline \end{array}$ |
|  | Total Percentage | 100 | 100 | 100 | 100 |
|  | Observed Number Weighted Number | $\begin{array}{r} 8877 \\ (8977) \end{array}$ | $\begin{array}{r} 1553 \\ (1525) \\ \hline \end{array}$ | $\begin{array}{r} 636 \\ (582) \\ \hline \end{array}$ | $\begin{array}{r} 11066 \\ (11083) \\ \hline \end{array}$ |
|  |  |  |  |  | $\mathrm{p}<0.01$ |

Figure 9.7: Stability and Change in Body Mass of Cohort Children between Age 5 and 7 years


[^21]
## Conclusions

This chapter has presented a number of two-way tabulations between indicators of children's health and factors by which they vary. Across almost all indicators, children from more disadvantaged backgrounds are less healthy than those from advantaged backgrounds. This applies to health indicators of varying degrees of objectivity, and across a range of socio-demographic circumstances including parents' qualifications, family type and family work status. The only ailments that more advantaged children were more likely to suffer from were hay fever and eczema (conditions equally prevalent among children from advantaged and less disadvantaged backgrounds). The age of the mother, usually an indicator of socioeconomic advantage, did not necessarily show the expected effect across all domains. In fact, in some cases of lifestyle behaviours, the health of children of the youngest mothers matched or even exceeded that of the oldest group of mothers. There were also strong ethnic differences. Bangladeshi and Pakistani children were those least likely to be classed as being in excellent or very good health. However, they were also among the least likely to be suffering from longstanding condition. There was a substantial difference in the health of black African children compared to black Caribbean children. Black Caribbean children were among those most likely to be suffering from a longstanding condition while black African children were among the least likely. Furthermore, black Caribbean children were among those most likely of any ethnic group to receive medication for longstanding conditions, which may point to the severity of the conditions. They were also especially prone to respiratory conditions. However, there were some positive indicators for black Caribbean children in terms of lifestyle (sleeping patterns, not shown) and physical activity factors.

Girls were significantly more likely than boys to have problematic weights, but there was only moderate evidence of a socioeconomic gradient. However, there was greater evidence of socioeconomic differentials in risk factors for being obese or overweight. Disadvantaged children were far less likely to engage in physical or sporting activities, were less likely to consume fruit and were more likely to go to bed late. While there was only mixed evidence as to the link between these indicators and obesity, these may be important for other aspects of physical and cognitive development and socialisation. Furthermore, given the relatively young age of the MCS children, sleep and exercise may become important predictors of excess weight and other aspects of development later in childhood and through to adolescence. We can already see some of this evidence forming in this sweep - skipping breakfast at age 7 was significantly associated with being overweight or obese at age 7 . However, when taking a longitudinal approach, eating breakfast at age 5 (the previous sweep) held greater predictive power and represented a significant and substantial predictor of obesity at age 7 . We may expect to see similar relationships based on current health and lifestyle indicators in the future, and need to investigate further the early years precursors of the health outcomes described here.

## References

Cole, T., Bellizzi, M., Flegal, K. and Dietz, W. (2000) Establishing a standard definition for child overweight and obesity worldwide: international survey. British Medical Journal, 320(7244): 1240-1245.

Daniels, S., Khoury, P. and Morrison, J. (1997) The Utility of Body Mass Index as a Measure of Body Fatness in Children and Adolescents: Differences by Race and Gender. Pedicatrics 99(6): 804-807.

Department of Health (2009) Change 4 Life:
www.nhs.uk/Change4life/Pages/PartnerLinks.aspx (acessed 24 December 2009).
Dezateux, C., Bedford, H., Cole, T., Peckham, C., Schoon, I., Hope, S. and Butler, N. (2004) Babies' Health and Development. In S. Dex and H. Joshi (eds) Millennium Cohort Study First Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.

Dezateux, C., Sullivan, A., Sherburne Hawkins, S., Cole, T. and Joshi, H. (2007) Child Health. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Second Survey: A User's Guide to Initial Findings. London, Centre for Longitudinal Studies, Institute of Education, University of London.

Donaldson, L. and C. Beasley (2008). If we carry on as we are, $90 \%$ of today's children could be overweight or obese by 2050. London, Department of Health: www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh _092026.pdf

Forshee, R., Anderson, P. and Storey, M. (2009) Associations of Various Family Characteristics and Time Use With Children's Body Mass Index. Journal of Community Health Nursing, 26(2): 77-86.

Johnson, A. (2009) Opening address by the Secretary of State for Health. Global Health Promotion 16:19-22.

Kaila, M., Rautava, P., Holmberg-Marttila, D., Vahlberg, T., Aromaa, M. and Sillanpää, M. (2009) Allergy from infancy to adolescence. A population-based 18year follow-up cohort. BMC Pediatrics 9(46).

Kleiser, C., Schaffrath Rosario, A., Mensink, G., Prinz-Langenohl, R. and Kurth, B-M. (2009) Potential determinants of obesity among children and adolescents in Germany: results from the corss-sectional KiGGS study. BMC Public Health, 9(46).

Lindsay, G., Pather, S. and Strand, S. (2006) Special Educational Needs and Ethnicity: Issues of Over- and Under-Representation. London, Department for Education and Skills. Research Report RR757.

Lipton, J., Becker, R. and Kothare, S. (2008) Insomnia During Childhood. Current Opinion in Pediatrics, 20(6): 641-649.

McPherson, K., Brown, M., Marsh, T. and Byatt, T. (2009) Obesity Trends for Children Aged 2-11 years: Analysis from the Health Survey for England (19932007). London: National Heart Forum.

Nessa, N. (2004) Disability. The Health of Children and Young People. London: Office for National Statistics.

Nessa, N. and J. Gallagher (2004) Diet, Nutrition, Dental Health and Exercise. The Health of Children and Young People. London: Office for National Statistics.

Pattenden, S., Temenuga, A., Neuberger, M., Nikiforov, B., De Sario, M., Grize, L., Heinrich, J., Hruba, F., Janssen, N., Luttman-Gibson, H., Privalova, L., Rudnai, P., Splichalova, A., Zlotkowska, R. and Fletcher, T. (2006) Parental smoking and children's respiratory health: independent effects of prenatal and postnatal exposure. Tobacco Control, 15: 294-301.

Pujades-Rodriguez, M., McKeever, T., Lewis, S., Whyatt, J., Britton, J. and Venn, A. (2009) Effect of traffic pollution on respiratory and allergic disease in adults: crosssectional and longitudinal analyses. BMC Pulmonary Medicine, 9(42).

Ransley, J., Greenwood, D., Cade, J., Blenkinsop, S., Schagen, I., Teeman, D., Scott, E., White, G. and Schagen, S. (2006) Does the school fruit and vegetable scheme improve children's diet? A non-randomised controlled trial. Journal of Epidemiology and Community Health, 61: 699-703.

Reading, R., Jones, A., Haynes, R., Daras, K. and Emond, A. (2008) Individual factors explain neighbourhood variations in accidents to children under 5 years of age. Social Science and Medicine 67(6): 915-927.

Schmidt, S. and F. Petermann (2009) Developmental psychopathology: Attention Deficit Hyperactivity Disorder (ADHD). BMC Psychiatry, 9(58): 10.

Scholes, S. and F. Heeks (2008) BMI, Overweight and Obesity. In R. Craig and J. Mindell (eds) Health Survey for England: Obesity and other risk factors in children: Volume 2. London: Joint Health Surveys Unit, Department for Health.

Smaldone, A., Honig, J. and Byrne, M. (2009) Does assessing sleep inadequacy across its continuum inform associations with child and family health? Journal of Paediatric Health Care, 23(6): 394-404.

Sullivan, A. and H. Joshi (2008) Child Health. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Third Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.

Sweeting, H. and P. West (1998) Health at age 11: reports from schoolchildren and their parents. Archives of Disease in Childhood, 78: 427-434.

Victorino, C. C. and A. H. Gauthier (2009) The social determinants of child health: variations across health outcomes - a population-based cross-sectional analysis. BMC Pediatrics, 9(53).

Wardle, J., Carnell, S., Haworth, C. and Plomin, R. (2008) Evidence for a strong genetic influence on childhood adiposity despite the force of the obesogenic environment. American Journal of Clinical Nutrition, 87(2).

World Health Organization (2004) International Statistical Classification of Diseases and Related Health Problems. Geneva: World Health Organisation.

## Chapter 10

## PARENTAL HEALTH

Dylan Kneale

## Introduction

## Chapter overview

This chapter looks at the health of the Millennium Cohort Study parents when their children were aged 7, and the patterns that emerge in relation to ethnicity, mother's age when the child was born, family type, family work status, parental education and socioeconomic status. The chapter is divided into three main parts:

- Health, illness and disability: self-rated health and longstanding conditions (illness, infirmity, disability).
- Mental health: limiting emotional problems, psychological distress and life satisfaction.
- Lifestyle factors: alcohol consumption, smoking and BMI (parents' weight).

Parental health is key to understanding patterns of child health. Several studies have highlighted that health has a strong intergenerational component, through environmental, genetic and lifestyle factors (Kahn et al., 2005; Wickrama et al., 1999). Independently, the parents of Millennium Cohort Study (MCS) cohort members provide an unparalleled snapshot of the health of working age adults (parents) in the UK, particularly disadvantaged adults and those from ethnic minority groups. In this chapter, we describe the health of parents when their children were aged seven. These parents are from a variety of backgrounds, the binding commonality being the cohort child.

Previous reports have shown that the majority of MCS mothers and fathers regarded their health as either very good or excellent (Calderwood et al., 2007; Roberts and Ketende, 2008). However, there were also clear indications that the parents were afflicted by certain health conditions. In particular, many fathers were overweight just 35 per cent were in the normal weight range in 2006. Mothers fared slightly better, but nevertheless over 40 per cent were over normal weight (Roberts and Ketende, 2008). A healthy body mass has become a recent focus for policy-makers. The Change4Life campaign launched in early 2009 was focused on children's health and in particular on the adoption of healthy eating and exercise patterns early in life as a precursor for a lifetime of healthy behaviours (Department of Health, 2009a) ${ }^{22}$. This initiative centred on activities around the family, as opposed to solely the child,

[^22]viewing the adoption of healthy lifestyles by parents as key to improving child health (Department of Health, 2009a). As such, parental obesity and its risk factors are salient topics for this chapter. Other recent changes include the implementation of the smoking ban in enclosed public places (which came into force in England, Wales and Northern Ireland during 2007 and in Scotland a year earlier) and increased taxes on alcohol. Other government initiatives have been launched to protect and improve the health and wellbeing of working-age people, aimed particularly at getting those who had been on long-term sickness benefits back into the labour market (Department for Work and Pensions, 2008). Special emphasis was placed on improving mental health services.

This chapter has three main parts that reflect recent government policies. The first part examines health, illness and disability. The second part looks at indicators of mental wellbeing, and the third, lifestyle factors. We examine the health of mothers and fathers, defined as natural, adoptive, foster or step-parents, ${ }^{23}$ irrespective of whether they answered the main or partner questionnaires (unless otherwise stated). This excludes the small number of grandparents and others ( 49 main and 188 partner respondents). The maximum numbers used in the tables are 13,707 mothers and 10,841 fathers before cases are dropped because of missing data. The analysis in this chapter is descriptive and mainly bivariate and cross-sectional and does not imply evidence of causal relationships. Covariates are as measured at MCS4. Analyses are weighted by combined sample and non-response weights, except where stated.

## Part 1: Health, illness and disability

## Self-rated health

The majority of parents rated their own health as excellent or very good ( $58 \%$ of mothers and $60 \%$ of fathers). Conversely, 13 per cent of mothers and fathers rated their health as fair or poor. Comparison with external data sources suggests MCS parents have poorer health than respondents to the Health Survey for England (National Centre for Social Research, 2008), but better health than respondents to the British Household Panel Survey (BHPS) (Snelgrove et al., 2009). This may reflect that each source uses different scales. Self-rated health varies by a number of background characteristics. In BHPS, for example, self-rated health deteriorates linearly with age (Snelgrove et al., 2009). Among MCS respondents, it is the younger parents who are more likely to rate their health as fair or poor - those who would have been under 30 at the time the of the cohort birth (Figure 10.1). This is likely to be a reflection of the social selectivity of early parenthood. Teenage parents are associated with a number of negative outcomes, although poorer physical health isn't usually one. Unexpectedly, this trend is observed for both young fathers as well as young mothers.

Mothers with no qualifications were around three times as likely to describe their health as 'poor' compared to those with degree level qualifications. Similar

[^23]relationships were observed with other socio-economic indicators including poverty status (Table 10.1). Over a fifth of mothers (22\%) in families with income below 60 per cent of the UK median rated their health as fair or poor compared to 10 per cent of mothers in families with income over this threshold. There were also significant country differences ${ }^{24}$ - English mothers were most likely to cite poor health and Northern Irish least. White and black African mothers were most likely to report excellent or very good health, while Bangladeshi mothers were only half as likely as white mothers to rate their health as excellent. Despite this, it was black Caribbean mothers who were more likely than mothers of any other ethnicity to rate their health as fair or poor. Many of the self-rated health differences among mothers were repeated among fathers (Table 10.2). For example, the proportion of fathers reporting fair or poor health was almost three times as high among fathers who were out of work or in unclassified roles compared to fathers in professional or managerial roles ( $9 \%$ versus $33 \%$ ). This would suggest that some fathers were not working because of health reasons. Some of the ethnic group differences observed among mothers were amplified among fathers. In particular, black African fathers were much more likely than any other group to report excellent health (34\%), and in particular much more likely than those from 'Other' ethnic groups which includes Chinese and Far East Asian (18\%). Bangladeshi and Pakistani fathers were most likely to report fair or poor health. Northern Irish, Welsh and Scottish fathers were more likely to report good health, a possible reflection of the relative absence of ethnic minority groups in these countries. Table 10.3 shows mothers' and fathers' ratings of their health were significantly related to one another. Despite this, Tables 10.4 and 10.5 show a difference longitudinally, in that more mothers reported positive than negative movement in health between 2006 and 2008; among fathers, the opposite effect was seen.

[^24]Table 10.13: Mother's General Health by selected background characteristics MCS4

|  | Excellent | Very Good | Good | Fair | Poor | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{25}$ | $\begin{array}{r} 336 \\ (17.5) \end{array}$ | $\begin{array}{r} 513 \\ (26.3) \end{array}$ | $\begin{array}{r} 662 \\ (32.9) \end{array}$ | $\begin{array}{r} 320 \\ (17.4) \\ \hline \end{array}$ | $\begin{array}{r} \hline 104 \\ (5.9) \end{array}$ | $\begin{array}{r} 1935 \\ (100.0) \end{array}$ |
| NVQ L1 (< 5 GCSE A-C) | $\begin{array}{r} 150 \\ (17.0) \\ \hline \end{array}$ | $\begin{array}{r} 309 \\ (32.0) \\ \hline \end{array}$ | $\begin{array}{r} 318 \\ (34.7) \end{array}$ | $\begin{array}{r} 117 \\ (12.5) \\ \hline \end{array}$ | $\begin{array}{r} 35 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 929 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 A-Level) | $\begin{array}{r} 691 \\ (18.6) \\ \hline \end{array}$ | $\begin{array}{r} 1201 \\ (34.0) \\ \hline \end{array}$ | $\begin{array}{r} 1174 \\ (33.0) \\ \hline \end{array}$ | $\begin{array}{r} 401 \\ (11.6) \\ \hline \end{array}$ | $\begin{array}{r} 100 \\ (2.8) \\ \hline \end{array}$ | $\begin{array}{r} 3567 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 457 \\ (21.2) \\ \hline \end{array}$ | $\begin{array}{r} 807 \\ (39.1) \\ \hline \end{array}$ | $\begin{array}{r} 578 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 180 \\ (8.8) \\ \hline \end{array}$ | $\begin{array}{r} 44 \\ (2.4) \\ \hline \end{array}$ | $\begin{array}{r} 2066 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 1162 \\ (27.7) \\ \hline \end{array}$ | $\begin{array}{r} 1595 \\ (38.2) \\ \hline \end{array}$ | $\begin{array}{r} 1057 \\ (25.8) \\ \hline \end{array}$ | $\begin{array}{r} 265 \\ (6.6) \\ \hline \end{array}$ | $\begin{array}{r} 74 \\ (1.8) \\ \hline \end{array}$ | $\begin{array}{r} 4153 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 300 \\ (33.0) \end{array}$ | $\begin{array}{r} 374 \\ (41.0) \\ \hline \end{array}$ | $\begin{array}{r} 191 \\ (19.9) \end{array}$ | $\begin{array}{r} 45 \\ (4.9) \end{array}$ | $\begin{array}{r} 11 \\ (1.3) \\ \hline \end{array}$ | $\begin{array}{r} 921 \\ (100.0) \end{array}$ |
| Total Percentage | (23.2) | (35.3) | (28.8) | (10.0) | (2.8) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 3096 \\ (3010) \\ \hline \end{array}$ | $\begin{array}{r} 4799 \\ (4753) \\ \hline \end{array}$ | $\begin{array}{r} 3980 \\ (3989) \\ \hline \end{array}$ | $\begin{array}{r} 1328 \\ (1375) \\ \hline \end{array}$ | $\begin{array}{r} 368 \\ (390) \\ \hline \end{array}$ | $\begin{array}{r} 13571 \\ (13516) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| England | $\begin{array}{r} 1828 \\ (21.5) \\ \hline \end{array}$ | $\begin{array}{r} 3014 \\ (35.2) \\ \hline \end{array}$ | $\begin{array}{r} 2661 \\ (30.0) \\ \hline \end{array}$ | $\begin{array}{r} 886 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 253 \\ (3.0) \\ \hline \end{array}$ | $\begin{array}{r} 8642 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 473 \\ (24.6) \end{array}$ | $\begin{array}{r} 748 \\ (37.7) \end{array}$ | $\begin{array}{r} 536 \\ (25.9) \end{array}$ | $\begin{array}{r} 185 \\ (9.2) \end{array}$ | $\begin{array}{r} 50 \\ (2.6) \end{array}$ | $\begin{array}{r} 1992 \\ (100.0) \end{array}$ |
| Scotland | $\begin{array}{r} 412 \\ (24.7) \end{array}$ | $\begin{array}{r} 567 \\ (34.8) \\ \hline \end{array}$ | $\begin{array}{r} 442 \\ (28.5) \end{array}$ | $\begin{array}{r} 136 \\ (9.4) \\ \hline \end{array}$ | $\begin{array}{r} 39 \\ (2.7) \end{array}$ | $\begin{array}{r} 1596 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 384 \\ (29.7) \end{array}$ | $\begin{array}{r} 472 \\ (33.9) \\ \hline \end{array}$ | $\begin{array}{r} 341 \\ (25.1) \end{array}$ | $\begin{array}{r} 121 \\ (9.2) \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ (2.1) \end{array}$ | $\begin{array}{r} 1344 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (23.2) | (35.4) | (28.7) | (10.0) | (2.8) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 3097 \\ (3137) \\ \hline \end{array}$ | $\begin{array}{r} 4801 \\ (4787) \\ \hline \end{array}$ | $\begin{array}{r} 3980 \\ (3892) \\ \hline \end{array}$ | $\begin{array}{r} 1328 \\ (1348) \\ \hline \end{array}$ | $\begin{array}{r} 368 \\ (376) \\ \hline \end{array}$ | $\begin{array}{r} 13574 \\ (13540) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Two Natural Parents | $\begin{array}{r} 2427 \\ (24.1) \end{array}$ | $\begin{array}{r} 3626 \\ (36.7) \\ \hline \end{array}$ | $\begin{array}{r} 2787 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 841 \\ (8.5) \\ \hline \end{array}$ | $\begin{array}{r} 214 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 9895 \\ (100.0) \\ \hline \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 164 \\ (17.7) \\ \hline \end{array}$ | $\begin{array}{r} 285 \\ (31.5) \\ \hline \end{array}$ | $\begin{array}{r} 291 \\ (32.1) \end{array}$ | $\begin{array}{r} 101 \\ (12.5) \end{array}$ | $\begin{array}{r} 52 \\ (6.2) \\ \hline \end{array}$ | $\begin{array}{r} 893 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 506 \\ (18.0) \end{array}$ | $\begin{array}{r} 890 \\ (31.7) \end{array}$ | $\begin{array}{r} 902 \\ (32.0) \end{array}$ | $\begin{array}{r} 386 \\ (14.7) \end{array}$ | $\begin{array}{r} 102 \\ (3.7) \end{array}$ | $\begin{array}{r} 2786 \\ (100.0) \end{array}$ |
| Total Percentage | (22.3) | (35.2) | (29.5) | (10.2) | (2.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 3097 \\ (3011) \\ \hline \end{array}$ | $\begin{array}{r} 4801 \\ (4756) \\ \hline \end{array}$ | $\begin{array}{r} 3980 \\ (3989) \\ \hline \end{array}$ | $\begin{array}{r} 1328 \\ (1375) \\ \hline \end{array}$ | $\begin{array}{r} 368 \\ (390) \\ \hline \end{array}$ | $\begin{array}{r} 13574 \\ (13521) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| White | $\begin{array}{r} 2744 \\ (22.9) \\ \hline \end{array}$ | $\begin{array}{r} 4185 \\ (35.7) \\ \hline \end{array}$ | $\begin{array}{r} 3265 \\ (28.6) \\ \hline \end{array}$ | $\begin{aligned} & \hline 1081 \\ & (9.9) \\ & \hline \end{aligned}$ | $\begin{array}{r} 305 \\ (2.8) \\ \hline \end{array}$ | $\begin{array}{r} 11580 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 15 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 50 \\ (44.2) \\ \hline \end{array}$ | $\begin{array}{r} 40 \\ (31.3) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (9.7) \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ (0.6) \\ \hline \end{array}$ | $\begin{array}{r} 120 \\ (100.0) \\ \hline \end{array}$ |
| Indian | $\begin{array}{r} 57 \\ (15.6) \end{array}$ | $\begin{array}{r} 110 \\ (33.0) \\ \hline \end{array}$ | $\begin{array}{r} 130 \\ (37.5) \\ \hline \end{array}$ | $\begin{array}{r} 39 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ (2.9) \\ \hline \end{array}$ | $\begin{array}{r} 346 \\ (100.0) \\ \hline \end{array}$ |
| Pakistani | $\begin{array}{r} 95 \\ (16.8) \\ \hline \end{array}$ | $\begin{array}{r} 163 \\ (27.2) \\ \hline \end{array}$ | $\begin{array}{r} 229 \\ (37.9) \\ \hline \end{array}$ | $\begin{array}{r} 91 \\ (14.3) \\ \hline \end{array}$ | $\begin{array}{r} 24 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 602 \\ (100.0) \\ \hline \end{array}$ |
| Bangladeshi | $\begin{array}{r} 28 \\ (12.0) \end{array}$ | $\begin{array}{r} 77 \\ (32.9) \end{array}$ | $\begin{array}{r} 104 \\ (38.9) \end{array}$ | $\begin{array}{r} 28 \\ (12.3) \end{array}$ | $\begin{array}{r} 9 \\ (4.0) \end{array}$ | $\begin{array}{r} 246 \\ (100.0) \end{array}$ |
| Black Caribbean | $\begin{array}{r} 38 \\ (19.1) \\ \hline \end{array}$ | $\begin{array}{r} 40 \\ (22.9) \\ \hline \end{array}$ | $\begin{array}{r} 57 \\ (34.0) \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ (20.7) \\ \hline \end{array}$ | $\begin{array}{r} 7 \\ (3.3) \\ \hline \end{array}$ | $\begin{array}{r} 172 \\ (100.0) \\ \hline \end{array}$ |
| Black African | $\begin{array}{r} 67 \\ (24.1) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (35.5) \\ \hline \end{array}$ | $\begin{array}{r} 75 \\ (32.3) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 6 \\ (3.0) \\ \hline \end{array}$ | $\begin{array}{r} 265 \\ (100.0) \\ \hline \end{array}$ |
| Continued |  |  |  |  |  |  |

[^25]Table 10.13: Mother's General Health by selected background characteristics MCS4

|  | Excellent | Very Good | Good | Fair | Poor | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | $\begin{array}{r} 52 \\ (18.3) \end{array}$ | $\begin{array}{r} 77 \\ (32.7) \\ \hline \end{array}$ | $\begin{array}{r} 80 \\ (33.3) \end{array}$ | $\begin{array}{r} 26 \\ (12.7) \\ \hline \end{array}$ | $\begin{array}{r} 6 \\ (3.0) \\ \hline \end{array}$ | $\begin{array}{r} 241 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (22.3) | (35.2) | (29.5) | (10.2) | (2.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 3096 \\ (3010) \\ \hline \end{array}$ | $\begin{array}{r} 4800 \\ (4755) \\ \hline \end{array}$ | $\begin{array}{r} 3980 \\ (3989) \\ \hline \end{array}$ | $\begin{array}{r} 1328 \\ (1375) \\ \hline \end{array}$ | $\begin{array}{r} 368 \\ (390) \\ \hline \end{array}$ | $\begin{array}{r} 13572 \\ (13519) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Income Above 60\% Median Value | $\begin{array}{r} 2421 \\ (24.5) \\ \hline \end{array}$ | $\begin{array}{r} 3635 \\ (38.4) \\ \hline \end{array}$ | $\begin{array}{r} 2583 \\ (27.6) \\ \hline \end{array}$ | $\begin{array}{r} 691 \\ (7.5) \\ \hline \end{array}$ | $\begin{array}{r} 186 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 9516 \\ (100.0) \\ \hline \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 676 \\ (16.8) \\ \hline \end{array}$ | $\begin{array}{r} 1162 \\ (27.3) \\ \hline \end{array}$ | $\begin{array}{r} 1392 \\ (34.2) \\ \hline \end{array}$ | $\begin{array}{r} 636 \\ (16.8) \\ \hline \end{array}$ | $\begin{array}{r} 182 \\ (4.9) \\ \hline \end{array}$ | $\begin{array}{r} 4048 \\ (100.0) \\ \hline \end{array}$ |
| Total Percent | (22.3) | (35.2) | (29.5) | (10.2) | (2.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 3097 \\ (3011) \\ \hline \end{array}$ | $\begin{array}{r} 4797 \\ (4752) \\ \hline \end{array}$ | $\begin{array}{r} 3975 \\ (3986) \\ \hline \end{array}$ | $\begin{array}{r} 1327 \\ (1375) \\ \hline \end{array}$ | $\begin{array}{r} 368 \\ (390) \\ \hline \end{array}$ | $\begin{array}{r} 13564 \\ (13514) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Professional/ Managerial Job ${ }^{26}$ | $\begin{array}{r} 995 \\ (30.4) \\ \hline \end{array}$ | $\begin{array}{r} 1263 \\ (39.2) \\ \hline \end{array}$ | $\begin{array}{r} 718 \\ (23.4) \\ \hline \end{array}$ | $\begin{array}{r} 178 \\ (5.8) \\ \hline \end{array}$ | $\begin{array}{r} 33 \\ (1.2) \end{array}$ | $\begin{array}{r} 3187 \\ (100.0) \\ \hline \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 1166 \\ (21.7) \end{array}$ | $\begin{array}{r} 1922 \\ (37.5) \end{array}$ | $\begin{array}{r} 1571 \\ (30.9) \end{array}$ | $\begin{array}{r} 422 \\ (8.7) \end{array}$ | $\begin{array}{r} 66 \\ (1.2) \end{array}$ | $\begin{array}{r} 5147 \\ (100.0) \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 936 \\ (18.1) \\ \hline \end{array}$ | $\begin{array}{r} 1616 \\ (30.6) \\ \hline \end{array}$ | $\begin{array}{r} 1691 \\ (31.7) \\ \hline \end{array}$ | $\begin{array}{r} 728 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 269 \\ (5.5) \\ \hline \end{array}$ | $\begin{array}{r} 5240 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (22.3) | (35.2) | (29.5) | (10.2) | (2.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 3097 \\ (3011) \\ \hline \end{array}$ | $\begin{array}{r} 4801 \\ (4756) \\ \hline \end{array}$ | $\begin{array}{r} 3980 \\ (3989) \\ \hline \end{array}$ | $\begin{array}{r} 1328 \\ (1375) \\ \hline \end{array}$ | $\begin{array}{r} 368 \\ (390) \\ \hline \end{array}$ | $\begin{array}{r} 13574 \\ (13521) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |

Notes: Using weight dovwt2 (except dovwt1 for country panel) and displaying unweighted cell size, weighted percentage in parentheses, followed by weighted cell size. Sample includes natural/step/adoptive/foster mothers only (either main or partner respondents).

[^26]Table 10.14: Father's General Health by selected background characteristics MCS4

|  | Excellent | Very Good | Good | Fair | Poor | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{27}$ | $\begin{array}{r} 254 \\ (19.0) \\ \hline \end{array}$ | $\begin{array}{r} 354 \\ (27.3) \\ \hline \end{array}$ | $\begin{array}{r} 378 \\ (30.4) \\ \hline \end{array}$ | $\begin{array}{r} 189 \\ (16.8) \\ \hline \end{array}$ | $\begin{array}{r} 76 \\ (6.6) \\ \hline \end{array}$ | $\begin{array}{r} 1251 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L1 (< 5 GCSE A-C) | $\begin{array}{r} 98 \\ (16.9) \end{array}$ | $\begin{array}{r} 170 \\ (30.9) \end{array}$ | $\begin{array}{r} 174 \\ (33.2) \end{array}$ | $\begin{array}{r} 79 \\ (14.3) \end{array}$ | $\begin{array}{r} 21 \\ (4.8) \end{array}$ | $\begin{array}{r} 542 \\ (100.0) \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 A-Level) | $\begin{array}{r} 472 \\ (20.2) \\ \hline \end{array}$ | $\begin{array}{r} 856 \\ (36.7) \\ \hline \end{array}$ | $\begin{array}{r} 649 \\ (29.9) \\ \hline \end{array}$ | $\begin{array}{r} 228 \\ (10.6) \\ \hline \end{array}$ | $\begin{array}{r} 62 \\ (2.7) \\ \hline \end{array}$ | $\begin{array}{r} 2267 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 324 \\ (22.5) \\ \hline \end{array}$ | $\begin{array}{r} 534 \\ (37.6) \\ \hline \end{array}$ | $\begin{array}{r} 381 \\ (29.0) \\ \hline \end{array}$ | $\begin{array}{r} 119 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 28 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 1386 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 767 \\ (27.6) \\ \hline \end{array}$ | $\begin{array}{r} 1055 \\ (39.1) \end{array}$ | $\begin{array}{r} 659 \\ (24.1) \end{array}$ | $\begin{array}{r} 201 \\ (7.7) \end{array}$ | $\begin{array}{r} 39 \\ (1.5) \end{array}$ | $\begin{array}{r} 2721 \\ (100.0) \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 313 \\ (30.6) \\ \hline \end{array}$ | $\begin{array}{r} 389 \\ (38.4) \\ \hline \end{array}$ | $\begin{array}{r} 239 \\ (23.0) \\ \hline \end{array}$ | $\begin{array}{r} 66 \\ (6.9) \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ (1.1) \\ \hline \end{array}$ | $\begin{array}{r} 1016 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (23.5) | (36.2) | (27.5) | (10.1) | (2.7) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 2228 \\ (2125) \end{array}$ | $\begin{array}{r} 3358 \\ (3271) \\ \hline \end{array}$ | $\begin{array}{r} 2480 \\ (2490) \\ \hline \end{array}$ | $\begin{array}{r} 882 \\ (913) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (242) \end{array}$ | $\begin{array}{r} 9183 \\ (9040) \\ \hline \end{array}$ |
|  |  |  |  |  |  | p<0.001 |
| England | $\begin{array}{r} 1335 \\ (22.7) \\ \hline \end{array}$ | $\begin{array}{r} 2123 \\ (35.8) \\ \hline \end{array}$ | $\begin{array}{r} 1687 \\ (28.4) \\ \hline \end{array}$ | $\begin{array}{r} 614 \\ (10.4) \\ \hline \end{array}$ | $\begin{array}{r} 168 \\ (2.8) \\ \hline \end{array}$ | $\begin{array}{r} 5927 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 337 \\ (26.1) \\ \hline \end{array}$ | $\begin{array}{r} 505 \\ (38.4) \\ \hline \end{array}$ | $\begin{array}{r} 329 \\ (24.4) \\ \hline \end{array}$ | $\begin{array}{r} 121 \\ (8.8) \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 1322 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 303 \\ (26.9) \end{array}$ | $\begin{array}{r} 434 \\ (39.5) \\ \hline \end{array}$ | $\begin{array}{r} 253 \\ (23.0) \\ \hline \end{array}$ | $\begin{array}{r} 87 \\ (8.6) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (2.0) \end{array}$ | $\begin{array}{r} 1096 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 253 \\ (30.6) \\ \hline \end{array}$ | $\begin{array}{r} 299 \\ (34.8) \\ \hline \end{array}$ | $\begin{array}{r} 216 \\ (24.7) \end{array}$ | $\begin{array}{r} 61 \\ (7.8) \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ (2.1) \\ \hline \end{array}$ | $\begin{array}{r} 847 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (24.4) | (36.5) | (26.8) | (9.7) | (2.6) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 2228 \\ (2183) \end{array}$ | $\begin{array}{r} 3361 \\ (3269) \\ \hline \end{array}$ | $\begin{array}{r} 2485 \\ (2405) \\ \hline \end{array}$ | $\begin{array}{r} 883 \\ (873) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (229) \\ \hline \end{array}$ | $\begin{array}{r} 9192 \\ (8960) \\ \hline \end{array}$ |
|  |  |  |  |  |  | p<0.001 |
| Two Natural Parents | $\begin{gathered} 2091 \\ (24.8) \end{gathered}$ | $\begin{array}{r} 3131 \\ (36.7) \end{array}$ | $\begin{array}{r} 2295 \\ (26.8) \end{array}$ | $\begin{array}{r} 792 \\ (9.4) \end{array}$ | $\begin{array}{r} 205 \\ (2.3) \end{array}$ | $\begin{array}{r} 8514 \\ (100.0) \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 123 \\ (20.4) \\ \hline \end{array}$ | $\begin{array}{r} 198 \\ (35.0) \\ \hline \end{array}$ | $\begin{array}{r} 156 \\ (26.7) \end{array}$ | $\begin{array}{r} 74 \\ (13.2) \end{array}$ | $\begin{array}{r} 25 \\ (4.8) \\ \hline \end{array}$ | $\begin{array}{r} 576 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 14 \\ (18.1) \end{array}$ | $\begin{array}{r} 32 \\ (30.9) \\ \hline \end{array}$ | $\begin{array}{r} 34 \\ (32.9) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (12.8) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 102 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (24.4) | (36.5) | (26.8) | (9.7) | (2.6) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 2228 \\ (2183) \\ \hline \end{array}$ | $\begin{array}{r} 3361 \\ (3269) \\ \hline \end{array}$ | $\begin{array}{r} 2485 \\ (2405) \end{array}$ | $\begin{array}{r} 883 \\ (873) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (229) \\ \hline \end{array}$ | $\begin{array}{r} 9192 \\ (8960) \\ \hline \end{array}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.001$ |
| White | $\begin{array}{r} 1933 \\ (23.6) \\ \hline \end{array}$ | $\begin{array}{r} 2948 \\ (36.8) \\ \hline \end{array}$ | $\begin{array}{r} 2099 \\ (27.1) \\ \hline \end{array}$ | $\begin{array}{r} 741 \\ (10.0) \\ \hline \end{array}$ | $\begin{array}{r} 188 \\ (2.6) \\ \hline \end{array}$ | $\begin{array}{r} 7909 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 15 \\ (24.3) \end{array}$ | $\begin{array}{r} 26 \\ (41.2) \end{array}$ | $\begin{array}{r} 10 \\ (18.2) \end{array}$ | $\begin{array}{r} 8 \\ (9.5) \end{array}$ | 4 $(6.8)$ | $\begin{array}{r} 63 \\ (100.0) \end{array}$ |
| Indian | $\begin{array}{r} 52 \\ (19.1) \\ \hline \end{array}$ | $\begin{array}{r} 96 \\ (38.0) \\ \hline \end{array}$ | $\begin{array}{r} 86 \\ (30.8) \\ \hline \end{array}$ | $\begin{array}{r} 21 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ (3.1) \\ \hline \end{array}$ | $\begin{array}{r} 264 \\ (100.0) \\ \hline \end{array}$ |
| Pakistani | $\begin{array}{r} 85 \\ (22.6) \\ \hline \end{array}$ | $\begin{array}{r} 135 \\ (30.5) \\ \hline \end{array}$ | $\begin{array}{r} 119 \\ (28.6) \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ (13.2) \\ \hline \end{array}$ | $\begin{array}{r} 20 \\ (5.1) \\ \hline \end{array}$ | $\begin{array}{r} 415 \\ (100.0) \\ \hline \end{array}$ |
| Bangladeshi | $\begin{array}{r} 35 \\ (23.2) \end{array}$ | $\begin{array}{r} 37 \\ (21.7) \end{array}$ | $\begin{array}{r} 58 \\ (36.3) \end{array}$ | $\begin{array}{r} 23 \\ (15.6) \end{array}$ | 6 $(3.2)$ | $\begin{array}{r} 159 \\ (100.0) \end{array}$ |
| Continued |  |  |  |  |  |  |

[^27]Table 10.14: Father's General Health by selected background characteristics MCS4

|  | Excellent | Very Good | Good | Fair | Poor | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Black Caribbean | $\begin{array}{r} 19 \\ (21.4) \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ (25.6) \\ \hline \end{array}$ | $\begin{array}{r} 28 \\ (37.3) \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ (15.2) \\ \hline \end{array}$ | 1 $(0.5)$ | $\begin{array}{r} 84 \\ (100.0) \\ \hline \end{array}$ |
| Black African | $\begin{array}{r} 47 \\ (33.6) \end{array}$ | $\begin{array}{r} 42 \\ (33.0) \end{array}$ | $\begin{array}{r} 30 \\ (29.0) \end{array}$ | $\begin{array}{r} 5 \\ (2.2) \end{array}$ | $\begin{array}{r} 3 \\ (2.2) \end{array}$ | $\begin{array}{r} 127 \\ (100.0) \end{array}$ |
| Other | $\begin{array}{r} 41 \\ (18.3) \end{array}$ | $\begin{array}{r} 49 \\ (31.1) \end{array}$ | $\begin{array}{r} 55 \\ (38.4) \end{array}$ | $\begin{array}{r} 19 \\ (10.4) \end{array}$ | $\begin{array}{r} 4 \\ (1.9) \\ \hline \end{array}$ | $\begin{array}{r} 168 \\ (100.0) \end{array}$ |
| Total Percentage | (23.6) | (36.8) | (27.1) | (10.0) | (2.6) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 2227 \\ (2124) \end{array}$ | $\begin{array}{r} 3359 \\ (3271) \\ \hline \end{array}$ | $\begin{array}{r} 2485 \\ (2495) \\ \hline \end{array}$ | $\begin{array}{r} 883 \\ (915) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (242) \\ \hline \end{array}$ | $\begin{array}{r} 9189 \\ (9045) \\ \hline \end{array}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.001$ |
| Income Above 60\% Median Value | $\begin{array}{r} 1867 \\ (24.4) \\ \hline \end{array}$ | $\begin{array}{r} 2879 \\ (38.4) \end{array}$ | $\begin{array}{r} 1959 \\ (27.2) \\ \hline \end{array}$ | $\begin{array}{r} 594 \\ (8.5) \\ \hline \end{array}$ | $\begin{array}{r} 108 \\ (1.6) \\ \hline \end{array}$ | $\begin{array}{r} 7407 \\ (100.0) \\ \hline \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 361 \\ (19.5) \\ \hline \end{array}$ | $\begin{array}{r} 480 \\ (25.9) \\ \hline \end{array}$ | $\begin{array}{r} 523 \\ (29.4) \\ \hline \end{array}$ | $\begin{array}{r} 287 \\ (17.3) \end{array}$ | $\begin{array}{r} 127 \\ (7.8) \end{array}$ | $\begin{array}{r} 1778 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (23.5) | (36.2) | (27.6) | (10.1) | (2.7) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 2228 \\ (2125) \\ \hline \end{array}$ | $\begin{array}{r} 3359 \\ (3272) \\ \hline \end{array}$ | $\begin{array}{r} 2482 \\ (2492) \\ \hline \end{array}$ | $\begin{array}{r} 881 \\ (913) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (241) \\ \hline \end{array}$ | $\begin{array}{r} 9185 \\ (9044) \\ \hline \end{array}$ |
|  |  |  |  |  |  | $\mathrm{p}<0.001$ |
| Professional/ ${ }^{28}$ Managerial Job | $\begin{array}{r} 1038 \\ (27.0) \end{array}$ | $\begin{aligned} & 1468 \\ & (40.3) \end{aligned}$ | $\begin{array}{r} 881 \\ (24.4) \end{array}$ | $\begin{array}{r} 257 \\ (7.4) \end{array}$ | $\begin{array}{r} 31 \\ (0.9) \end{array}$ | $\begin{array}{r} 3675 \\ (100.0) \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 1020 \\ (21.8) \\ \hline \end{array}$ | $\begin{array}{r} 1648 \\ (35.6) \\ \hline \end{array}$ | $\begin{array}{r} 1338 \\ (30.6) \end{array}$ | $\begin{array}{r} 434 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 73 \\ (1.7) \\ \hline \end{array}$ | $\begin{array}{r} 4513 \\ (100.0) \\ \hline \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 170 \\ (17.6) \\ \hline \end{array}$ | $\begin{array}{r} 245 \\ (23.1) \end{array}$ | $\begin{array}{r} 266 \\ (26.2) \end{array}$ | $\begin{array}{r} 192 \\ (19.4) \end{array}$ | $\begin{array}{r} 131 \\ (13.8) \\ \hline \end{array}$ | $\begin{array}{r} 1004 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (23.5) | (36.2) | (27.6) | (10.1) | (2.7) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 2228 \\ (2125) \end{array}$ | $\begin{array}{r} 3361 \\ (3274) \end{array}$ | $\begin{array}{r} 2485 \\ (2495) \end{array}$ | $\begin{array}{r} 883 \\ (915) \end{array}$ | $\begin{array}{r} 235 \\ (241) \end{array}$ | $\begin{array}{r} 9192 \\ (9049) \end{array}$ |
|  |  |  |  |  |  | $\mathrm{p}<0.001$ |

Notes: Using weight dovwt2 (except dovwt1 for country table) and displaying unweighted cell size, weighted
percentage in parentheses, followed by weighted cell size. Sample includes natural/step/adoptive/foster fathers only including those lone fathers who were main respondent (either main or partner, one per family).

[^28]Figure 10.8: Percentage of Mothers and Fathers in Fair or Poor Health by Age Group at MCS4 in 2008


Teenage at birth of CM refers to parents who were aged under 20 at the time of the birth of the MCS child
Notes: See Tables 10.1 and 10.2.

Table 10.15: Mother's General Health by Father's General Health MCS4

|  |  | Mother's General Health |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excellent | Very Good | Good | Fair | Poor | Total |
|  | Excellent | $\begin{array}{r} 787 \\ (33.8) \\ \hline \end{array}$ | $\begin{array}{r} 801 \\ (36.9) \\ \hline \end{array}$ | $\begin{array}{r} 447 \\ (20.9) \end{array}$ | $\begin{array}{r} 136 \\ (6.4) \end{array}$ | $\begin{array}{r} 39 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 2210 \\ (100.0) \\ \hline \end{array}$ |
|  | Very Good | $\begin{array}{r} 772 \\ (22.8) \\ \hline \end{array}$ | $\begin{array}{r} 1325 \\ (39.3) \\ \hline \end{array}$ | $\begin{array}{r} 855 \\ (26.8) \\ \hline \end{array}$ | $\begin{array}{r} 281 \\ (9.1) \\ \hline \end{array}$ | $\begin{array}{r} 70 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 3303 \\ (100.0) \\ \hline \end{array}$ |
|  | Good | $\begin{array}{r} 466 \\ (18.5) \end{array}$ | $\begin{array}{r} 886 \\ (35.5) \end{array}$ | $\begin{array}{r} 832 \\ (32.9) \end{array}$ | $\begin{array}{r} 257 \\ (10.2) \end{array}$ | $\begin{array}{r} 66 \\ (2.8) \end{array}$ | $\begin{array}{r} 2507 \\ (100.0) \\ \hline \end{array}$ |
|  | Fair | $\begin{array}{r} 132 \\ (16.2) \\ \hline \end{array}$ | $\begin{array}{r} 216 \\ (26.3) \\ \hline \end{array}$ | $\begin{array}{r} 244 \\ (31.9) \\ \hline \end{array}$ | $\begin{array}{r} 142 \\ (21.0) \\ \hline \end{array}$ | $\begin{array}{r} 33 \\ (4.5) \\ \hline \end{array}$ | $\begin{array}{r} 767 \\ (100.0) \\ \hline \end{array}$ |
|  | Poor | $\begin{array}{r} 40 \\ (18.3) \\ \hline \end{array}$ | $\begin{array}{r} 71 \\ (28.7) \\ \hline \end{array}$ | $\begin{array}{r} 54 \\ (24.8) \\ \hline \end{array}$ | $\begin{array}{r} 41 \\ (19.5) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (8.7) \\ \hline \end{array}$ | $\begin{array}{r} 225 \\ (100.0) \\ \hline \end{array}$ |
|  | Total Percent | $\begin{array}{r} 2197 \\ (23.6) \end{array}$ | $\begin{array}{r} 3299 \\ (36.2) \end{array}$ | $\begin{array}{r} 2432 \\ (27.5) \end{array}$ | $\begin{array}{r} 857 \\ (10.1) \end{array}$ | $\begin{array}{r} 227 \\ (2.6) \end{array}$ | $\begin{array}{r} 9012 \\ (100.0) \end{array}$ |
|  | Observed Number Weighted Number | $\begin{array}{r} 2197 \\ (2084) \\ \hline \end{array}$ | $\begin{array}{r} 3299 \\ (3201) \\ \hline \end{array}$ | $\begin{array}{r} 2432 \\ (2428) \\ \hline \end{array}$ | $\begin{array}{r} 857 \\ (890) \\ \hline \end{array}$ | $\begin{array}{r} 227 \\ (233) \\ \hline \end{array}$ | $\begin{array}{r} 9012 \\ (8834) \\ \hline \end{array}$ |
|  | $\mathrm{p}<0.001$ |  |  |  |  |  |  |

[^29]Table 10.16: Mother's General Health over two surveys (2008 by 2006)

|  |  | Mother's General Health Age 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excellent | Very Good | Good | Fair | Poor | Total |
|  | Excellent | $\begin{array}{r} 1533 \\ (60.1) \\ \hline \end{array}$ | $\begin{array}{r} 768 \\ (28.3) \end{array}$ | $\begin{array}{r} 290 \\ (9.43) \end{array}$ | $\begin{array}{r} 55 \\ (1.65) \\ \hline \end{array}$ | $\begin{array}{r} 12 \\ (0.501) \end{array}$ | $\begin{aligned} & \hline 2658 \\ & (100) \\ & \hline \end{aligned}$ |
|  | Very Good | $\begin{array}{r} 1053 \\ (21.9) \\ \hline \end{array}$ | $\begin{array}{r} 2349 \\ (50.7) \\ \hline \end{array}$ | $\begin{array}{r} 1140 \\ (22.9) \\ \hline \end{array}$ | $\begin{array}{r} 182 \\ (3.79) \\ \hline \end{array}$ | $\begin{array}{r} 37 \\ (0.753) \\ \hline \end{array}$ | $\begin{array}{r} \hline 4761 \\ (100) \\ \hline \end{array}$ |
|  | Good | $\begin{array}{r} 318 \\ (8.18) \end{array}$ | $\begin{array}{r} 1186 \\ (32.4) \end{array}$ | $\begin{array}{r} 1731 \\ (47.3) \end{array}$ | $\begin{array}{r} 411 \\ (10.7) \end{array}$ | $\begin{array}{r} 60 \\ (1.43) \end{array}$ | $\begin{array}{r} 3706 \\ (100) \\ \hline \end{array}$ |
|  | Fair | $\begin{array}{r} 58 \\ (3.22) \end{array}$ | $\begin{aligned} & \hline 224 \\ & (15) \\ & \hline \end{aligned}$ | $\begin{array}{r} 541 \\ (39.6) \end{array}$ | $\begin{array}{r} 472 \\ (34.2) \end{array}$ | $\begin{array}{r} 113 \\ (7.95) \end{array}$ | $\begin{aligned} & 1408 \\ & (100) \end{aligned}$ |
|  | Poor | $\begin{array}{r} 8 \\ (1.95) \end{array}$ | $\begin{array}{r} 37 \\ (10.1) \end{array}$ | $\begin{array}{r} 65 \\ (17.6) \end{array}$ | $\begin{array}{r} 127 \\ (33.1) \end{array}$ | $\begin{array}{r} 124 \\ (37.2) \end{array}$ | $\begin{array}{r} 361 \\ (100) \end{array}$ |
|  | Total Percentage | $\begin{array}{r} 2970 \\ (23.7) \end{array}$ | $\begin{array}{r} 4564 \\ (36.2) \end{array}$ | $\begin{array}{r} 3767 \\ (28.5) \end{array}$ | $\begin{array}{r} 1247 \\ (9.12) \end{array}$ | $\begin{array}{r} 346 \\ (2.57) \end{array}$ | $\begin{array}{r} 12894 \\ (100) \end{array}$ |
|  | Observed Number Weighted Number | $\begin{aligned} & 2970 \\ & 3180 \end{aligned}$ | $\begin{aligned} & 4564 \\ & 4861 \end{aligned}$ | $\begin{aligned} & 3767 \\ & 3828 \end{aligned}$ | $\begin{aligned} & 1247 \\ & 1226 \end{aligned}$ | 346 345 | $\begin{aligned} & 12894 \\ & 13440 \end{aligned}$ |
|  | $\mathrm{p}<0.001$ |  |  |  |  |  |  |

Notes: Displaying unweighted cell size, weighted percentage in parentheses, followed by weighted cell size. Sample includes natural/step/adoptive/foster mothers only (either main or partner respondents). Sample confined to mothers present at both age 5 and age 7 sweeps. Analysis that uses information from different sweeps in this chapter uses original sample weight (weight2); results were cross checked using latest attrition weights with the overall trends remaining.

Table 10.17: Father's General Health over two surveys (2008 by 2006)

|  |  | Father's General Health Age 2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excellent | Very Good | Good | Fair | Poor | Total |
| Father's General Health Age 2006 | Excellent | $\begin{aligned} & 1154 \\ & (60.2) \end{aligned}$ | $\begin{array}{r} 570 \\ (29.6) \end{array}$ | $\begin{array}{r} 167 \\ (8.55) \end{array}$ | $\begin{array}{r} 27 \\ (1.21) \end{array}$ | $\begin{array}{r} 6 \\ (0.37) \end{array}$ | $\begin{aligned} & \hline 1924 \\ & (100) \end{aligned}$ |
|  | Very Good | $\begin{array}{r} 618 \\ (19.5) \end{array}$ | $\begin{gathered} 1677 \\ (53.8) \end{gathered}$ | $\begin{array}{r} 741 \\ (22.7) \end{array}$ | $\begin{array}{r} 118 \\ (3.43) \end{array}$ | $\begin{array}{r} 22 \\ (0.543) \end{array}$ | $\begin{aligned} & 3176 \\ & (100) \end{aligned}$ |
|  | Good | $\begin{array}{r} 174 \\ (6.98) \end{array}$ | $\begin{aligned} & 651 \\ & (29) \end{aligned}$ | $\begin{array}{r} 1036 \\ (47.8) \end{array}$ | $\begin{array}{r} 312 \\ (14.8) \end{array}$ | $\begin{array}{r} 37 \\ (1.46) \end{array}$ | $\begin{aligned} & 2210 \\ & (100) \end{aligned}$ |
|  | Fair | $\begin{array}{r} 31 \\ (3.93) \end{array}$ | $\begin{array}{r} 98 \\ (13.2) \end{array}$ | $\begin{array}{r} 229 \\ (34.9) \end{array}$ | $\begin{array}{r} 251 \\ (38.2) \end{array}$ | $\begin{array}{r} \hline 62 \\ (9.73) \end{array}$ | $\begin{array}{r} 671 \\ (100) \end{array}$ |
|  | Poor | $\begin{array}{r} 8 \\ (3.55) \end{array}$ | $\begin{array}{r} 10 \\ (7.36) \end{array}$ | $\begin{array}{r} \hline 29 \\ (18) \end{array}$ | $\begin{array}{r} 50 \\ (26.7) \end{array}$ | $\begin{array}{r} 80 \\ (44.3) \end{array}$ | $\begin{array}{r} 177 \\ (100) \end{array}$ |
|  | Total Percent | $\begin{array}{r} 1985 \\ (24.1) \end{array}$ | $\begin{array}{r} 3006 \\ (37.3) \end{array}$ | $\begin{array}{r} 2202 \\ (27) \end{array}$ | $\begin{array}{r} 758 \\ (9.25) \end{array}$ | $\begin{array}{r} 207 \\ (2.36) \end{array}$ | $\begin{aligned} & 8158 \\ & (100) \end{aligned}$ |
|  | Observed Number <br> Weighted Number | $\begin{aligned} & 1985 \\ & 2179 \end{aligned}$ | $\begin{aligned} & 3006 \\ & 3363 \end{aligned}$ | $\begin{aligned} & 2202 \\ & 2435 \end{aligned}$ | 758 834 | $\begin{aligned} & 207 \\ & 213 \end{aligned}$ | $\begin{aligned} & 8158 \\ & 9024 \end{aligned}$ |
|  |  |  |  |  |  |  | $\mathrm{p}<0.001$ |

Notes: see Table 10.2. Sample confined to fathers present at both age 5 and age 7 sweeps).

## Longstanding conditions (IIIness, infirmity, disability)

Longstanding illness, and particularly limiting longstanding illness that prevents labour market participation, became a focus for the previous government in a range of early intervention initiatives (Campbell et al., 2007). The motivation for these initiatives includes a government report that showed around a quarter of the working age population are not in employment, and of these, around 28 per cent are not in work because of longstanding illness (Black, 2008). In MCS4, 29 per cent of mothers not in work reported a longstanding condition (although not necessarily limiting, referred to as longstanding illness from this point onwards) as did 47 per cent of fathers not in employment ${ }^{29}$. More generally, approximately a quarter of mothers and fathers reported a longstanding illness of some kind and 15 per cent of mothers and 13 per cent of fathers reported that this limited their work and/or study capabilities. As with self-rated health, the prevalence of illness and limiting illness varied significantly by social background characteristics (Table 10.6).

Again there was a strong socioeconomic gradient. For example, 19 per cent of mothers with no NVQ qualifications reported a limiting longstanding illness while only 11 per cent of mothers with higher degree-level qualifications did. Among fathers in the poverty income group, almost a quarter reported a limiting long-term illness compared to only one in ten of fathers in families above this threshold. Among family types, the small number of lone fathers was most likely to report illness. There were no significant country differences in the prevalence of illness. While Bangladeshi mothers were least likely to report good health (Table 10.1) they were among the least likely ethnic groups to report a longstanding illness. Black African mothers reported high levels of self-rated health as well as low levels of illness. This may indicate cultural differences in the interpretation of health and illness. Similar results were observed in Bangladeshi mothers' reports of child health (Chapter 9).

Tables 10.7 and 10.8 show that illness is related to the amount of body pain experienced on a daily basis. However, it should also be noted that a substantial amount of those who experienced moderate, severe or very severe daily body pain did not consider themselves to have a longstanding illness (not shown).

Table 10.9 shows the relationship between illness among mothers and fathers in couples. Overall, among children growing up in two parent households, 59 per cent are in households where neither parent had a longstanding illness of any sort. However, 6 percent are in households where both parents had longstanding illnesses and 3 per cent in households where both parents had limiting illnesses. This could suggest a substantial proportion of MCS children may enter caring roles within their families in the future, if not currently.

[^30]Table 10.18: Mother's and Father's Illness by selected background characteristics MCS4

|  | Mother |  |  |  | Father |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No <br> Illness | Illness: <br> Not <br> Limiting | Limiting Illness | Total | No Illness | Illness: <br> Not <br> Limiting | Limiting IIIness | Total |
| No UK Qualifications ${ }^{30}$ | $\begin{array}{r} 1410 \\ (72.0) \\ \hline \end{array}$ | $\begin{array}{r} 152 \\ (8.8) \\ \hline \end{array}$ | $\begin{array}{r} 372 \\ (19.2) \\ \hline \end{array}$ | $\begin{array}{r} 1934 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 634 \\ (67.9) \\ \hline \end{array}$ | $\begin{array}{r} 90 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 185 \\ (21.8) \\ \hline \end{array}$ | $\begin{array}{r} 909 \\ (100.0) \\ \hline \end{array}$ |
| $\begin{aligned} & \text { NVQ L1 (<5 GCSE } \\ & \text { A-C) } \end{aligned}$ | $\begin{array}{r} 689 \\ (75.4) \\ \hline \end{array}$ | $\begin{array}{r} 81 \\ (8.2) \\ \hline \end{array}$ | $\begin{array}{r} 158 \\ (16.4) \\ \hline \end{array}$ | $\begin{array}{r} 928 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 260 \\ (77.2) \\ \hline \end{array}$ | $\begin{array}{r} 27 \\ (7.6) \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ (15.2) \\ \hline \end{array}$ | $\begin{array}{r} 343 \\ (100.0) \\ \hline \end{array}$ |
| $\begin{aligned} & \hline \text { NVQ L2 (5 GCSE } \\ & \text { A-C/ } 1 \text { A-Level) } \\ & \hline \end{aligned}$ | $\begin{array}{r} 2604 \\ (73.0) \\ \hline \end{array}$ | $\begin{array}{r} 392 \\ (11.2) \\ \hline \end{array}$ | $\begin{array}{r} 568 \\ (15.8) \\ \hline \end{array}$ | $\begin{array}{r} 3564 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 411 \\ (74.9) \\ \hline \end{array}$ | $\begin{array}{r} 55 \\ (11.2) \\ \hline \end{array}$ | $\begin{array}{r} 76 \\ (13.9) \\ \hline \end{array}$ | $\begin{array}{r} 542 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ ALevel) | $\begin{array}{r} 1600 \\ (77.4) \end{array}$ | $\begin{array}{r} 192 \\ (8.8) \end{array}$ | $\begin{array}{r} 270 \\ (13.8) \end{array}$ | $\begin{array}{r} 2062 \\ (100.0) \end{array}$ | $\begin{array}{r} 1688 \\ (73.4) \end{array}$ | $\begin{array}{r} 264 \\ (12.1) \end{array}$ | $\begin{array}{r} 315 \\ (14.5) \end{array}$ | $\begin{array}{r} 2267 \\ (100.0) \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 3215 \\ (77.3) \\ \hline \end{array}$ | $\begin{array}{r} 434 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 503 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 4152 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 1063 \\ (76.5) \\ \hline \end{array}$ | $\begin{array}{r} 156 \\ (11.1) \\ \hline \end{array}$ | $\begin{array}{r} 166 \\ (12.4) \\ \hline \end{array}$ | $\begin{array}{r} 1385 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 722 \\ (78.9) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (10.4) \end{array}$ | $\begin{array}{r} 102 \\ (10.7) \\ \hline \end{array}$ | $\begin{array}{r} 922 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 2076 \\ (76.1) \\ \hline \end{array}$ | $\begin{array}{r} 348 \\ (13.5) \\ \hline \end{array}$ | $\begin{array}{r} 294 \\ (10.5) \\ \hline \end{array}$ | $\begin{array}{r} 2718 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (75.3) | (10.1) | (14.5) | (100.0) | (77.4) | (12.7) | (9.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10240 \\ (10175) \end{array}$ | $\begin{array}{r} 1349 \\ (1369) \end{array}$ | $\begin{array}{r} 1973 \\ (1963) \end{array}$ | $\begin{array}{r} 13562 \\ (13506) \end{array}$ | $\begin{array}{r} 6929 \\ (6763) \end{array}$ | $\begin{array}{r} 1064 \\ (1089) \end{array}$ | $\begin{array}{r} 1187 \\ (1189) \end{array}$ | $\begin{array}{r} 9180 \\ (9041) \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  | $\mathrm{p}<0.001$ |  |  |  |
| England | $\begin{array}{r} 6528 \\ (75.1) \\ \hline \end{array}$ | $\begin{array}{r} 867 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 1241 \\ (14.6) \\ \hline \end{array}$ | $\begin{array}{r} 8636 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 4409 \\ (74.3) \\ \hline \end{array}$ | $\begin{array}{r} 724 \\ (12.4) \\ \hline \end{array}$ | $\begin{array}{r} 794 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 5927 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 1460 \\ (74.2) \end{array}$ | $\begin{array}{r} 210 \\ (10.3) \end{array}$ | $\begin{array}{r} 319 \\ (15.5) \end{array}$ | $\begin{array}{r} 1989 \\ (100.0) \end{array}$ | $\begin{array}{r} 1018 \\ (77.6) \end{array}$ | $\begin{array}{r} 138 \\ (9.5) \end{array}$ | $\begin{array}{r} 164 \\ (12.9) \end{array}$ | $\begin{array}{r} 1320 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 1226 \\ (77.1) \\ \hline \end{array}$ | $\begin{array}{r} 160 \\ (9.8) \end{array}$ | $\begin{array}{r} 210 \\ (13.2) \\ \hline \end{array}$ | $\begin{array}{r} 1596 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 848 \\ (76.8) \\ \hline \end{array}$ | $\begin{array}{r} 122 \\ (11.4) \end{array}$ | $\begin{array}{r} 125 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 1095 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 1028 \\ (76.6) \\ \hline \end{array}$ | $\begin{array}{r} 113 \\ (8.3) \\ \hline \end{array}$ | $\begin{array}{r} 203 \\ (15.1) \\ \hline \end{array}$ | $\begin{array}{r} 1344 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 661 \\ (78.0) \\ \hline \end{array}$ | $\begin{array}{r} 81 \\ (10.0) \\ \hline \end{array}$ | $\begin{array}{r} 105 \\ (12.0) \\ \hline \end{array}$ | $\begin{array}{r} 847 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (75.4) | (10.0) | (14.6) | (100.0) | (75.4) | (11.6) | (13.0) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10242 \\ (10198) \\ \hline \end{array}$ | $\begin{array}{r} 1350 \\ (1356) \\ \hline \end{array}$ | $\begin{array}{r} 1973 \\ (1976) \\ \hline \end{array}$ | $\begin{array}{r} 13565 \\ (13531) \\ \hline \end{array}$ | $\begin{array}{r} 6936 \\ (6753) \\ \hline \end{array}$ | $\begin{array}{r} 1065 \\ (1043) \\ \hline \end{array}$ | $\begin{array}{r} 1188 \\ (1163) \\ \hline \end{array}$ | $\begin{array}{r} 9189 \\ (8959) \\ \hline \end{array}$ |
| $\mathrm{p}=0.240$ |  |  |  |  | P=0.046 |  |  |  |
| 2 Natural Parents | $\begin{array}{r} 7629 \\ (77.0) \end{array}$ | $\begin{array}{r} 992 \\ (10.2) \\ \hline \end{array}$ | $\begin{array}{r} 1268 \\ (12.8) \\ \hline \end{array}$ | $\begin{array}{r} 9889 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 6457 \\ (75.3) \end{array}$ | $\begin{array}{r} 997 \\ (12.3) \\ \hline \end{array}$ | $\begin{array}{r} 1057 \\ (12.4) \\ \hline \end{array}$ | $\begin{array}{r} 8511 \\ (100.0) \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 627 \\ (68.7) \\ \hline \end{array}$ | $\begin{array}{r} 95 \\ (12.0) \\ \hline \end{array}$ | $\begin{array}{r} 171 \\ (19.4) \\ \hline \end{array}$ | $\begin{array}{r} 893 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 418 \\ (70.8) \\ \hline \end{array}$ | $\begin{array}{r} 55 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 103 \\ (20.3) \\ \hline \end{array}$ | $\begin{array}{r} 576 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 1986 \\ (72.3) \\ \hline \end{array}$ | $\begin{array}{r} 263 \\ (9.2) \\ \hline \end{array}$ | $\begin{array}{r} 534 \\ (18.5) \\ \hline \end{array}$ | $\begin{array}{r} 2783 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 61 \\ (64.0) \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ (13.1) \\ \hline \end{array}$ | $\begin{array}{r} 28 \\ (22.9) \\ \hline \end{array}$ | $\begin{array}{r} 102 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (75.3) | (10.1) | (14.5) | (100.0) | (74.8) | (12.1) | (13.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10242 \\ (10178) \\ \hline \end{array}$ | $\begin{array}{r} 1350 \\ (1370) \\ \hline \end{array}$ | $\begin{array}{r} 1973 \\ (1963) \\ \hline \end{array}$ | $\begin{array}{r} 13565 \\ (13511) \\ \hline \end{array}$ | $\begin{array}{r} 6936 \\ (6768) \\ \hline \end{array}$ | $\begin{array}{r} 1065 \\ (1091) \\ \hline \end{array}$ | $\begin{array}{r} 1188 \\ (1190) \\ \hline \end{array}$ | $\begin{array}{r} 9189 \\ (9049) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  | $\mathrm{p}<0.001$ |  |  |  |
| White | $\begin{array}{r} 8638 \\ (74.4) \\ \hline \end{array}$ | $\begin{array}{r} 1214 \\ (10.7) \\ \hline \end{array}$ | $\begin{array}{r} 1719 \\ (14.9) \\ \hline \end{array}$ | $\begin{array}{r} \hline 11571 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 5950 \\ (74.4) \\ \hline \end{array}$ | $\begin{array}{r} 944 \\ (12.4) \\ \hline \end{array}$ | $\begin{array}{r} 1013 \\ (13.2) \\ \hline \end{array}$ | $\begin{array}{r} 7907 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 86 \\ (74.3) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (12.4) \\ \hline \end{array}$ | $\begin{array}{r} 120 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 51 \\ (84.2) \\ \hline \end{array}$ | $\begin{array}{r} 7 \\ (8.6) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (7.2) \\ \hline \end{array}$ | $\begin{array}{r} 63 \\ (100.0) \\ \hline \end{array}$ |
| Indian | $\begin{array}{r} 282 \\ (83.1) \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 41 \\ (11.6) \\ \hline \end{array}$ | $\begin{array}{r} 346 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 201 \\ (74.4) \\ \hline \end{array}$ | $\begin{array}{r} 28 \\ (13.6) \\ \hline \end{array}$ | $\begin{array}{r} 35 \\ (12.1) \\ \hline \end{array}$ | $\begin{array}{r} 264 \\ (100.0) \\ \hline \end{array}$ |
| Pakistani | $\begin{array}{r} 479 \\ (79.9) \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ (5.8) \end{array}$ | $\begin{array}{r} 87 \\ (14.4) \end{array}$ | $\begin{array}{r} 602 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 319 \\ (78.4) \\ \hline \end{array}$ | $\begin{array}{r} 32 \\ (7.3) \end{array}$ | $\begin{array}{r} 64 \\ (14.3) \end{array}$ | $\begin{array}{r} 415 \\ (100.0) \\ \hline \end{array}$ |
| Bangladeshi | $\begin{array}{r} 207 \\ (85.2) \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ (3.0) \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ (11.9) \\ \hline \end{array}$ | $\begin{array}{r} 246 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 119 \\ (77.0) \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ (13.9) \\ \hline \end{array}$ | $\begin{array}{r} 158 \\ (100.0) \\ \hline \end{array}$ |
| Black Caribbean | $\begin{array}{r} 131 \\ (78.3) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 22 \\ (9.9) \\ \hline \end{array}$ | $\begin{array}{r} 172 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 64 \\ (72.1) \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ (16.9) \\ \hline \end{array}$ | $\begin{array}{r} 84 \\ (100.0) \\ \hline \end{array}$ |
| Black African | $\begin{array}{r} 218 \\ (85.3) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (4.3) \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 265 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (81.2) \\ \hline \end{array}$ | $\begin{array}{r} 15 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (8.5) \\ \hline \end{array}$ | $\begin{array}{r} 127 \\ (100.0) \\ \hline \end{array}$ |
| Other | $\begin{array}{r} 201 \\ (84.2) \end{array}$ | $\begin{array}{r} 13 \\ (5.7) \end{array}$ | $\begin{array}{r} 27 \\ (10.1) \end{array}$ | $\begin{array}{r} 241 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 131 \\ (80.7) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (7.6) \end{array}$ | $\begin{array}{r} 23 \\ (11.7) \\ \hline \end{array}$ | $\begin{array}{r} 168 \\ (100.0) \\ \hline \end{array}$ |

[^31]Table 10.18: Mother's and Father's Illness by selected background characteristics MCS4

|  | Mother |  |  |  | Father |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No Illness | Illness: Not Limiting | Limiting Illness | Total | No Illness | Illness: <br> Not <br> Limiting | Limiting Illness | Total |
| Continued |  |  |  |  |  |  |  |  |
| Total Percentage | (75.3) | (10.1) | (14.5) | (100.0) | (74.8) | (12.1) | (13.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10242 \\ (10178) \\ \hline \end{array}$ | $\begin{array}{r} 1348 \\ (1368) \end{array}$ | $\begin{array}{r} 1973 \\ (1963) \\ \hline \end{array}$ | $\begin{array}{r} 13563 \\ (13509) \\ \hline \end{array}$ | $\begin{array}{r} 6933 \\ (6764) \end{array}$ | $\begin{array}{r} 1065 \\ (1091) \end{array}$ | $\begin{array}{r} 1188 \\ (1190) \\ \hline \end{array}$ | $\begin{array}{r} 9186 \\ (9045) \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  | $\mathrm{p}=0.260$ |  |  |  |
| Income Above 60\% Median Value | $\begin{array}{r} 7355 \\ (76.9) \\ \hline \end{array}$ | $\begin{array}{r} 979 \\ (10.6) \\ \hline \end{array}$ | $\begin{array}{r} 1176 \\ (12.5) \\ \hline \end{array}$ | $\begin{array}{r} 9510 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 5737 \\ (76.9) \\ \hline \end{array}$ | $\begin{array}{r} 894 \\ (12.5) \\ \hline \end{array}$ | $\begin{array}{r} 772 \\ (10.6) \\ \hline \end{array}$ | $\begin{array}{r} 7403 \\ (100.0) \\ \hline \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 2879 \\ (71.3) \\ \hline \end{array}$ | $\begin{array}{r} 371 \\ (9.1) \\ \hline \end{array}$ | $\begin{array}{r} 795 \\ (19.6) \\ \hline \end{array}$ | $\begin{array}{r} 4045 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 1193 \\ (64.8) \\ \hline \end{array}$ | $\begin{array}{r} 170 \\ (9.9) \\ \hline \end{array}$ | $\begin{array}{r} 416 \\ (25.3) \\ \hline \end{array}$ | $\begin{array}{r} 1779 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (75.3) | (10.1) | (14.5) | (100.0) | (74.8) | (12.1) | (13.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10234 \\ (10172) \end{array}$ | $\begin{array}{r} 1350 \\ (1370) \end{array}$ | $\begin{array}{r} 1971 \\ (1962) \end{array}$ | $\begin{array}{r} 13555 \\ (13504) \end{array}$ | $\begin{array}{r} 6930 \\ (6763) \end{array}$ | $\begin{array}{r} 1064 \\ (1091) \end{array}$ | $\begin{array}{r} 1188 \\ (1190) \end{array}$ | $\begin{array}{r} 9182 \\ (9044) \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  | $\mathrm{p}<0.001$ |  |  |  |
| Professional/ Managerial Job | $\begin{array}{r} 2514 \\ (78.6) \\ \hline \end{array}$ | $\begin{array}{r} 354 \\ (11.4) \\ \hline \end{array}$ | $\begin{array}{r} 318 \\ (10.0) \\ \hline \end{array}$ | $\begin{array}{r} 3186 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 2864 \\ (77.2) \\ \hline \end{array}$ | $\begin{array}{r} 467 \\ (13.2) \\ \hline \end{array}$ | $\begin{array}{r} \hline 342 \\ (9.6) \\ \hline \end{array}$ | $\begin{array}{r} 3673 \\ (100.0) \\ \hline \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 4024 \\ (77.7) \end{array}$ | $\begin{array}{r} 544 \\ (10.9) \end{array}$ | $\begin{array}{r} 576 \\ (11.4) \end{array}$ | $\begin{array}{r} 5144 \\ (100.0) \end{array}$ | $\begin{array}{r} 3500 \\ (76.9) \end{array}$ | $\begin{array}{r} 511 \\ (11.8) \end{array}$ | $\begin{array}{r} 501 \\ (11.3) \end{array}$ | $\begin{array}{r} 4512 \\ (100.0) \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 3704 \\ (71.1) \\ \hline \end{array}$ | $\begin{array}{r} 452 \\ (8.7) \\ \hline \end{array}$ | $\begin{array}{r} 1079 \\ (20.2) \\ \hline \end{array}$ | $\begin{array}{r} 5235 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 572 \\ (56.0) \\ \hline \end{array}$ | $\begin{array}{r} 87 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 345 \\ (35.0) \\ \hline \end{array}$ | $\begin{array}{r} 1004 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (75.3) | (10.1) | (14.5) | (100.0) | (74.8) | (12.1) | (13.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10242 \\ (10178) \\ \hline \end{array}$ | $\begin{array}{r} 1350 \\ (1370) \\ \hline \end{array}$ | $\begin{array}{r} 1973 \\ (1963) \\ \hline \end{array}$ | $\begin{array}{r} 13565 \\ (13511) \\ \hline \end{array}$ | $\begin{array}{r} 6936 \\ (6768) \\ \hline \end{array}$ | $\begin{array}{r} 1065 \\ (1091) \\ \hline \end{array}$ | $\begin{array}{r} 1188 \\ (1190) \\ \hline \end{array}$ | $\begin{array}{r} 9189 \\ (9049) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  | $\mathrm{p}<0.001$ |  |  |  |
| Teenage at birth of CM | $\begin{array}{r} 720 \\ (77.0) \\ \hline \end{array}$ | $\begin{array}{r} 65 \\ (8.1) \\ \hline \end{array}$ | $\begin{array}{r} 127 \\ (14.9) \\ \hline \end{array}$ | $\begin{array}{r} 912 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 131 \\ (74.5) \\ \hline \end{array}$ | $\begin{array}{r} 13 \\ (9.1) \\ \hline \end{array}$ | $\begin{array}{r} 22 \\ (16.4) \\ \hline \end{array}$ | $\begin{array}{r} 166 \\ (100.0) \\ \hline \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 1782 \\ (75.7) \end{array}$ | $\begin{array}{r} 185 \\ (8.2) \end{array}$ | $\begin{array}{r} 368 \\ (16.1) \end{array}$ | $\begin{array}{r} 2335 \\ (100.0) \end{array}$ | $\begin{array}{r} 628 \\ (77.9) \end{array}$ | $\begin{array}{r} 73 \\ (9.8) \end{array}$ | $\begin{array}{r} 89 \\ (12.3) \end{array}$ | $\begin{array}{r} 790 \\ (100.0) \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 2787 \\ (75.7) \\ \hline \end{array}$ | $\begin{array}{r} 371 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 523 \\ (14.0) \end{array}$ | $\begin{array}{r} 3681 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 1510 \\ (77.7) \\ \hline \end{array}$ | $\begin{array}{r} 181 \\ (10.1) \end{array}$ | $\begin{array}{r} 231 \\ (12.2) \end{array}$ | $\begin{array}{r} 1922 \\ (100.0) \\ \hline \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 3190 \\ (76.4) \end{array}$ | $\begin{array}{r} 439 \\ (10.5) \\ \hline \end{array}$ | $\begin{array}{r} 553 \\ (13.0) \\ \hline \end{array}$ | $\begin{array}{r} 4182 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 2445 \\ (77.3) \\ \hline \end{array}$ | $\begin{array}{r} 348 \\ (11.7) \\ \hline \end{array}$ | $\begin{array}{r} 343 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 3136 \\ (100.0) \\ \hline \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 1763 \\ (71.8) \\ \hline \end{array}$ | $\begin{array}{r} 290 \\ (12.1) \\ \hline \end{array}$ | $\begin{array}{r} 402 \\ (16.1) \\ \hline \end{array}$ | $\begin{array}{r} 2455 \\ (100.0) \\ \hline \end{array}$ | $\begin{array}{r} 2222 \\ (69.8) \\ \hline \end{array}$ | $\begin{array}{r} 450 \\ (14.4) \\ \hline \end{array}$ | $\begin{array}{r} 503 \\ (15.8) \\ \hline \end{array}$ | $\begin{array}{r} 3175 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (75.3) | (10.1) | (14.5) | (100.0) | (74.8) | (12.1) | (13.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 10242 \\ (10178) \\ \hline \end{array}$ | $\begin{array}{r} 1350 \\ (1370) \\ \hline \end{array}$ | $\begin{array}{r} 1973 \\ (1963) \\ \hline \end{array}$ | $\begin{array}{r} 13565 \\ (13511) \\ \hline \end{array}$ | $\begin{array}{r} 6936 \\ (6768) \\ \hline \end{array}$ | $\begin{array}{r} 1065 \\ (1091) \\ \hline \end{array}$ | $\begin{array}{r} 1188 \\ (1190) \\ \hline \end{array}$ | $\begin{array}{r} 9189 \\ (9049) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  | $\mathrm{p}<0.001$ |  |  |  |

Notes: Using weight dovwt2 (except dovwt1 for country table) and displaying unweighted cell size, weighted
percentage in parentheses, followed by weighted cell size. Sample includes natural/step/adoptive/foster mothers and fathers only.

Table 10.19: Mothers reporting Longstanding Illness by amount of body pain MCS4

|  | None | Very <br> Mild | Mild | Moderate | Severe or Very Severe | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Illness: Not Limiting | $\begin{array}{r} 576 \\ (42.2) \\ \hline \end{array}$ | $\begin{array}{r} 275 \\ (20.2) \\ \hline \end{array}$ | $\begin{array}{r} 209 \\ (16.2) \\ \hline \end{array}$ | $\begin{array}{r} 211 \\ (15.6) \\ \hline \end{array}$ | $\begin{array}{r} 79 \\ (5.9) \\ \hline \end{array}$ | $\begin{array}{r} 1350 \\ (100.0) \\ \hline \end{array}$ |
| Limiting Illness | $\begin{array}{r} 330 \\ (16.9) \\ \hline \end{array}$ | $\begin{array}{r} 265 \\ (14.0) \end{array}$ | $\begin{array}{r} 338 \\ (17.3) \\ \hline \end{array}$ | $\begin{array}{r} 592 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 448 \\ (23.4) \\ \hline \end{array}$ | $\begin{array}{r} 1973 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (27.3) | (16.5) | (16.8) | (23.2) | (16.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 906 \\ (909) \end{array}$ | $\begin{array}{r} 540 \\ (550) \end{array}$ | $\begin{array}{r} 547 \\ (561) \end{array}$ | $\begin{array}{r} 803 \\ (773) \end{array}$ | $\begin{array}{r} 527 \\ (540) \end{array}$ | $\begin{array}{r} 3323 \\ (3333) \end{array}$ |
| p<0.001 |  |  |  |  |  |  |

Notes: See Table 10.1 Sample is restricted to those who reported a longstanding illness.

Table 10.20: Fathers reporting Longstanding IIIness by amount of body pain MCS4

|  | None | Very <br> Mild | Mild | Moderate | Severe or Very Severe | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 425 | 238 | 180 | 155 | 67 | 1065 |
| Illness: Not Limiting | (39.0) | (22.2) | (16.6) | (15.2) | (7.0) | (100.0) |
|  | 204 | 166 | 224 | 333 | 261 | 1188 |
| Limiting Illness | (18.2) | (14.5) | (19.3) | (26.9) | (21.2) | (100.0) |
| Total Percentage | (28.2) | (18.2) | (18.0) | (21.3) | (14.4) | (100.0) |
| Observed Number | 629 | 404 | 404 | 488 | 328 | 2253 |
| Weighted Number | (642) | (414) | (411) | (486) | (328) | (2281) |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |

Notes: See Table 10.2. Sample is restricted to those who reported a longstanding or limiting longstanding illness.

Table 10.21: Mother's Longstanding IIIness by Father's Longstanding IIIness MCS4

|  |  | Mother's longstanding health |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | No Illness | Illness: Not Limiting | Illness: <br> Limiting | Total | Col Total |
|  | No Illness | $\begin{array}{r} 5283 \\ (77.6) \\ \hline \end{array}$ | $\begin{array}{r} 695 \\ (10.9) \\ \hline \end{array}$ | $\begin{array}{r} 829 \\ (11.6) \\ \hline \end{array}$ | $\begin{array}{r} 6807 \\ (100.0) \\ \hline \end{array}$ | (75.2) |
|  | Illness: Not Limiting | $\begin{array}{r} 791 \\ (76.6) \\ \hline \end{array}$ | $\begin{array}{r} 106 \\ (10.5) \\ \hline \end{array}$ | $\begin{array}{r} 146 \\ (12.9) \\ \hline \end{array}$ | $\begin{array}{r} 1043 \\ (100.0) \\ \hline \end{array}$ | (12.4) |
|  | Illness: Limiting | $\begin{array}{r} 786 \\ (66.8) \end{array}$ | $\begin{array}{r} 141 \\ (13.3) \end{array}$ | $\begin{array}{r} 227 \\ (19.9) \end{array}$ | $\begin{array}{r} 1154 \\ (100.0) \\ \hline \end{array}$ | (12.5) |
|  | Total Percentage | (76.1) | (11.1) | (12.8) | (100.0) | (100) |
|  | Observed Number Weighted Number | $\begin{array}{r} 6860 \\ (7460) \end{array}$ | $\begin{array}{r} 942 \\ (1091) \end{array}$ | $\begin{array}{r} 1202 \\ (1251) \end{array}$ | $\begin{array}{r} 9004 \\ (9803) \end{array}$ |  |
|  | $\mathrm{p}=0.001$ |  |  |  |  |  |

Notes: See Table 10.1 and 10.2. Sample is restricted to couples.

## Part 2: Mental health

Ensuring adequate diagnosis and treatment for mental health issues has become a tenet of public policy response to mental health problems in the workforce (Department for Work and Pensions, 2008). Mental health problems are more common than many people realise. At any point in time, one in six people in the UK
experiences symptoms that are indicative of problematic mental health - symptoms such as sleep problems, fatigue, anxiety and irritability do not necessarily meet criteria for a medical diagnosis but can still impede quality of life. A further one-sixth of the working age population have symptoms that could indicate a mental health disorder, and 0.5 per cent have symptoms of a psychotic illness (Lelliott et al., 2008). We would therefore expect to see a relatively high proportion of MCS parents with a mental health issue, which is the case.

## Limiting emotional problems

Looking first at the extent to which self-reported emotional problems limit work or study activities, we find that this is relatively common, particularly among women. Thirteen per cent of mothers reported that emotional problems limited work (or study) somewhat, quite a lot, or to the extent that they could not carry out activities (referred to as moderate-severe from this point on, Table 10.10). This compared to 7 per cent of fathers who reported the same difficulties (Table 10.11). Such a gender imbalance is not unexpected, and is found in the literature. Women aged 35-54, who are economically disadvantaged, who are lone parents and who have low qualifications are most likely to be suffering a mental illness (Lelliott et al., 2008). Among MCS mothers, these patterns were repeated.

The highest qualified women had rates of moderate-severe emotional problems that were almost half those of women with no qualifications ( $20 \%$ compared to $10 \%$ ). Similar patterns were found among MCS mothers as within the literature in terms of being a lone parent and disadvantaged, where experience of either increased the propensity of emotional problems. Additionally, being from Pakistani or black Caribbean heritage also increased the prevalence of emotional problems which limited activities severely (Figure 10.2). Among fathers, many of these patterns were repeated, although it was black Caribbean and Indian men who were most likely to find that emotional problems limited their work. Among MCS mothers and fathers, there were significant differences by country and those in Northern Ireland were least likely to report suffering from emotional problems and those in England most likely. We also observe a slight age gradient in terms of limiting emotional problems, with younger parents more likely to be afflicted by limiting emotional problems, although there is little difference in the mental health of the parents in the two oldest age groups, and the relationship is not statistically significant in the case of the emotional problems of fathers. While patterns of emotional problems by maternal age and country were statistically significant, they were not necessarily of a large magnitude.

Table 10.22: Mothers' Emotional Problems limiting work or study by selected background characteristics MCS4

|  | Not at all | Very Little | Somewhat | Quite a Lot | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{31}$ | $\begin{array}{r} 1251 \\ (64.5) \\ \hline \end{array}$ | $\begin{array}{r} 307 \\ (15.6) \\ \hline \end{array}$ | $\begin{array}{r} 200 \\ (10.8) \\ \hline \end{array}$ | $\begin{array}{r} 172 \\ (9.1) \end{array}$ | $\begin{array}{r} 1930 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L1 (< 5 GCSE A-C) | $\begin{array}{r} 650 \\ (70.1) \\ \hline \end{array}$ | $\begin{array}{r} 142 \\ (15.8) \\ \hline \end{array}$ | $\begin{array}{r} 79 \\ (8.2) \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ (6.0) \\ \hline \end{array}$ | $\begin{array}{r} 927 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 ALevel) | $\begin{array}{r} 2530 \\ (70.2) \\ \hline \end{array}$ | $\begin{array}{r} 546 \\ (15.9) \end{array}$ | $\begin{array}{r} 288 \\ (8.3) \\ \hline \end{array}$ | $\begin{array}{r} 202 \\ (5.7) \\ \hline \end{array}$ | $\begin{array}{r} 3566 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 1526 \\ (73.0) \\ \hline \end{array}$ | $\begin{array}{r} 303 \\ (15.1) \\ \hline \end{array}$ | $\begin{array}{r} 141 \\ (7.0) \\ \hline \end{array}$ | $\begin{array}{r} 95 \\ (4.9) \end{array}$ | $\begin{array}{r} 2065 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 3190 \\ (76.1) \\ \hline \end{array}$ | $\begin{array}{r} 585 \\ (15.0) \\ \hline \end{array}$ | $\begin{array}{r} 234 \\ (5.4) \\ \hline \end{array}$ | $\begin{array}{r} 144 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 4153 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 695 \\ (74.4) \end{array}$ | $\begin{array}{r} 131 \\ (15.1) \end{array}$ | $\begin{array}{r} 71 \\ (7.6) \end{array}$ | $\begin{array}{r} 25 \\ (2.8) \end{array}$ | $\begin{array}{r} 922 \\ (100.0) \end{array}$ |
| Total Percentage | $\begin{array}{r} 9842 \\ (71.8) \end{array}$ | $\begin{array}{r} 2014 \\ (15.4) \\ \hline \end{array}$ | $\begin{aligned} & 1013 \\ & (7.6) \\ & \hline \end{aligned}$ | $\begin{array}{r} 694 \\ (5.2) \\ \hline \end{array}$ | $\begin{array}{r} 13563 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 9842 \\ (9700) \\ \hline \end{array}$ | $\begin{array}{r} 2014 \\ (2080) \\ \hline \end{array}$ | $\begin{array}{r} 1013 \\ (1022) \\ \hline \end{array}$ | $\begin{array}{r} 694 \\ (707) \\ \hline \end{array}$ | $\begin{array}{r} 13563 \\ (13509) \\ \hline \end{array}$ |
|  |  |  |  |  | $\mathrm{p}<0.001$ |
| England | $\begin{array}{r} 6126 \\ (71.1) \\ \hline \end{array}$ | $\begin{array}{r} 1364 \\ (15.8) \\ \hline \end{array}$ | $\begin{array}{r} \hline 676 \\ (7.7) \\ \hline \end{array}$ | $\begin{array}{r} \hline 468 \\ (5.4) \\ \hline \end{array}$ | $\begin{array}{r} 8634 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 1494 \\ (75.1) \\ \hline \end{array}$ | $\begin{array}{r} 256 \\ (12.9) \end{array}$ | $\begin{array}{r} 144 \\ (7.2) \\ \hline \end{array}$ | $\begin{array}{r} 97 \\ (4.7) \end{array}$ | $\begin{array}{r} 1991 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 1199 \\ (74.6) \\ \hline \end{array}$ | $\begin{array}{r} 235 \\ (14.8) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (6.3) \end{array}$ | $\begin{array}{r} 65 \\ (4.4) \end{array}$ | $\begin{array}{r} 1597 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 1025 \\ (76.9) \\ \hline \end{array}$ | $\begin{array}{r} 160 \\ (11.5) \\ \hline \end{array}$ | $\begin{array}{r} 95 \\ (6.9) \\ \hline \end{array}$ | $\begin{array}{r} 64 \\ (4.8) \\ \hline \end{array}$ | $\begin{array}{r} 1344 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | $\begin{array}{r} 9844 \\ (72.7) \end{array}$ | $\begin{array}{r} 2015 \\ (14.8) \end{array}$ | $\begin{aligned} & 1013 \\ & (7.4) \\ & \hline \end{aligned}$ | $\begin{array}{r} 694 \\ (5.1) \end{array}$ | $\begin{array}{r} 13566 \\ (100.0) \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 9844 \\ (9835) \end{array}$ | $\begin{array}{r} 2015 \\ (2007) \\ \hline \end{array}$ | $\begin{array}{r} 1013 \\ (1003) \end{array}$ | $\begin{array}{r} 694 \\ (690) \end{array}$ | $\begin{array}{r} 13566 \\ (13535) \end{array}$ |
|  |  |  |  |  | $\mathrm{p}<0.001$ |
| Two Natural Parents | $\begin{array}{r} 7541 \\ (76.1) \\ \hline \end{array}$ | $\begin{array}{r} 1379 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 609 \\ (6.3) \\ \hline \end{array}$ | $\begin{array}{r} 359 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 9888 \\ (100.0) \\ \hline \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 596 \\ (66.5) \\ \hline \end{array}$ | $\begin{array}{r} 134 \\ (14.7) \end{array}$ | $\begin{array}{r} 89 \\ (9.8) \end{array}$ | $\begin{array}{r} 74 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 893 \\ (100.0) \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 1707 \\ (60.0) \\ \hline \end{array}$ | $\begin{array}{r} 502 \\ (19.3) \end{array}$ | $\begin{array}{r} 315 \\ (11.0) \end{array}$ | $\begin{array}{r} 261 \\ (9.6) \end{array}$ | $\begin{array}{r} 2785 \\ (100.0) \end{array}$ |
| Total Percentage | $\begin{array}{r} 9844 \\ (71.8) \end{array}$ | $\begin{array}{r} 2015 \\ (15.4) \end{array}$ | $\begin{aligned} & 1013 \\ & (7.6) \end{aligned}$ | $\begin{array}{r} 694 \\ (5.2) \end{array}$ | $\begin{array}{r} 13566 \\ (100.0) \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 9844 \\ (9705) \end{array}$ | $\begin{array}{r} 2015 \\ (2080) \end{array}$ | $\begin{array}{r} 1013 \\ (1022) \end{array}$ | $\begin{array}{r} 694 \\ (707) \end{array}$ | $\begin{array}{r} 13566 \\ (13514) \end{array}$ |
|  |  |  |  |  | $\mathrm{p}<0.001$ |
| Teenage at birth of CM | $\begin{array}{r} 636 \\ (69.1) \\ \hline \end{array}$ | $\begin{array}{r} 132 \\ (14.9) \\ \hline \end{array}$ | $\begin{array}{r} 75 \\ (7.4) \\ \hline \end{array}$ | $\begin{array}{r} 70 \\ (8.6) \\ \hline \end{array}$ | $\begin{array}{r} 913 \\ (100.0) \\ \hline \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 1594 \\ (66.8) \end{array}$ | $\begin{array}{r} 360 \\ (15.9) \end{array}$ | $\begin{array}{r} 226 \\ (10.3) \end{array}$ | $\begin{array}{r} 155 \\ (6.9) \end{array}$ | $\begin{array}{r} 2335 \\ (100.0) \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 2688 \\ (72.8) \\ \hline \end{array}$ | $\begin{array}{r} 531 \\ (15.0) \\ \hline \end{array}$ | $\begin{array}{r} 274 \\ (7.2) \end{array}$ | $\begin{array}{r} 183 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 3676 \\ (100.0) \\ \hline \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 3121 \\ (73.9) \\ \hline \end{array}$ | $\begin{array}{r} 615 \\ (15.4) \\ \hline \end{array}$ | $\begin{array}{r} 275 \\ (6.7) \\ \hline \end{array}$ | $\begin{array}{r} 173 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 4184 \\ (100.0) \\ \hline \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 1805 \\ (73.1) \\ \hline \end{array}$ | $\begin{array}{r} 377 \\ (15.7) \\ \hline \end{array}$ | $\begin{array}{r} 163 \\ (6.8) \\ \hline \end{array}$ | $\begin{array}{r} 113 \\ (4.4) \\ \hline \end{array}$ | $\begin{array}{r} 2458 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (71.8) | (15.4) | (7.6) | (5.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 9844 \\ (9705) \\ \hline \end{array}$ | $\begin{array}{r} 2015 \\ (2080) \\ \hline \end{array}$ | $\begin{array}{r} 1013 \\ (1022) \\ \hline \end{array}$ | $\begin{array}{r} 694 \\ (707) \\ \hline \end{array}$ | $\begin{array}{r} 13566 \\ (13514) \\ \hline \end{array}$ |
|  |  |  |  |  | $\mathrm{p}<0.001$ |
| Continued |  |  |  |  |  |
| Income Above 60\% Median | 7282 | 1327 | 564 | 340 | 9513 |

[^32]Table 10.22: Mothers' Emotional Problems limiting work or study by selected background characteristics MCS4

|  | Not at all | Very Little | Somewhat | Quite a Lot | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Value | (76.1) | (14.4) | (5.9) | (3.7) | (100.0) |
| Income Below 60\% Median Value | $\begin{array}{r} 2556 \\ (61.3) \\ \hline \end{array}$ | $\begin{array}{r} 686 \\ (17.9) \\ \hline \end{array}$ | $\begin{array}{r} 449 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 352 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 4043 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (71.8) | (15.4) | (7.6) | (5.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 9838 \\ (9700) \\ \hline \end{array}$ | $\begin{array}{r} 2013 \\ (2079) \\ \hline \end{array}$ | $\begin{array}{r} 1013 \\ (1022) \\ \hline \end{array}$ | $\begin{array}{r} 692 \\ (706) \\ \hline \end{array}$ | $\begin{array}{r} 13556 \\ (13508) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |
| Professional/ <br> Managerial Job | $\begin{array}{r} 2490 \\ (77.4) \\ \hline \end{array}$ | $\begin{array}{r} 429 \\ (14.3) \\ \hline \end{array}$ | $\begin{array}{r} 170 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 97 \\ (3.0) \end{array}$ | $\begin{array}{r} 3186 \\ (100.0) \\ \hline \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 3947 \\ (75.6) \\ \hline \end{array}$ | $\begin{array}{r} 718 \\ (14.8) \\ \hline \end{array}$ | $\begin{array}{r} \hline 312 \\ (6.2) \end{array}$ | $\begin{array}{r} 170 \\ (3.4) \end{array}$ | $\begin{array}{r} 5147 \\ (100.0) \\ \hline \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 3407 \\ (64.8) \\ \hline \end{array}$ | $\begin{array}{r} 868 \\ (16.6) \\ \hline \end{array}$ | $\begin{array}{r} 531 \\ (10.2) \\ \hline \end{array}$ | $\begin{array}{r} 427 \\ (8.3) \\ \hline \end{array}$ | $\begin{array}{r} 5233 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (71.8) | (15.4) | (7.6) | (5.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 9844 \\ (9705) \\ \hline \end{array}$ | $\begin{array}{r} 2015 \\ (2080) \\ \hline \end{array}$ | $\begin{array}{r} 1013 \\ (1022) \\ \hline \end{array}$ | $\begin{array}{r} 694 \\ (707) \\ \hline \end{array}$ | $\begin{array}{r} 13566 \\ (13514) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |

Notes: See Table 10.1

Table 10.23: Fathers' Emotional Problems limiting work or study by selected background characteristics MCS4


Continued

[^33]Table 10.23: Fathers' Emotional Problems limiting work or study by selected background characteristics MCS4

|  | Not at all | Very Little | Somewhat | Quite a Lot | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{p}<0.001$ |  |  |  |  |  |
| Two Natural Parents | $\begin{array}{r} 6859 \\ (79.9) \\ \hline \end{array}$ | $\begin{array}{r} 1069 \\ (13.2) \end{array}$ | $\begin{array}{r} 329 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 256 \\ (2.9) \\ \hline \end{array}$ | $\begin{array}{r} 8513 \\ (100.0) \\ \hline \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 448 \\ (77.7) \\ \hline \end{array}$ | $\begin{array}{r} 68 \\ (10.8) \\ \hline \end{array}$ | $\begin{array}{r} 37 \\ (7.2) \end{array}$ | $\begin{array}{r} 23 \\ (4.3) \end{array}$ | $\begin{array}{r} 576 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 63 \\ (61.5) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (17.4) \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ (10.7) \\ \hline \end{array}$ | $\begin{array}{r} 15 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 102 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | $\begin{array}{r} 7370 \\ (79.5) \\ \hline \end{array}$ | $\begin{array}{r} 1151 \\ (13.1) \\ \hline \end{array}$ | $\begin{array}{r} 376 \\ (4.3) \\ \hline \end{array}$ | $\begin{array}{r} 294 \\ (3.1) \\ \hline \end{array}$ | $\begin{array}{r} 9191 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 7370 \\ (7196) \\ \hline \end{array}$ | $\begin{array}{r} 1151 \\ (1182) \end{array}$ | $\begin{array}{r} 376 \\ (391) \end{array}$ | $\begin{array}{r} 294 \\ (281) \end{array}$ | $\begin{array}{r} 9191 \\ (9050) \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |
| Teenage at birth of CM | $\begin{array}{r} 127 \\ (75.3) \\ \hline \end{array}$ | $\begin{array}{r} 25 \\ (15.8) \end{array}$ | $\begin{array}{r} 8 \\ (5.4) \end{array}$ | $\begin{array}{r} 6 \\ (3.5) \end{array}$ | $\begin{array}{r} 166 \\ (100.0) \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 646 \\ (81.1) \\ \hline \end{array}$ | $\begin{array}{r} 80 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 32 \\ (3.9) \\ \hline \end{array}$ | $\begin{array}{r} 32 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 790 \\ (100.0) \\ \hline \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 1526 \\ (79.4) \\ \hline \end{array}$ | $\begin{array}{r} 239 \\ (12.5) \\ \hline \end{array}$ | $\begin{array}{r} 90 \\ (5.1) \end{array}$ | $\begin{array}{r} 65 \\ (2.9) \\ \hline \end{array}$ | $\begin{array}{r} 1920 \\ (100.0) \\ \hline \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 2542 \\ (80.2) \\ \hline \end{array}$ | $\begin{array}{r} 397 \\ (13.2) \\ \hline \end{array}$ | $\begin{array}{r} 119 \\ (4.2) \\ \hline \end{array}$ | $\begin{array}{r} 80 \\ (2.4) \\ \hline \end{array}$ | $\begin{array}{r} 3138 \\ (100.0) \\ \hline \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 2529 \\ (78.7) \\ \hline \end{array}$ | $\begin{array}{r} 410 \\ (13.6) \\ \hline \end{array}$ | $\begin{array}{r} 127 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 111 \\ (3.7) \\ \hline \end{array}$ | $\begin{array}{r} 3177 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (79.5) | (13.1) | (4.3) | (3.1) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 7370 \\ (7196) \\ \hline \end{array}$ | $\begin{array}{r} 1151 \\ (1182) \end{array}$ | $\begin{array}{r} 376 \\ (391) \\ \hline \end{array}$ | $\begin{array}{r} 294 \\ (281) \\ \hline \end{array}$ | $\begin{array}{r} 9191 \\ (9050) \end{array}$ |
|  |  |  |  |  | $\mathrm{p}=0.368$ |
| Income Above 60\% Median Value | $\begin{array}{r} 6147 \\ (82.3) \\ \hline \end{array}$ | $\begin{array}{r} 860 \\ (12.1) \\ \hline \end{array}$ | $\begin{array}{r} \hline 248 \\ (3.6) \\ \hline \end{array}$ | $\begin{array}{r} \hline 152 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 7407 \\ (100.0) \\ \hline \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 1218 \\ (66.4) \\ \hline \end{array}$ | $\begin{array}{r} 290 \\ (17.7) \\ \hline \end{array}$ | $\begin{array}{r} 127 \\ (7.7) \end{array}$ | $\begin{array}{r} 142 \\ (8.2) \\ \hline \end{array}$ | $\begin{array}{r} 1777 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (79.5) | (13.1) | (4.3) | (3.1) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 7365 \\ (7191) \\ \hline \end{array}$ | $\begin{array}{r} 1150 \\ (1182) \\ \hline \end{array}$ | $\begin{array}{r} 375 \\ (390) \\ \hline \end{array}$ | $\begin{array}{r} 294 \\ (281) \\ \hline \end{array}$ | $\begin{array}{r} 9184 \\ (9044) \\ \hline \end{array}$ |
|  |  |  |  |  | $\mathrm{p}<0.001$ |
| Professional/ <br> Managerial Job | $\begin{array}{r} 3016 \\ (81.4) \\ \hline \end{array}$ | $\begin{array}{r} 461 \\ (13.1) \\ \hline \end{array}$ | $\begin{array}{r} 134 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 65 \\ (1.8) \\ \hline \end{array}$ | $\begin{array}{r} 3676 \\ (100.0) \\ \hline \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 3731 \\ (82.1) \\ \hline \end{array}$ | $\begin{array}{r} 517 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 148 \\ (3.6) \\ \hline \end{array}$ | $\begin{array}{r} 116 \\ (2.5) \\ \hline \end{array}$ | $\begin{array}{r} 4512 \\ (100.0) \\ \hline \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 623 \\ (60.8) \\ \hline \end{array}$ | $\begin{array}{r} 173 \\ (18.4) \\ \hline \end{array}$ | $\begin{array}{r} 94 \\ (9.8) \\ \hline \end{array}$ | $\begin{array}{r} 113 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 1003 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (79.5) | (13.1) | (4.3) | (3.1) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 7370 \\ (7196) \\ \hline \end{array}$ | $\begin{array}{r} 1151 \\ (1182) \end{array}$ | $\begin{array}{r} 376 \\ (391) \\ \hline \end{array}$ | $\begin{array}{r} 294 \\ (281) \\ \hline \end{array}$ | $\begin{array}{r} 9191 \\ (9050) \end{array}$ |
| p<0.001 |  |  |  |  |  |

Notes: See Table 10.2

Figure 10.9: Percentage of Mothers' and Fathers' Emotional Problems limiting work or study by Ethnic Group (\% being affected somewhat, quite a lot or couldn't perform activities) MCS4


See Notes to Table 10.1 and 10.2.

## Psychological Distress (Kessler)

Psychological distress was measured using the Kessler 6 scale, widely used in general purpose health surveys for the measurement of non-specific psychological disorders (Kessler et al., 2003). Unlike previous sweeps, only main respondents completed the relevant set of items, and we present information for mothers only given that the majority of main respondents are mothers. The six questions asked how often in the past 30 days the respondent had felt: i) so depressed that nothing could cheer you up ii) hopeless iii) restless or fidgety iv) that everything you did was an effort v) worthless vi) nervous. For each question respondents score four points if they answer 'all of the time', three points for most of the time, two points for some of the time, one point for a little of the time and zero for none of the time. The questions form a 24-point scale and the following cut-offs were used: 0-3 'no or low distress', 4-12 'medium distress', and 13 or over 'high distress'. The majority of mothers reported in the range for low or no distress (68\%), over a quarter were in the medium distress range ( $28 \%$ ), while the remainder ( $4 \%$ ) had responses classified as high distress. Psychological distress was patterned in much the same way as indicators of emotional problems presented earlier (Table 10.12), although some of these patterns were amplified. For example, almost half of mothers from Bangladeshi and other ethnic groups reported in the medium to high distress range; mothers who were not working or were in occupations that could not be classified were five times more
likely to be classed as highly distressed than those in professional or managerial occupations. Similar numbers of mothers reported either increased psychological distress, or reported decreased stress between 2006 and 2008. Overall, 11 per cent of those who reported high psychological distress in 2006 reported a score corresponding to low or no psychological distress in 2008 (Table 10.13).

Table 10.24: Mother's psychological distress score (Kessler Scale) by selected background characteristics MCS4

|  | No or Low Distress | Medium Distress |  | Total |
| :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{33}$ | $\begin{array}{r} 719 \\ (55.0) \\ \hline \end{array}$ | $\begin{array}{r} 457 \\ (35.1) \\ \hline \end{array}$ | $\begin{array}{r} 121 \\ (9.9) \\ \hline \end{array}$ | $\begin{array}{r} 1297 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L1 (< 5 GCSE A-C) | $\begin{array}{r} 530 \\ (63.8) \\ \hline \end{array}$ | $\begin{array}{r} 253 \\ (30.1) \\ \hline \end{array}$ | $\begin{array}{r} 52 \\ (6.1) \\ \hline \end{array}$ | $\begin{array}{r} 835 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 A-Level) | $\begin{array}{r} 2186 \\ (65.5) \\ \hline \end{array}$ | $\begin{array}{r} 1003 \\ (30.3) \\ \hline \end{array}$ | $\begin{array}{r} 136 \\ (4.2) \end{array}$ | $\begin{array}{r} 3325 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 1352 \\ (69.1) \\ \hline \end{array}$ | $\begin{array}{r} 528 \\ (27.8) \\ \hline \end{array}$ | $\begin{array}{r} 63 \\ (3.1) \\ \hline \end{array}$ | $\begin{array}{r} 1943 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 2968 \\ (74.2) \end{array}$ | $\begin{array}{r} 951 \\ (24.1) \end{array}$ | $\begin{array}{r} 69 \\ (1.7) \end{array}$ | $\begin{array}{r} 3988 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 616 \\ (70.1) \end{array}$ | $\begin{array}{r} 245 \\ (27.2) \end{array}$ | $\begin{array}{r} 17 \\ (2.7) \end{array}$ | $\begin{array}{r} 878 \\ (100.0) \end{array}$ |
| Total Percentage | (67.7) | (28.3) | (3.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 8371 \\ (8365) \\ \hline \end{array}$ | $\begin{array}{r} 3437 \\ (3496) \\ \hline \end{array}$ | $\begin{array}{r} 458 \\ (486) \\ \hline \end{array}$ | $\begin{array}{r} 12266 \\ (12347) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |
| England | $\begin{array}{r} 5091 \\ (67.3) \\ \hline \end{array}$ | $\begin{array}{r} 2200 \\ (28.7) \\ \hline \end{array}$ | $\begin{array}{r} 300 \\ (4.0) \end{array}$ | $\begin{array}{r} 7591 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 1288 \\ (67.8) \\ \hline \end{array}$ | $\begin{array}{r} 540 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 67 \\ (3.7) \end{array}$ | $\begin{array}{r} 1895 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 1073 \\ (69.6) \\ \hline \end{array}$ | $\begin{array}{r} 399 \\ (27.0) \\ \hline \end{array}$ | $\begin{array}{r} 47 \\ (3.4) \end{array}$ | $\begin{array}{r} 1519 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 922 \\ (73.3) \end{array}$ | $\begin{array}{r} 298 \\ (23.0) \end{array}$ | $\begin{array}{r} 44 \\ (3.7) \end{array}$ | $\begin{array}{r} 1264 \\ (100.0) \end{array}$ |
| Total Percentage | (68.3) | (27.9) | (3.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 8374 \\ (8516) \\ \hline \end{array}$ | $\begin{array}{r} 3437 \\ (3475) \\ \hline \end{array}$ | $\begin{array}{r} 458 \\ (482) \end{array}$ | $\begin{array}{r} 12269 \\ (12473) \end{array}$ |
|  |  |  |  | $\mathrm{p}=0.009$ |
| Two Natural Parents | $\begin{array}{r} 6439 \\ (72.1) \\ \hline \end{array}$ | $\begin{array}{r} 2261 \\ (25.4) \\ \hline \end{array}$ | $\begin{array}{r} 225 \\ (2.5) \\ \hline \end{array}$ | $\begin{array}{r} 8925 \\ (100.0) \\ \hline \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 507 \\ (62.9) \\ \hline \end{array}$ | $\begin{array}{r} 264 \\ (31.2) \\ \hline \end{array}$ | $\begin{array}{r} 48 \\ (5.9) \\ \hline \end{array}$ | $\begin{array}{r} 819 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 1428 \\ (55.6) \end{array}$ | $\begin{array}{r} 912 \\ (36.6) \\ \hline \end{array}$ | $\begin{array}{r} 185 \\ (7.8) \end{array}$ | $\begin{array}{r} 2525 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (68.3) | (27.9) | (3.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 8374 \\ (8370) \end{array}$ | $\begin{array}{r} 3437 \\ (3496) \end{array}$ | $\begin{array}{r} 458 \\ (486) \end{array}$ | $\begin{array}{r} 12269 \\ (12352) \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |
| White | $\begin{array}{r} 7616 \\ (68.4) \\ \hline \end{array}$ | $\begin{array}{r} 3003 \\ (27.8) \\ \hline \end{array}$ | $\begin{array}{r} 384 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 11003 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 58 \\ (57.9) \\ \hline \end{array}$ | $\begin{array}{r} 39 \\ (38.2) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (3.9) \end{array}$ | $\begin{array}{r} 102 \\ (100.0) \\ \hline \end{array}$ |
| Indian | $\begin{array}{r} 166 \\ (65.4) \\ \hline \end{array}$ | $\begin{array}{r} 78 \\ (30.0) \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ (4.6) \\ \hline \end{array}$ | $\begin{array}{r} 255 \\ (100.0) \\ \hline \end{array}$ |
| Pakistani | $\begin{array}{r} 172 \\ (58.8) \end{array}$ | $\begin{array}{r} 112 \\ (33.9) \end{array}$ | $\begin{array}{r} 21 \\ (7.2) \end{array}$ | $\begin{array}{r} 305 \\ (100.0) \\ \hline \end{array}$ |
| Bangladeshi | $\begin{array}{r} 58 \\ (54.9) \\ \hline \end{array}$ | $\begin{array}{r} 48 \\ (39.0) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (6.0) \\ \hline \end{array}$ | $\begin{array}{r} 111 \\ (100.0) \\ \hline \end{array}$ |
| Continued |  |  |  |  |

[^34]Table 10.24: Mother's psychological distress score (Kessler Scale) by selected background characteristics MCS4

|  | No or Low Distress | Medium Distress | $\begin{gathered} \text { High } \\ \text { Distress } \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: |
| Black Caribbean | $\begin{array}{r} 90 \\ (58.5) \end{array}$ | $\begin{array}{r} 51 \\ (34.6) \end{array}$ | $\begin{array}{r} 12 \\ (6.9) \end{array}$ | $\begin{array}{r} 153 \\ (100.0) \\ \hline \end{array}$ |
| Black African | $\begin{array}{r} 124 \\ (70.6) \\ \hline \end{array}$ | $\begin{array}{r} 43 \\ (23.8) \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ (5.6) \\ \hline \end{array}$ | $\begin{array}{r} 178 \\ (100.0) \\ \hline \end{array}$ |
| Other | $\begin{array}{r} 89 \\ (55.6) \end{array}$ | $\begin{array}{r} 62 \\ (39.3) \end{array}$ | $\begin{array}{r} 9 \\ (5.1) \end{array}$ | $\begin{array}{r} 160 \\ (100.0) \end{array}$ |
| Total Percentage | (68.3) | (27.9) | (3.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 8373 \\ (8369) \end{array}$ | $\begin{array}{r} 3436 \\ (3495) \\ \hline \end{array}$ | $\begin{array}{r} 458 \\ (486) \\ \hline \end{array}$ | $\begin{array}{r} 12267 \\ (12350) \\ \hline \end{array}$ |
|  |  |  |  | $\mathrm{p}=0.090$ |
| Income Above 60\% Median Value | $\begin{array}{r} 6568 \\ (72.5) \\ \hline \end{array}$ | $\begin{array}{r} 2220 \\ (25.2) \\ \hline \end{array}$ | $\begin{array}{r} 194 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 8982 \\ (100.0) \\ \hline \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 1805 \\ (54.7) \\ \hline \end{array}$ | $\begin{array}{r} 1216 \\ (36.9) \\ \hline \end{array}$ | $\begin{array}{r} 264 \\ (8.4) \\ \hline \end{array}$ | $\begin{array}{r} 3285 \\ (100.0) \end{array}$ |
| Total Percentage | (68.3) | (27.9) | (3.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 8373 \\ (8369) \\ \hline \end{array}$ | $\begin{array}{r} 3436 \\ (3495) \\ \hline \end{array}$ | $\begin{array}{r} 458 \\ (486) \\ \hline \end{array}$ | $\begin{array}{r} 12267 \\ (12351) \\ \hline \end{array}$ |
|  |  |  |  | $\mathrm{p}<0.001$ |
| Professional/ <br> Managerial Job | $\begin{array}{r} 2312 \\ (75.0) \end{array}$ | $\begin{array}{r} 709 \\ (23.6) \\ \hline \end{array}$ | $\begin{array}{r} 42 \\ (1.4) \end{array}$ | $\begin{array}{r} 3063 \\ (100.0) \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 3458 \\ (70.7) \\ \hline \end{array}$ | $\begin{array}{r} 1275 \\ (27.0) \\ \hline \end{array}$ | $\begin{array}{r} 107 \\ (2.2) \\ \hline \end{array}$ | $\begin{array}{r} 4840 \\ (100.0) \\ \hline \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 2604 \\ (59.9) \\ \hline \end{array}$ | $\begin{array}{r} 1453 \\ (32.7) \\ \hline \end{array}$ | $\begin{array}{r} 309 \\ (7.4) \\ \hline \end{array}$ | $\begin{array}{r} 4366 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (68.3) | (27.9) | (3.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 8374 \\ (8370) \\ \hline \end{array}$ | $\begin{array}{r} 3437 \\ (3496) \\ \hline \end{array}$ | $\begin{array}{r} 458 \\ (486) \\ \hline \end{array}$ | $\begin{array}{r} 12269 \\ (12352) \\ \hline \end{array}$ |
|  |  |  |  | $\mathrm{p}<0.001$ |
| Teenage at birth of CM | $\begin{array}{r} 493 \\ (59.4) \\ \hline \end{array}$ | $\begin{array}{r} 274 \\ (33.0) \\ \hline \end{array}$ | $\begin{array}{r} 54 \\ (7.6) \\ \hline \end{array}$ | $\begin{array}{r} 821 \\ (100.0) \\ \hline \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 1252 \\ (60.1) \\ \hline \end{array}$ | $\begin{array}{r} 665 \\ (33.3) \\ \hline \end{array}$ | $\begin{array}{r} 121 \\ (6.6) \\ \hline \end{array}$ | $\begin{array}{r} 2038 \\ (100.0) \\ \hline \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 2259 \\ (68.6) \\ \hline \end{array}$ | $\begin{array}{r} 919 \\ (28.0) \\ \hline \end{array}$ | $\begin{array}{r} 122 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 3300 \\ (100.0) \\ \hline \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 2772 \\ (71.6) \\ \hline \end{array}$ | $\begin{array}{r} 991 \\ (25.8) \\ \hline \end{array}$ | $\begin{array}{r} 99 \\ (2.6) \\ \hline \end{array}$ | $\begin{array}{r} 3862 \\ (100.0) \\ \hline \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 1598 \\ (71.1) \\ \hline \end{array}$ | $\begin{array}{r} 588 \\ (26.1) \\ \hline \end{array}$ | $\begin{array}{r} 62 \\ (2.8) \\ \hline \end{array}$ | $\begin{array}{r} 2248 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (67.8) | (28.3) | (3.9) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 8374 \\ (8370) \end{array}$ | $\begin{array}{r} 3437 \\ (3496) \\ \hline \end{array}$ | $\begin{array}{r} 458 \\ (486) \\ \hline \end{array}$ | $\begin{array}{r} 12269 \\ (12352) \\ \hline \end{array}$ |
| p<0.001 |  |  |  |  |

Notes: See Table 10.1


Notes: See Table 10.1Sample of mothers who were present at both 2006 and 2008 sweeps.

## Life satisfaction

Questions about life satisfaction had been put to both main and partner respondents in 2006, although only to main respondents in 2008. Satisfaction with 'life so far' was recorded on an 11-point scale. We have collapsed this into a binary variable where a score of seven or above is treated as being reasonably satisfied (and anything less is considered not satisfied). We find three groups who stand out as having two-fifths or more who are not satisfied with their lives so far. These are: lone parents, mothers in families with poverty level income, and black Caribbean mothers (Figure 10.3). These are also the groups with most dissatisfaction in the 2006 survey (Roberts and Ketende, 2008; Table 10.14). As has been the case in the majority of the chapter, black African mothers, graduate mothers and those who are in dual earner partnerships appear to be in the best health, shown here through having the highest rates of life satisfaction. Longitudinally, the 'not satisfied category' was not as stable as the 'satisfied', with just over half remaining in the category between 2006 and 2008, compared to almost 90 per cent of those in the satisfied category. Physical health was also significantly related to life satisfaction (Table 10.15) - 86 per cent of those who described their health as excellent were highly satisfied with life. This dropped to 50 per cent among those with poor physical health.

Figure 10.10: Percentage of Mothers not satisfied with life so far by selected MCS4 characteristics


Notes See Table 10.1.

Table 10.26: Mother's Life Satisfaction over time - MCS3 and MCS4

|  |  | Mother's Life Satisfaction at 2008 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Not Satisfied | Satisfied | Total | Col Total |
|  | Not Satisfied | $\begin{array}{r} 1578 \\ (54.9) \\ \hline \end{array}$ | $\begin{array}{r} 1318 \\ (45.1) \end{array}$ | $\begin{array}{r} 2896 \\ (100.0) \\ \hline \end{array}$ | (23.2) |
|  | Satisfied | $\begin{array}{r} 1185 \\ (12.8) \end{array}$ | $\begin{array}{r} 7753 \\ (87.2) \end{array}$ | $\begin{array}{r} 8938 \\ (100.0) \end{array}$ | (76.8) |
|  | Total Percentage | $\begin{array}{r} 2763 \\ (22.6) \end{array}$ | $\begin{array}{r} 9071 \\ (77.4) \end{array}$ | $\begin{array}{r} 11834 \\ (100.0) \end{array}$ | (100.0) |
|  | Observed Number Weighted Number | $\begin{array}{r} 2763 \\ (2868) \\ \hline \end{array}$ | $\begin{array}{r} 9071 \\ (9848) \\ \hline \end{array}$ | $\begin{array}{r} 11834 \\ (12716) \\ \hline \end{array}$ |  |
| $\mathrm{p}<0.001$ |  |  |  |  |  |

Notes: See Table 10.1 Sample those who were present at both 2006 and 2008 sweeps.

Table 10.27: Mother's Life Satisfaction by Mother's General Health MCS4

|  | Not Satisfied | Satisfied | Total |
| :---: | :---: | :---: | :---: |
| Excellent | $\begin{array}{r} 373 \\ (13.8) \\ \hline \end{array}$ | $\begin{array}{r} 2575 \\ (86.2) \\ \hline \end{array}$ | $\begin{array}{r} 2948 \\ (100.0) \\ \hline \end{array}$ |
| Very Good | $\begin{array}{r} 864 \\ (19.6) \\ \hline \end{array}$ | $\begin{array}{r} 3715 \\ (80.4) \\ \hline \end{array}$ | $\begin{array}{r} 4579 \\ (100.0) \\ \hline \end{array}$ |
| Good | $\begin{array}{r} 1125 \\ (31.1) \\ \hline \end{array}$ | $\begin{array}{r} 2585 \\ (68.9) \\ \hline \end{array}$ | $\begin{array}{r} 3710 \\ (100.0) \\ \hline \end{array}$ |
| Fair | $\begin{array}{r} 511 \\ (44.8) \end{array}$ | $\begin{array}{r} 714 \\ (55.2) \\ \hline \end{array}$ | $\begin{array}{r} 1225 \\ (100.0) \\ \hline \end{array}$ |
| Poor | $\begin{array}{r} 166 \\ (50.2) \end{array}$ | $\begin{array}{r} 172 \\ (49.8) \\ \hline \end{array}$ | $\begin{array}{r} 338 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | $\begin{array}{r} 3039 \\ (25.0) \\ \hline \end{array}$ | $\begin{array}{r} 9761 \\ (75.0) \\ \hline \end{array}$ | $\begin{array}{r} 12800 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 3039 \\ (3223) \\ \hline \end{array}$ | $\begin{array}{r} 9761 \\ (9650) \\ \hline \end{array}$ | $\begin{array}{r} 12800 \\ (12873) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |

Notes: See Table 10.1

## Part 3: Health and lifestyle

## Alcohol consumption

Alcohol consumption in the UK is of concern to health professionals and policymakers alike. Excessive consumption of alcohol has been linked to a range of physical and psychological problems including increased risks of cardiovascular diseases, liver diseases and forms of cancer. Rates of alcohol consumption have changed only slightly in recent years, remaining high with one in three men (34\%) and one in five women (19\%) drinking at least every other day according to recent estimates (Lader, 2009). UK alcohol consumption remains lower per capita than in several European countries, ranking $14^{\text {th }}$ out of 25 in litres consumed per capita (Department of Health, 2006). Nevertheless, the patterns of drinking are a cause of concern. Firstly, the unequal distribution of alcohol consumption by social characteristics means that some groups tend to be disproportionately burdened by the ill effects of excessive consumption. Secondly, consumption patterns as measured by frequency of drinking alcohol may mask some heavy drinking. For
example, almost two-fifths of men (38\%) and a quarter of women (25\%) exceeded their recommended daily allowance of alcohol in a single session in a typical week (Department of Health, 2009b; Lader, 2009). This section examines the social background characteristics of alcohol consumption of MCS parents in terms of frequency of consumption, but it should be recognised that this measurement may not give the full picture.

Alcohol consumption has a very different social profile from that of physical and mental illness reported above. Among MCS mothers, alcohol consumption was higher among the socially advantaged (Table 10.16). For example, almost twice as many mothers with higher tertiary qualifications drank alcohol every day as those with no qualifications ( $4.7 \%$ compared to $2.5 \%$ ). Twenty-three per cent of mothers in families with income above the poverty threshold drank alcohol every day or several days a week (referred to as frequently from this point), compared to 10 per cent of those in 'poor' families. Older mothers were also substantially more likely to drink frequently than younger mothers, possibly a reflection of other socioeconomic characteristics. Mothers in Northern Ireland were substantially less likely than mothers in any of the other countries to drink frequently - 8 per cent of Northern Irish mothers drank several days a week or every day compared to 15 per cent of mothers in Scotland, 19 per cent in Wales and 20 per cent in England. White mothers were much more likely than mothers of any other ethnicity to be frequent drinkers. In fact, with the exception of black Caribbean and mixed ethnicity mothers, very few mothers of non-white ethnicity drank frequently (less than 5\%), and almost all Bangladeshi and Pakistani mothers reported not drinking at all. Among fathers, many of the patterns of alcohol consumption observed for mothers were repeated (Table 10.17). Those from workless families, with low qualifications, and who were non-white were the least likely to drink or to drink frequently. Again, it should be emphasised that despite alcohol being a risk factor for several longstanding health conditions, this social patterning represents a direct reversal of those observed for health conditions earlier in the chapter. The patterns by country were also repeated - fathers in England were 11 times more likely to drink every day than those in Northern Ireland ( $6.8 \%$ compared to $0.6 \%$ ). As among mothers, there was also a strong age gradient of alcohol consumption. Among fathers under 26, 10 per cent drank frequently compared to 41 per cent of those 42 and above.

Table 10.18 compares drinking among mothers to that of fathers. Although many couples were matched in the frequency of alcohol consumption, 58 per cent of couples drank alcohol at different frequencies. Of those with different frequencies, it was much rarer for mothers to drink more often than fathers than the other way around ( $27 \%$ compared to $73 \%$ ).

Table 10.28: Mother's frequency of Alcohol consumption by selected background characteristics MCS4

|  | Every day | Several days a week | 1-2 days a week | 1-2 days a month | Less than once a month | Never | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{34}$ | $\begin{array}{r} 44 \\ (2.5) \\ \hline \end{array}$ | $\begin{array}{r} 94 \\ (5.1) \end{array}$ | $\begin{array}{r} 310 \\ (16.0) \\ \hline \end{array}$ | $\begin{array}{r} 213 \\ (12.2) \end{array}$ | $\begin{array}{r} 301 \\ (17.7) \\ \hline \end{array}$ | $\begin{array}{r} 972 \\ (46.5) \\ \hline \end{array}$ | $\begin{array}{r} 1934 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L1 (< 5 GCSE AC) | $\begin{array}{r} 17 \\ (1.9) \end{array}$ | $\begin{array}{r} 73 \\ (8.7) \end{array}$ | $\begin{array}{r} 240 \\ (26.4) \end{array}$ | $\begin{array}{r} 160 \\ (17.3) \end{array}$ | $\begin{array}{r} 217 \\ (24.8) \end{array}$ | $\begin{array}{r} 221 \\ (20.9) \end{array}$ | $\begin{array}{r} 928 \\ (100.0) \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 A-Level) | $\begin{array}{r} 104 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 428 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 981 \\ (27.8) \\ \hline \end{array}$ | $\begin{array}{r} 693 \\ (19.2) \\ \hline \end{array}$ | $\begin{array}{r} 700 \\ (19.8) \\ \hline \end{array}$ | $\begin{array}{r} 661 \\ (16.6) \\ \hline \end{array}$ | $\begin{array}{r} 3567 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 42 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 274 \\ (14.7) \end{array}$ | $\begin{array}{r} 595 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 401 \\ (20.2) \\ \hline \end{array}$ | $\begin{array}{r} 389 \\ (19.0) \\ \hline \end{array}$ | $\begin{array}{r} 365 \\ (15.3) \\ \hline \end{array}$ | $\begin{array}{r} 2066 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 128 \\ (3.6) \\ \hline \end{array}$ | $\begin{array}{r} 907 \\ (23.8) \\ \hline \end{array}$ | $\begin{array}{r} 1254 \\ (29.3) \end{array}$ | $\begin{array}{r} 652 \\ (15.6) \end{array}$ | $\begin{array}{r} 658 \\ (15.6) \end{array}$ | $\begin{array}{r} 553 \\ (12.1) \end{array}$ | $\begin{array}{r} 4152 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 38 \\ (4.7) \\ \hline \end{array}$ | $\begin{array}{r} 236 \\ (28.4) \\ \hline \end{array}$ | $\begin{array}{r} 254 \\ (26.3) \\ \hline \end{array}$ | $\begin{array}{r} 134 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 124 \\ (13.0) \\ \hline \end{array}$ | $\begin{array}{r} 136 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 922 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (3.1) | (16.0) | (26.5) | (16.8) | (18.1) | (19.5) | (100.0) |
| Observed Number <br> Weighted Number | $\begin{array}{r} 373 \\ (423) \\ \hline \end{array}$ | $\begin{array}{r} 2012 \\ (2164) \\ \hline \end{array}$ | $\begin{array}{r} 3634 \\ (3575) \\ \hline \end{array}$ | $\begin{array}{r} 2253 \\ (2276) \\ \hline \end{array}$ | $\begin{array}{r} 2389 \\ (2446) \\ \hline \end{array}$ | $\begin{array}{r} 2908 \\ (2631) \\ \hline \end{array}$ | $\begin{array}{r} 13569 \\ (13515) \\ \hline \end{array}$ |
|  |  |  |  |  |  |  | $\mathrm{p}<0.001$ |
| England | $\begin{array}{r} \hline 284 \\ (3.5) \end{array}$ | $\begin{array}{r} 1361 \\ (16.7) \end{array}$ | $\begin{array}{r} 2041 \\ (25.4) \end{array}$ | $\begin{gathered} 1276 \\ (16.0) \end{gathered}$ | $\begin{array}{r} 1426 \\ (17.7) \end{array}$ | $\begin{gathered} 2253 \\ (20.8) \end{gathered}$ | $\begin{array}{r} 8641 \\ (100.0) \end{array}$ |
| Wales | $\begin{array}{r} 50 \\ (2.7) \\ \hline \end{array}$ | $\begin{array}{r} 307 \\ (16.6) \\ \hline \end{array}$ | $\begin{array}{r} 600 \\ (30.0) \\ \hline \end{array}$ | $\begin{array}{r} 391 \\ (19.7) \\ \hline \end{array}$ | $\begin{array}{r} 376 \\ (17.7) \\ \hline \end{array}$ | $\begin{array}{r} 266 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 1990 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 26 \\ (1.3) \end{array}$ | $\begin{array}{r} 252 \\ (14.2) \end{array}$ | $\begin{array}{r} 517 \\ (30.3) \end{array}$ | $\begin{array}{r} 312 \\ (21.1) \end{array}$ | $\begin{array}{r} 323 \\ (21.5) \end{array}$ | $\begin{array}{r} 167 \\ (11.6) \end{array}$ | $\begin{array}{r} 1597 \\ (100.0) \end{array}$ |
| Northern Ireland | $\begin{array}{r} 13 \\ (1.0) \\ \hline \end{array}$ | $\begin{array}{r} 92 \\ (6.7) \\ \hline \end{array}$ | $\begin{array}{r} 476 \\ (35.0) \\ \hline \end{array}$ | $\begin{array}{r} 275 \\ (21.0) \\ \hline \end{array}$ | $\begin{array}{r} 265 \\ (19.1) \end{array}$ | $\begin{array}{r} 223 \\ (17.1) \end{array}$ | $\begin{array}{r} 1344 \\ (100.0) \\ \hline \end{array}$ |
| Total Percent | (2.9) | (15.4) | 27.6) | (17.6) | (18.3) | (18.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 373 \\ (387) \\ \hline \end{array}$ | $\begin{array}{r} 2012 \\ (2083) \\ \hline \end{array}$ | $\begin{array}{r} 3634 \\ (3738) \\ \hline \end{array}$ | $\begin{array}{r} 2254 \\ (2388) \\ \hline \end{array}$ | $\begin{array}{r} 2390 \\ (2474) \\ \hline \end{array}$ | $\begin{array}{r} 2909 \\ (2469) \\ \hline \end{array}$ | $\begin{array}{r} 13572 \\ (13539) \\ \hline \end{array}$ |
|  |  |  |  |  |  |  | $\mathrm{p}<0.001$ |
| Two Natural Parents | $\begin{array}{r} 296 \\ (3.4) \end{array}$ | $\begin{gathered} 1607 \\ (18.0) \end{gathered}$ | $\begin{array}{r} 2623 \\ (26.4) \end{array}$ | $\begin{array}{r} 1565 \\ (16.4) \end{array}$ | $\begin{array}{r} 1645 \\ (16.6) \end{array}$ | $\begin{array}{r} 2159 \\ (19.3) \end{array}$ | $\begin{array}{r} 9895 \\ (100.0) \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 20 \\ (2.5) \\ \hline \end{array}$ | $\begin{array}{r} 100 \\ (10.5) \\ \hline \end{array}$ | $\begin{array}{r} 248 \\ (26.5) \\ \hline \end{array}$ | $\begin{array}{r} 168 \\ (17.2) \\ \hline \end{array}$ | $\begin{array}{r} 195 \\ (23.6) \\ \hline \end{array}$ | $\begin{array}{r} 162 \\ (19.8) \\ \hline \end{array}$ | $\begin{array}{r} 893 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 57 \\ (2.5) \\ \hline \end{array}$ | $\begin{array}{r} 305 \\ (11.7) \\ \hline \end{array}$ | $\begin{array}{r} 763 \\ (26.6) \\ \hline \end{array}$ | $\begin{array}{r} 521 \\ (18.0) \\ \hline \end{array}$ | $\begin{array}{r} 550 \\ (21.1) \\ \hline \end{array}$ | $\begin{array}{r} 588 \\ (20.1) \\ \hline \end{array}$ | $\begin{array}{r} 2784 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (3.1) | (16.0) | (26.5) | (16.8) | (18.1) | (19.5) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 373 \\ (423) \\ \hline \end{array}$ | $\begin{array}{r} 2012 \\ (2164) \\ \hline \end{array}$ | $\begin{array}{r} 3634 \\ (3575) \\ \hline \end{array}$ | $\begin{array}{r} 2254 \\ (2277) \\ \hline \end{array}$ | $\begin{array}{r} 2390 \\ (2447) \\ \hline \end{array}$ | $\begin{array}{r} 2909 \\ (2634) \\ \hline \end{array}$ | $\begin{array}{r} 13572 \\ (13520) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |  |
| White | $\begin{array}{r} 356 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 1966 \\ (17.9) \\ \hline \end{array}$ | $\begin{array}{r} 3507 \\ (29.1) \end{array}$ | $\begin{array}{r} 2156 \\ (18.4) \\ \hline \end{array}$ | $\begin{array}{r} 2178 \\ (18.8) \\ \hline \end{array}$ | $\begin{array}{r} 1415 \\ (12.3) \\ \hline \end{array}$ | $\begin{array}{r} \hline 11578 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 3 \\ (0.9) \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ (8.5) \\ \hline \end{array}$ | $\begin{array}{r} 25 \\ (19.4) \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ (8.7) \\ \hline \end{array}$ | $\begin{array}{r} 27 \\ (28.9) \\ \hline \end{array}$ | $\begin{array}{r} 46 \\ (33.5) \\ \hline \end{array}$ | $\begin{array}{r} 120 \\ (100.0) \\ \hline \end{array}$ |
| Indian | $\begin{array}{r} 1 \\ (0.5) \end{array}$ | $\begin{array}{r} 5 \\ (1.7) \end{array}$ | $\begin{array}{r} 29 \\ (10.6) \end{array}$ | $\begin{array}{r} 26 \\ (7.2) \end{array}$ | $\begin{array}{r} 56 \\ (16.7) \end{array}$ | $\begin{array}{r} 229 \\ (63.3) \end{array}$ | $\begin{array}{r} 346 \\ (100.0) \end{array}$ |
| Pakistani | $\begin{array}{r} 2 \\ (0.2) \end{array}$ | 1 $(0.2)$ | 3 $(0.5)$ | 1 $(0.2)$ | 6 $(1.4)$ | $\begin{array}{r} 589 \\ (97.5) \\ \hline \end{array}$ | $\begin{array}{r} 602 \\ (100.0) \\ \hline \end{array}$ |

[^35]
## Table 10.28: Mother's frequency of Alcohol consumption by selected background characteristics MCS4

|  | Every day | Several days a week | 1-2 days a week | 1-2 days a month | Less than once a month | Never | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |  |
| Bangladeshi | $\begin{array}{r} 0 \\ (0.0) \end{array}$ | $\begin{array}{r} 1 \\ (0.2) \end{array}$ | $\begin{array}{r} 2 \\ (0.4) \end{array}$ | $\begin{array}{r} 0 \\ (0.0) \end{array}$ | $\begin{array}{r} 0 \\ (0.0) \end{array}$ | $\begin{array}{r} 243 \\ (99.5) \end{array}$ | $\begin{array}{r} 246 \\ (100.0) \\ \hline \end{array}$ |
| Black Caribbean | $\begin{array}{r} 5 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ (9.3) \\ \hline \end{array}$ | $\begin{array}{r} 32 \\ (18.5) \\ \hline \end{array}$ | $\begin{array}{r} 24 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 43 \\ (27.9) \\ \hline \end{array}$ | $\begin{array}{r} 50 \\ (26.7) \\ \hline \end{array}$ | $\begin{array}{r} 172 \\ (100.0) \\ \hline \end{array}$ |
| Black African | $\begin{array}{r} 0 \\ (0.0) \end{array}$ | $\begin{array}{r} 4 \\ (2.8) \end{array}$ | $\begin{array}{r} 17 \\ (6.6) \end{array}$ | $\begin{array}{r} 16 \\ (8.6) \end{array}$ | $\begin{array}{r} 46 \\ (15.8) \end{array}$ | $\begin{array}{r} 182 \\ (66.2) \end{array}$ | $\begin{array}{r} 265 \\ (100.0) \end{array}$ |
| Other | $\begin{array}{r} 6 \\ (1.9) \\ \hline \end{array}$ | $\begin{array}{r} 6 \\ (2.7) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 21 \\ (7.6) \\ \hline \end{array}$ | $\begin{array}{r} 34 \\ (17.6) \\ \hline \end{array}$ | $\begin{array}{r} 155 \\ (61.3) \\ \hline \end{array}$ | $\begin{array}{r} 241 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (3.1) | (16.0) | (26.5) | (16.8) | (18.1) | (19.5) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 373 \\ (423) \\ \hline \end{array}$ | $\begin{array}{r} 2011 \\ (2163) \\ \hline \end{array}$ | $\begin{array}{r} 3634 \\ (3575) \end{array}$ | $\begin{array}{r} 2253 \\ (2276) \\ \hline \end{array}$ | $\begin{array}{r} 2390 \\ (2447) \end{array}$ | $\begin{array}{r} 2909 \\ (2634) \end{array}$ | $\begin{array}{r} 13570 \\ (13518) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |  |
| Income Above 60\% Median Value | $\begin{array}{r} 301 \\ (3.6) \end{array}$ | $\begin{array}{r} 1760 \\ (19.8) \end{array}$ | $\begin{array}{r} 2798 \\ (28.5) \end{array}$ | $\begin{array}{r} 1666 \\ (17.6) \end{array}$ | $\begin{array}{r} 1642 \\ (17.4) \end{array}$ | $\begin{array}{r} 1349 \\ (13.2) \end{array}$ | $\begin{array}{r} 9516 \\ (100.0) \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 71 \\ (2.0) \end{array}$ | $\begin{array}{r} 252 \\ (6.7) \\ \hline \end{array}$ | $\begin{array}{r} 835 \\ (21.5) \end{array}$ | $\begin{array}{r} 587 \\ (14.9) \end{array}$ | $\begin{array}{r} 747 \\ (20.0) \\ \hline \end{array}$ | $\begin{array}{r} 1555 \\ (34.9) \end{array}$ | $\begin{array}{r} 4047 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (3.1) | (16.0) | (26.5) | (16.8) | (18.1) | (19.5) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 372 \\ (422) \\ \hline \end{array}$ | $\begin{array}{r} 2012 \\ (2164) \\ \hline \end{array}$ | $\begin{array}{r} 3633 \\ (3575) \\ \hline \end{array}$ | $\begin{array}{r} 2253 \\ (2276) \\ \hline \end{array}$ | $\begin{array}{r} 2389 \\ (2447) \\ \hline \end{array}$ | $\begin{array}{r} 2904 \\ (2630) \\ \hline \end{array}$ | $\begin{array}{r} 13563 \\ (13513) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |  |
| Professional/ Managerial Job | $\begin{array}{r} 120 \\ (4.3) \end{array}$ | $\begin{array}{r} 801 \\ (26.6) \\ \hline \end{array}$ | $\begin{array}{r} 1002 \\ (30.4) \\ \hline \end{array}$ | $\begin{array}{r} 509 \\ (15.6) \\ \hline \end{array}$ | $\begin{array}{r} 463 \\ (14.7) \\ \hline \end{array}$ | $\begin{array}{r} 292 \\ (8.5) \\ \hline \end{array}$ | $\begin{array}{r} 3187 \\ (100.0) \\ \hline \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 143 \\ (3.2) \end{array}$ | $\begin{array}{r} 733 \\ (15.5) \end{array}$ | $\begin{array}{r} 1521 \\ (28.9) \end{array}$ | $\begin{array}{r} 1001 \\ (19.6) \end{array}$ | $\begin{array}{r} 998 \\ (19.7) \end{array}$ | $\begin{array}{r} 751 \\ (13.1) \end{array}$ | $\begin{array}{r} 5147 \\ (100.0) \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 110 \\ (2.3) \end{array}$ | $\begin{array}{r} 478 \\ (10.4) \end{array}$ | $\begin{array}{r} 1111 \\ (21.7) \end{array}$ | $\begin{array}{r} 744 \\ (14.8) \end{array}$ | $\begin{array}{r} 929 \\ (18.5) \end{array}$ | $\begin{array}{r} 1866 \\ (32.2) \end{array}$ | $\begin{array}{r} 5238 \\ (100.0) \end{array}$ |
| Total Percentage | (3.1) | (16.0) | (26.5) | (16.8) | (18.1) | (19.5) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 373 \\ (423) \\ \hline \end{array}$ | $\begin{array}{r} 2012 \\ (2164) \\ \hline \end{array}$ | $\begin{array}{r} 3634 \\ (3575) \\ \hline \end{array}$ | $\begin{array}{r} 2254 \\ (2277) \\ \hline \end{array}$ | $\begin{array}{r} 2390 \\ (2447) \\ \hline \end{array}$ | $\begin{array}{r} 2909 \\ (2634) \\ \hline \end{array}$ | $\begin{array}{r} 13572 \\ (13520) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |  |
| Teenage at birth of CM | $\begin{array}{r} 6 \\ (0.7) \\ \hline \end{array}$ | $\begin{array}{r} 38 \\ (4.8) \\ \hline \end{array}$ | $\begin{array}{r} 250 \\ (26.7) \\ \hline \end{array}$ | $\begin{array}{r} 215 \\ (22.5) \\ \hline \end{array}$ | $\begin{array}{r} 198 \\ (23.4) \\ \hline \end{array}$ | $\begin{array}{r} 207 \\ (21.8) \\ \hline \end{array}$ | $\begin{array}{r} 914 \\ (100.0) \\ \hline \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 27 \\ (1.7) \\ \hline \end{array}$ | $\begin{array}{r} 152 \\ (7.5) \\ \hline \end{array}$ | $\begin{array}{r} 540 \\ (23.5) \\ \hline \end{array}$ | $\begin{array}{r} 425 \\ (18.8) \\ \hline \end{array}$ | $\begin{array}{r} 479 \\ (21.2) \end{array}$ | $\begin{array}{r} 712 \\ (27.3) \\ \hline \end{array}$ | $\begin{array}{r} 2335 \\ (100.0) \\ \hline \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 82 \\ (2.6) \end{array}$ | $\begin{array}{r} 449 \\ (13.4) \end{array}$ | $\begin{array}{r} 977 \\ (26.3) \end{array}$ | $\begin{array}{r} 648 \\ (17.6) \end{array}$ | $\begin{array}{r} 661 \\ (18.6) \end{array}$ | $\begin{array}{r} 864 \\ (21.5) \end{array}$ | $\begin{array}{r} 3681 \\ (100.0) \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 140 \\ (3.9) \\ \hline \end{array}$ | $\begin{array}{r} 827 \\ (21.8) \\ \hline \end{array}$ | $\begin{array}{r} 1184 \\ (27.6) \\ \hline \end{array}$ | $\begin{array}{r} 637 \\ (15.4) \\ \hline \end{array}$ | $\begin{array}{r} 674 \\ (16.2) \\ \hline \end{array}$ | $\begin{array}{r} 722 \\ (15.1) \\ \hline \end{array}$ | $\begin{array}{r} 4184 \\ (100.0) \\ \hline \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 118 \\ (5.1) \\ \hline \end{array}$ | $\begin{array}{r} 546 \\ (23.9) \\ \hline \end{array}$ | $\begin{array}{r} 683 \\ (27.6) \\ \hline \end{array}$ | $\begin{array}{r} 329 \\ (13.6) \end{array}$ | $\begin{array}{r} 378 \\ (15.0) \\ \hline \end{array}$ | $\begin{array}{r} 404 \\ (14.8) \\ \hline \end{array}$ | $\begin{array}{r} 2458 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | $\begin{array}{r} 373 \\ (3.1) \end{array}$ | $\begin{array}{r} 2012 \\ (16.0) \end{array}$ | $\begin{array}{r} 3634 \\ (26.4) \end{array}$ | $\begin{array}{r} 2254 \\ (16.8) \end{array}$ | $\begin{array}{r} 2390 \\ (18.1) \end{array}$ | $\begin{array}{r} 2909 \\ (19.5) \end{array}$ | $\begin{array}{r} 13572 \\ (100.0) \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 373 \\ (423) \\ \hline \end{array}$ | $\begin{array}{r} 2012 \\ (2164) \end{array}$ | $\begin{array}{r} 3634 \\ (3575) \\ \hline \end{array}$ | $\begin{array}{r} 2254 \\ (2277) \end{array}$ | $\begin{array}{r} 2390 \\ (2447) \end{array}$ | $\begin{array}{r} 2909 \\ (2634) \end{array}$ | $\begin{array}{r} 13572 \\ (13520) \\ \hline \end{array}$ |
| p<0.001 |  |  |  |  |  |  |  |

Notes: See Note to Table 10.1

Table 10.29: Father's frequency of Alcohol consumption by selected background characteristics MCS4

|  | Every day | Several days a week | 1-2 days <br> a week | 1-2 days a month | Less than once a month | Never | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{35}$ | $\begin{array}{r} 67 \\ (6.3) \end{array}$ | $\begin{array}{r} 156 \\ (14.8) \end{array}$ | $\begin{array}{r} 278 \\ (23.4) \end{array}$ | $\begin{array}{r} 149 \\ (12.7) \end{array}$ | $\begin{array}{r} 141 \\ (11.0) \end{array}$ | $\begin{array}{r} 461 \\ (31.8) \end{array}$ | $\begin{array}{r} 1252 \\ (100.0) \end{array}$ |
| NVQ L1 (< 5 GCSE AC) | $\begin{array}{r} 36 \\ (6.4) \end{array}$ | $\begin{array}{r} 99 \\ (21.4) \end{array}$ | $\begin{array}{r} 162 \\ (27.9) \end{array}$ | $\begin{array}{r} 66 \\ (12.9) \end{array}$ | $\begin{array}{r} 83 \\ (14.6) \end{array}$ | $\begin{array}{r} 96 \\ (16.8) \end{array}$ | $\begin{array}{r} 542 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 A-Level) | $\begin{array}{r} 120 \\ (5.7) \end{array}$ | $\begin{array}{r} 506 \\ (24.4) \\ \hline \end{array}$ | $\begin{array}{r} 772 \\ (33.5) \end{array}$ | $\begin{array}{r} 362 \\ (16.4) \\ \hline \end{array}$ | $\begin{array}{r} 260 \\ (11.0) \end{array}$ | $\begin{array}{r} 246 \\ (9.1) \end{array}$ | $\begin{array}{r} 2266 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 93 \\ (8.2) \end{array}$ | $\begin{array}{r} 374 \\ (28.0) \\ \hline \end{array}$ | $\begin{array}{r} 440 \\ (31.1) \end{array}$ | $\begin{array}{r} 199 \\ (14.4) \end{array}$ | $\begin{array}{r} 136 \\ (9.4) \\ \hline \end{array}$ | $\begin{array}{r} 144 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 1386 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 141 \\ (6.0) \end{array}$ | $\begin{array}{r} 884 \\ (33.5) \end{array}$ | $\begin{array}{r} 861 \\ (31.7) \end{array}$ | $\begin{array}{r} 364 \\ (13.2) \end{array}$ | $\begin{array}{r} 205 \\ (7.8) \end{array}$ | $\begin{array}{r} 267 \\ (7.8) \end{array}$ | $\begin{array}{r} 2722 \\ (100.0) \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 52 \\ (5.6) \end{array}$ | $\begin{array}{r} 369 \\ (39.8) \\ \hline \end{array}$ | $\begin{array}{r} 304 \\ (29.2) \end{array}$ | $\begin{array}{r} 109 \\ (10.0) \end{array}$ | $\begin{array}{r} 57 \\ (4.9) \end{array}$ | $\begin{array}{r} 124 \\ (10.6) \end{array}$ | $\begin{array}{r} 1015 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (6.2) | (27.9) | (30.5) | (13.7) | (9.4) | (12.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 509 \\ (565) \\ \hline \end{array}$ | $\begin{array}{r} 2388 \\ (2522) \\ \hline \end{array}$ | $\begin{array}{r} 2817 \\ (2758) \end{array}$ | $\begin{array}{r} 1249 \\ (1242) \end{array}$ | $\begin{array}{r} 882 \\ (847) \\ \hline \end{array}$ | $\begin{array}{r} 1338 \\ (1107) \end{array}$ | $\begin{array}{r} 9183 \\ (9041) \\ \hline \end{array}$ |


|  |  |  |  |  |  | $\mathrm{p}<0.001$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England | $\begin{array}{r} 399 \\ (6.8) \end{array}$ | $\begin{array}{r} 1613 \\ (28.8) \\ \hline \end{array}$ | $\begin{array}{r} 1612 \\ (29.1) \\ \hline \end{array}$ | $\begin{array}{r} 737 \\ (13.3) \\ \hline \end{array}$ | $\begin{array}{r} 494 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 1072 \\ (13.0) \\ \hline \end{array}$ | $\begin{array}{r} 5927 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 70 \\ (5.6) \end{array}$ | $\begin{array}{r} 362 \\ (28.7) \end{array}$ | $\begin{array}{r} 447 \\ (33.8) \end{array}$ | $\begin{array}{r} 191 \\ (13.7) \end{array}$ | $\begin{array}{r} 145 \\ (10.1) \end{array}$ | $\begin{array}{r} 107 \\ (8.1) \end{array}$ | $\begin{array}{r} 1322 \\ (100.0) \end{array}$ |
| Scotland | $\begin{array}{r} 33 \\ (3.4) \end{array}$ | $\begin{array}{r} 282 \\ (24.2) \end{array}$ | $\begin{array}{r} 395 \\ (35.9) \\ \hline \end{array}$ | $\begin{array}{r} 177 \\ (16.3) \\ \hline \end{array}$ | $\begin{array}{r} 127 \\ (12.1) \\ \hline \end{array}$ | $\begin{array}{r} 82 \\ (8.0) \\ \hline \end{array}$ | $\begin{array}{r} 1096 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 7 \\ (0.6) \\ \hline \end{array}$ | $\begin{array}{r} 132 \\ (15.0) \\ \hline \end{array}$ | $\begin{array}{r} 365 \\ (43.9) \\ \hline \end{array}$ | $\begin{array}{r} 145 \\ (16.6) \\ \hline \end{array}$ | $\begin{array}{r} 117 \\ (13.7) \end{array}$ | $\begin{array}{r} 81 \\ (10.2) \\ \hline \end{array}$ | $\begin{array}{r} 847 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (5.7) | (27.1) | (31.9) | (14.0) | (9.8) | (11.4) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 509 \\ (511) \\ \hline \end{array}$ | $\begin{array}{r} 2389 \\ (2425) \\ \hline \end{array}$ | $\begin{array}{r} 2819 \\ (2860) \end{array}$ | $\begin{array}{r} 1250 \\ (1257) \\ \hline \end{array}$ | $\begin{array}{r} 883 \\ (882) \end{array}$ | $\begin{array}{r} 1342 \\ (1025) \end{array}$ | $\begin{array}{r} 9192 \\ (8961) \end{array}$ |
|  |  |  |  |  |  |  | $\mathrm{p}<0.001$ |
| Two Natural Parents | $\begin{array}{r} 472 \\ (6.3) \end{array}$ | $\begin{array}{r} 2258 \\ (28.8) \end{array}$ | $\begin{array}{r} 2607 \\ (30.3) \end{array}$ | $\begin{array}{r} 1127 \\ (13.3) \end{array}$ | $\begin{array}{r} 786 \\ (8.9) \end{array}$ | $\begin{array}{r} 1264 \\ (12.5) \end{array}$ | $\begin{array}{r} 8514 \\ (100.0) \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 32 \\ (6.0) \\ \hline \end{array}$ | $\begin{array}{r} 110 \\ (18.3) \end{array}$ | $\begin{array}{r} 190 \\ (34.6) \end{array}$ | $\begin{array}{r} 104 \\ (17.1) \end{array}$ | $\begin{array}{r} 83 \\ (14.5) \end{array}$ | $\begin{array}{r} 57 \\ (9.4) \\ \hline \end{array}$ | $\begin{array}{r} 576 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 5 \\ (5.8) \end{array}$ | $\begin{array}{r} 21 \\ (19.1) \end{array}$ | $\begin{array}{r} 22 \\ (23.6) \end{array}$ | $\begin{array}{r} 19 \\ (22.8) \end{array}$ | $\begin{array}{r} 14 \\ (13.6) \end{array}$ | $\begin{array}{r} 21 \\ (15.0) \end{array}$ | $\begin{array}{r} 102 \\ (100.0) \end{array}$ |
| Total Percentage | (6.2) | (27.9) | (30.5) | (13.7) | (9.4) | (12.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 509 \\ (565) \\ \hline \end{array}$ | $\begin{array}{r} 2389 \\ (2524) \\ \hline \end{array}$ | $\begin{array}{r} 2819 \\ (2760) \end{array}$ | $\begin{array}{r} 1250 \\ (1243) \end{array}$ | $\begin{array}{r} 883 \\ (848) \end{array}$ | $\begin{array}{r} 1342 \\ (1110) \\ \hline \end{array}$ | $\begin{array}{r} 9192 \\ (9050) \end{array}$ |
|  |  |  |  |  |  |  | p<0.001 |
| White | $\begin{array}{r} \hline 476 \\ (6.7) \end{array}$ | $\begin{array}{r} 2285 \\ (30.3) \\ \hline \end{array}$ | $\begin{array}{r} 2672 \\ (32.8) \end{array}$ | $\begin{array}{r} 1153 \\ (14.4) \end{array}$ | $\begin{array}{r} 789 \\ (9.5) \\ \hline \end{array}$ | $\begin{array}{r} 534 \\ (6.3) \end{array}$ | $\begin{array}{r} 7909 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 4 \\ (7.2) \end{array}$ | $\begin{array}{r} 9 \\ (13.7) \end{array}$ | $\begin{array}{r} 10 \\ (15.2) \end{array}$ | $\begin{array}{r} 9 \\ (15.1) \end{array}$ | $\begin{array}{r} 13 \\ (22.4) \end{array}$ | $\begin{array}{r} 18 \\ (26.4) \\ \hline \end{array}$ | $\begin{array}{r} 63 \\ (100.0) \\ \hline \end{array}$ |
| Indian | $\begin{array}{r} 13 \\ (6.2) \end{array}$ | $\begin{array}{r} 43 \\ (18.5) \end{array}$ | $\begin{array}{r} 54 \\ (19.7) \end{array}$ | $\begin{array}{r} 30 \\ (13.5) \end{array}$ | $\begin{array}{r} 27 \\ (9.6) \end{array}$ | $\begin{array}{r} 97 \\ (32.4) \end{array}$ | $\begin{array}{r} 264 \\ (100.0) \end{array}$ |
| Pakistani | $\begin{array}{r} 2 \\ (0.4) \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ (1.0) \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ (3.3) \\ \hline \end{array}$ | 7 $(2.0)$ | 5 $(1.2)$ | $\begin{array}{r} 386 \\ (92.1) \end{array}$ | $\begin{array}{r} 415 \\ (100.0) \\ \hline \end{array}$ |
| Bangladeshi | $\begin{array}{r} 1 \\ (0.5) \\ \hline \end{array}$ | $\begin{array}{r} 0 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 0 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 3 \\ (1.5) \\ \hline \end{array}$ | $\begin{array}{r} 151 \\ (95.6) \\ \hline \end{array}$ | $\begin{array}{r} 159 \\ (100.0) \\ \hline \end{array}$ |

[^36]|  | Every day | Several days a week | 1-2 days a week | 1-2 days a month | Less than once a month | Never | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |  |
| Black Caribbean | $\begin{array}{r} 3 \\ (2.9) \end{array}$ | $\begin{array}{r} 17 \\ (18.8) \end{array}$ | $\begin{array}{r} 26 \\ (34.1) \end{array}$ | $\begin{array}{r} 14 \\ (15.2) \end{array}$ | $\begin{array}{r} 10 \\ (15.6) \end{array}$ | $\begin{array}{r} 14 \\ (13.3) \end{array}$ | $\begin{array}{r} 84 \\ (100.0) \end{array}$ |
| Black African | $\begin{array}{r} 0 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 12 \\ (8.2) \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ (19.1) \\ \hline \end{array}$ | $\begin{array}{r} 14 \\ (10.1) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 66 \\ (48.9) \\ \hline \end{array}$ | $\begin{array}{r} 127 \\ (100.0) \\ \hline \end{array}$ |
| Other | $\begin{array}{r} 9 \\ (4.4) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (12.5) \\ \hline \end{array}$ | $\begin{array}{r} 24 \\ (12.6) \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ (16.1) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 76 \\ (40.3) \\ \hline \end{array}$ | $\begin{array}{r} 168 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (6.2) | (27.9) | (30.5) | (13.7) | (9.4) | (12.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 508 \\ (564) \\ \hline \end{array}$ | $\begin{array}{r} 2387 \\ (2521) \\ \hline \end{array}$ | $\begin{array}{r} 2819 \\ (2760) \\ \hline \end{array}$ | $\begin{array}{r} 1250 \\ (1243) \\ \hline \end{array}$ | $\begin{array}{r} 883 \\ (848) \\ \hline \end{array}$ | $\begin{array}{r} 1342 \\ (1110) \\ \hline \end{array}$ | $\begin{array}{r} 9189 \\ (9046) \\ \hline \end{array}$ |
| (1) $\quad \mathrm{p}<0.001$ |  |  |  |  |  |  |  |
| Teenage at birth of CM | $\begin{array}{r} 3 \\ (2.4) \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ (7.2) \end{array}$ | $\begin{array}{r} 64 \\ (44.4) \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ (19.1) \\ \hline \end{array}$ | $\begin{array}{r} 32 \\ (18.5) \\ \hline \end{array}$ | $\begin{array}{r} 15 \\ (8.4) \\ \hline \end{array}$ | $\begin{array}{r} 166 \\ (100.0) \\ \hline \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 28 \\ (3.4) \end{array}$ | $\begin{array}{r} 132 \\ (19.5) \end{array}$ | $\begin{array}{r} 244 \\ (29.5) \end{array}$ | $\begin{array}{r} 107 \\ (14.4) \end{array}$ | $\begin{array}{r} 106 \\ (13.7) \end{array}$ | $\begin{array}{r} 173 \\ (19.5) \end{array}$ | $\begin{array}{r} 790 \\ (100.0) \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 85 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 410 \\ (22.9) \end{array}$ | $\begin{array}{r} 615 \\ (33.0) \\ \hline \end{array}$ | $\begin{array}{r} 298 \\ (15.7) \end{array}$ | $\begin{array}{r} 178 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 335 \\ (14.5) \end{array}$ | $\begin{array}{r} 1921 \\ (100.0) \\ \hline \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 159 \\ (5.7) \\ \hline \end{array}$ | $\begin{array}{r} 880 \\ (30.3) \\ \hline \end{array}$ | $\begin{array}{r} 970 \\ (30.9) \\ \hline \end{array}$ | $\begin{array}{r} 431 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 291 \\ (8.8) \\ \hline \end{array}$ | $\begin{array}{r} 407 \\ (10.6) \\ \hline \end{array}$ | $\begin{array}{r} 3138 \\ (100.0) \\ \hline \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 234 \\ (8.6) \end{array}$ | $\begin{array}{r} 951 \\ (32.1) \end{array}$ | $\begin{array}{r} 926 \\ (27.9) \end{array}$ | $\begin{array}{r} 378 \\ (12.0) \end{array}$ | $\begin{array}{r} 276 \\ (8.5) \end{array}$ | $\begin{array}{r} 412 \\ (10.9) \end{array}$ | $\begin{array}{r} 3177 \\ (100.0) \end{array}$ |
| Total Percentage | (6.2) | (27.9) | (30.5) | (13.7) | (9.4) | (12.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 509 \\ (565) \end{array}$ | $\begin{array}{r} 2389 \\ (2524) \end{array}$ | $\begin{array}{r} 2819 \\ (2760) \end{array}$ | $\begin{array}{r} 1250 \\ (1243) \end{array}$ | $\begin{array}{r} 883 \\ (848) \end{array}$ | $\begin{array}{r} 1342 \\ (1110) \end{array}$ | $\begin{array}{r} 9192 \\ (9050) \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |  |
| Income Above 60\% Median Value | $\begin{array}{r} 425 \\ (6.5) \\ \hline \end{array}$ | $\begin{gathered} 2176 \\ (31.0) \end{gathered}$ | $\begin{array}{r} 2435 \\ (32.3) \end{array}$ | $\begin{gathered} 1052 \\ (13.9) \end{gathered}$ | $\begin{array}{r} 652 \\ (8.4) \end{array}$ | $\begin{array}{r} \hline 666 \\ (7.9) \\ \hline \end{array}$ | $\begin{array}{r} 7406 \\ (100.0) \\ \hline \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 83 \\ (4.9) \\ \hline \end{array}$ | $\begin{array}{r} 212 \\ (13.3) \end{array}$ | $\begin{array}{r} 383 \\ (22.1) \end{array}$ | $\begin{array}{r} 197 \\ (13.1) \end{array}$ | $\begin{array}{r} 231 \\ (14.0) \end{array}$ | $\begin{array}{r} 673 \\ (32.6) \end{array}$ | $\begin{array}{r} 1779 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (6.2) | (27.9) | (30.5) | (13.7) | (9.4) | (12.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 508 \\ (564) \\ \hline \end{array}$ | $\begin{array}{r} 2388 \\ (2523) \\ \hline \end{array}$ | $\begin{array}{r} 2818 \\ (2759) \\ \hline \end{array}$ | $\begin{array}{r} 1249 \\ (1243) \\ \hline \end{array}$ | $\begin{array}{r} 883 \\ (848) \\ \hline \end{array}$ | $\begin{array}{r} 1339 \\ (1107) \\ \hline \end{array}$ | $\begin{array}{r} 9185 \\ (9044) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |  |
| Professional/ Managerial Job | $\begin{array}{r} 208 \\ (6.4) \end{array}$ | $\begin{array}{r} 1287 \\ (36.6) \end{array}$ | $\begin{gathered} 1168 \\ (31.3) \end{gathered}$ | $\begin{array}{r} 471 \\ (12.6) \end{array}$ | $\begin{array}{r} 240 \\ (6.4) \end{array}$ | $\begin{array}{r} \hline 300 \\ (6.6) \end{array}$ | $\begin{array}{r} 3674 \\ (100.0) \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 250 \\ (6.4) \end{array}$ | $\begin{array}{r} 949 \\ (23.0) \end{array}$ | $\begin{array}{r} 1437 \\ (31.5) \end{array}$ | $\begin{array}{r} 645 \\ (14.6) \end{array}$ | $\begin{array}{r} 489 \\ (10.3) \end{array}$ | $\begin{array}{r} 744 \\ (14.2) \end{array}$ | $\begin{array}{r} 4514 \\ (100.0) \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 51 \\ (4.8) \\ \hline \end{array}$ | $\begin{array}{r} 153 \\ (16.3) \\ \hline \end{array}$ | $\begin{array}{r} 214 \\ (22.9) \\ \hline \end{array}$ | $\begin{array}{r} 134 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 154 \\ (16.8) \\ \hline \end{array}$ | $\begin{array}{r} 298 \\ (25.1) \end{array}$ | $\begin{array}{r} 1004 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (6.2) | (27.9) | (30.5) | (13.7) | (9.4) | (12.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 509 \\ (565) \end{array}$ | $\begin{array}{r} 2389 \\ (2524) \end{array}$ | $\begin{array}{r} 2819 \\ (2760) \end{array}$ | $\begin{array}{r} 1250 \\ (1243) \end{array}$ | $\begin{array}{r} 883 \\ (848) \end{array}$ | $\begin{array}{r} 1342 \\ (1110) \end{array}$ | $\begin{array}{r} 9192 \\ (9050) \end{array}$ |
|  |  |  |  |  |  |  | $\mathrm{p}<0.001$ |

See note to Table 10.2

|  | Father's frequency of alcohol consumption |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Every day | Several Days a week | 1-2 days a week | 1-2 days a month | Less than once a month | Never | Total | Col <br> Total |
| Every day | $\begin{array}{r} 104 \\ (37.0) \\ \hline \end{array}$ | $\begin{array}{r} 110 \\ (40.7) \\ \hline \end{array}$ | $\begin{array}{r} 41 \\ (14.7) \\ \hline \end{array}$ | $\begin{array}{r} 12 \\ (4.5) \end{array}$ | $\begin{array}{r} 3 \\ (1.5) \\ \hline \end{array}$ | $\begin{array}{r} 8 \\ (1.5) \end{array}$ | $\begin{array}{r} 278 \\ (100.0) \\ \hline \end{array}$ | (3.5) |
| Several days a week | $\begin{array}{r} 159 \\ (11.6) \\ \hline \end{array}$ | $\begin{array}{r} 890 \\ (60.2) \\ \hline \end{array}$ | $\begin{array}{r} 338 \\ (20.4) \\ \hline \end{array}$ | $\begin{array}{r} 64 \\ (4.4) \\ \hline \end{array}$ | $\begin{array}{r} 33 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ (1.5) \\ \hline \end{array}$ | $\begin{array}{r} 1507 \\ (100.0) \\ \hline \end{array}$ | (18.1) |
| 1-2 days a week | $\begin{array}{r} 101 \\ (4.6) \\ \hline \end{array}$ | $\begin{array}{r} 721 \\ (31.3) \\ \hline \end{array}$ | $\begin{array}{r} 1194 \\ (47.8) \\ \hline \end{array}$ | $\begin{array}{r} 266 \\ (10.7) \\ \hline \end{array}$ | $\begin{array}{r} 89 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ (2.1) \\ \hline \end{array}$ | $\begin{array}{r} 2427 \\ (100.0) \\ \hline \end{array}$ | (26.8) |
| 1-2 days a month | $\begin{array}{r} 43 \\ (3.4) \end{array}$ | $\begin{array}{r} 255 \\ (17.9) \\ \hline \end{array}$ | $\begin{array}{r} 557 \\ (38.1) \\ \hline \end{array}$ | $\begin{array}{r} 392 \\ (25.4) \\ \hline \end{array}$ | $\begin{array}{r} 158 \\ (10.3) \\ \hline \end{array}$ | $\begin{array}{r} 78 \\ (4.9) \end{array}$ | $\begin{array}{r} 1483 \\ (100.0) \\ \hline \end{array}$ | (16.8) |
| Less than once a month | $\begin{array}{r} 47 \\ (3.1) \\ \hline \end{array}$ | $\begin{array}{r} 226 \\ (16.0) \\ \hline \end{array}$ | $\begin{array}{r} 392 \\ (25.9) \\ \hline \end{array}$ | $\begin{array}{r} 314 \\ (21.5) \\ \hline \end{array}$ | $\begin{array}{r} 366 \\ (23.7) \\ \hline \end{array}$ | $\begin{array}{r} 164 \\ (9.8) \\ \hline \end{array}$ | $\begin{array}{r} 1509 \\ (100.0) \\ \hline \end{array}$ | (16.1) |
| Never | $\begin{array}{r} 46 \\ (3.1) \end{array}$ | $\begin{array}{r} 158 \\ (10.3) \end{array}$ | $\begin{array}{r} 256 \\ (16.0) \end{array}$ | $\begin{array}{r} 177 \\ (11.0) \end{array}$ | $\begin{array}{r} 215 \\ (12.5) \end{array}$ | $\begin{array}{r} 956 \\ (47.1) \end{array}$ | $\begin{array}{r} 1808 \\ (100.0) \end{array}$ | (18.1) |
| Total Percentage | $\begin{array}{r} 500 \\ (6.3) \\ \hline \end{array}$ | $\begin{array}{r} 2360 \\ (28.2) \\ \hline \end{array}$ | $\begin{array}{r} 2778 \\ (30.6) \\ \hline \end{array}$ | $\begin{array}{r} 1225 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 864 \\ (9.3) \\ \hline \end{array}$ | $\begin{array}{r} 1285 \\ (11.9) \\ \hline \end{array}$ | $\begin{array}{r} 9012 \\ (100.0) \\ \hline \end{array}$ |  |
| Observed Number Weighted Number | $\begin{array}{r} 500 \\ (553) \end{array}$ | $\begin{array}{r} 2360 \\ (2490) \end{array}$ | $\begin{array}{r} 2778 \\ (2706) \end{array}$ | $\begin{array}{r} 1225 \\ (1209) \end{array}$ | $\begin{array}{r} 864 \\ (823) \end{array}$ | $\begin{array}{r} 1285 \\ (1054) \end{array}$ | $\begin{array}{r} 9012 \\ (8835) \end{array}$ |  |
|  |  |  |  |  |  |  | $\mathrm{p}<0.001$ |  |

See Notes to Tables 10.1 and 10.2. Sample here is restricted to couples.

## Smoking

While alcohol consumption was associated with relatively advantaged social backgrounds, smoking was associated with disadvantage, as also found in the literature (Davy, 2007). For example, among MCS mothers, less than 10 per cent of the most qualified mothers smoked, while among women with no qualifications almost half did (43\%) (Table 10.19). While mothers in England were most likely to drink alcohol, they were the least likely to smoke. Lone mothers had particularly high rates of smoking, as did mothers who gave birth as teenagers. In the latter group non-smokers were the minority ( $56 \%$ smoking). The majority of lone mothers who did not work smoked ( $54 \%$ ), although only 40 per cent of lone mothers with jobs smoked, suggesting interplay between age, disadvantage and partnership status in predicting smoking. This conforms to the idea of smoking being part of a coping strategy among young mothers (Graham et al., 2006). Less than 10 per cent of Indian, Bangladeshi, Pakistani and black African mothers smoked. One significant trend was the rarity of those who smoke less than one cigarette per day - these might be described as social smokers - who accounted for 1 per cent of mothers. Very heavy smokers, who smoked more than a 20 cigarettes per day, were also rare -1 per cent of mothers.

The proportion of fathers who smoked at all matched that of mothers ( $29 \%$ compared to $28 \%$ ) (Table 10.20). However, among fathers there were slightly higher rates of social smoking (2\%) and heavy smoking (2\%). Fathers were twice as likely as mothers to smoke more than 10 cigarettes a day. There was also evidence that social background characteristics played an even stronger role in predicting which fathers smoked. The majority of fathers with no qualifications and those who were part of reconstituted families (as well as the small number of lone fathers) were smokers. Unlike mothers, there was no perceptible difference between smoking rates
in the two youngest age groups for fathers. Another contrast to the smoking patterns of mothers was the reversal of country differences so that fathers in Northern Ireland were the least likely to smoke and fathers in Scotland and England the most. There were also different patterns between mothers' and fathers' smoking by ethnicity. While Bangladeshi and Pakistani mothers had the lowest rates of smoking, fathers from these groups had the highest rates of smoking (around 40\% each). Black Caribbean mothers and fathers shared relatively high rates of smoking. However, white fathers were the heaviest smokers - Pakistani, Bangladeshi and black Caribbean fathers showed a distinctive pattern of high levels of moderate smoking but lower levels of heavy smoking.

There was more agreement between couples' smoking patterns than alcohol consumption. Around 71 per cent of couples smoked the same amount (including those who didn't smoke at all), while 19 per cent were couples where the father smoked more than the mother, and the remaining 10 per cent were couples where the mother smoked more than the father (Table 10.21).

Tables 10.22 and 10.23 show the relationships between alcohol consumption and smoking habits. While there was a significant relationship between these for both mothers and fathers, these relationships were difficult to interpret which again shows the limitations of bivariate analyses. However, for both mothers and fathers, it appeared that both those who drank every day and those who drank very infrequently or never had the highest rates of smoking. Mothers and fathers who drank several days a week or who drank moderately were those least likely to smoke.

The smoking patterns of MCS mothers and fathers have implications for their own health and that of their children. Smoking has been undoubtedly linked with the incidence of lung cancer for quite some time (see Hennekens and Buring, 1987: 1011), and smoking in pregnancy is associated with low birthweight (see Power and Elliott (2006) for examples from earlier cohort studies). Other evidence shows that parental smoking damages the respiratory health of children during childhood (Pattenden, et al., 2006). In Chapter 9 of this report, we also show a link between experience of asthma and parental smoking.

Table 10.31: Mother's Frequency of Smoking by selected background characteristics MCS4

|  | None | Less than 5 a day | $\begin{aligned} & \hline 6-10 \mathrm{a} \\ & \text { day } \\ & \hline \end{aligned}$ | More than a 10 pack | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{36}$ | $\begin{gathered} 1188 \\ (57.0) \end{gathered}$ | $\begin{array}{r} 109 \\ (6.5) \end{array}$ | $\begin{array}{r} 226 \\ (13.5) \end{array}$ | $\begin{array}{r} 411 \\ (23.0) \end{array}$ | $\begin{array}{r} 1934 \\ (100.0) \end{array}$ |
| NVQ L1 (< 5 GCSE A-C) | $\begin{array}{r} 529 \\ (55.7) \end{array}$ | $\begin{array}{r} 57 \\ (6.1) \end{array}$ | $\begin{array}{r} 139 \\ (15.7) \end{array}$ | $\begin{array}{r} 203 \\ (22.5) \end{array}$ | $\begin{array}{r} 928 \\ (100.0) \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 A-Level) | $\begin{array}{r} 2350 \\ (64.8) \end{array}$ | $\begin{array}{r} 246 \\ (7.4) \end{array}$ | $\begin{array}{r} 410 \\ (11.9) \end{array}$ | $\begin{array}{r} 562 \\ (15.9) \end{array}$ | $\begin{array}{r} 3568 \\ (100.0) \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 1538 \\ (74.4) \\ \hline \end{array}$ | $\begin{array}{r} 129 \\ (6.3) \\ \hline \end{array}$ | $\begin{array}{r} 178 \\ (9.1) \\ \hline \end{array}$ | $\begin{array}{r} 221 \\ (10.2) \\ \hline \end{array}$ | $\begin{array}{r} 2066 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 3539 \\ (84.9) \end{array}$ | $\begin{array}{r} 215 \\ (5.3) \end{array}$ | $\begin{array}{r} 182 \\ (4.6) \end{array}$ | $\begin{array}{r} 216 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 4152 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 833 \\ (90.4) \end{array}$ | $\begin{array}{r} 37 \\ (4.3) \end{array}$ | $\begin{array}{r} 26 \\ (2.5) \end{array}$ | $\begin{array}{r} 26 \\ (2.8) \end{array}$ | $\begin{array}{r} 922 \\ (100.0) \end{array}$ |
| Total Percentage | (72.0) | (6.2) | (9.3) | (12.6) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 9977 \\ (9726) \end{array}$ | $\begin{array}{r} 793 \\ (837) \\ \hline \end{array}$ | $\begin{array}{r} 1161 \\ (1251) \end{array}$ | $\begin{array}{r} 1639 \\ (1703) \\ \hline \end{array}$ | $\begin{array}{r} 13570 \\ (13516) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |
| Two Natural Parents | $\begin{array}{r} 7994 \\ (79.7) \end{array}$ | $\begin{array}{r} \hline 464 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 590 \\ (6.3) \end{array}$ | $\begin{array}{r} 847 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 9895 \\ (100.0) \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 504 \\ (54.7) \end{array}$ | $\begin{array}{r} 73 \\ (8.4) \end{array}$ | $\begin{array}{r} 113 \\ (12.8) \end{array}$ | $\begin{array}{r} 203 \\ (24.1) \end{array}$ | $\begin{array}{r} 893 \\ (100.0) \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 1480 \\ (53.2) \end{array}$ | $\begin{array}{r} 257 \\ (9.2) \end{array}$ | $\begin{array}{r} 458 \\ (17.4) \end{array}$ | $\begin{array}{r} 590 \\ (20.2) \end{array}$ | $\begin{array}{r} 2785 \\ (100.0) \end{array}$ |
| Total Percentage | (71.9) | (6.2) | (9.2) | (12.6) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 9978 \\ (9726) \\ \hline \end{array}$ | $\begin{array}{r} 794 \\ (840) \\ \hline \end{array}$ | $\begin{array}{r} 1161 \\ (1251) \end{array}$ | $\begin{array}{r} 1640 \\ (1704) \end{array}$ | $\begin{array}{r} 13573 \\ (13521) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |
| White | $\begin{gathered} 8185 \\ (69.7) \end{gathered}$ | $\begin{gathered} \hline 689 \\ (6.2) \end{gathered}$ | $\begin{gathered} 1101 \\ (10.1) \end{gathered}$ | $\begin{gathered} 1604 \\ (14.1) \end{gathered}$ | $\begin{array}{r} 11579 \\ (100.0) \end{array}$ |
| Mixed | $\begin{array}{r} 79 \\ (64.5) \end{array}$ | $\begin{array}{r} 16 \\ (17.5) \end{array}$ | $\begin{array}{r} 16 \\ (11.7) \end{array}$ | $\begin{array}{r} 9 \\ (6.4) \end{array}$ | $\begin{array}{r} 120 \\ (100.0) \end{array}$ |
| Indian | $\begin{array}{r} 325 \\ (94.9) \end{array}$ | $\begin{array}{r} 17 \\ (4.2) \end{array}$ | $\begin{array}{r} 4 \\ (0.9) \end{array}$ | $\begin{array}{r} 0 \\ (0.0) \end{array}$ | $\begin{array}{r} 346 \\ (100.0) \end{array}$ |
| Pakistani | $\begin{array}{r} 566 \\ (93.3) \end{array}$ | $\begin{array}{r} 19 \\ (3.8) \end{array}$ | $\begin{array}{r} 13 \\ (2.0) \end{array}$ | $\begin{array}{r} 4 \\ (0.8) \end{array}$ | $\begin{array}{r} 602 \\ (100.0) \end{array}$ |
| Bangladeshi | $\begin{array}{r} 234 \\ (95.2) \end{array}$ | $\begin{array}{r} 9 \\ (3.5) \end{array}$ | $\begin{array}{r} 3 \\ (1.3) \end{array}$ | 0 $(0.0)$ | $\begin{array}{r} 246 \\ (100.0) \end{array}$ |
| Black Caribbean | $\begin{array}{r} 114 \\ (65.2) \end{array}$ | $\begin{array}{r} 26 \\ (14.5) \end{array}$ | $\begin{array}{r} 17 \\ (11.4) \end{array}$ | $\begin{array}{r} 15 \\ (8.9) \end{array}$ | $\begin{array}{r} 172 \\ (100.0) \end{array}$ |
| Black African | $\begin{array}{r} 250 \\ (92.4) \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ (4.7) \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ (1.2) \end{array}$ | 3 $(1.7)$ | $\begin{array}{r} 265 \\ (100.0) \\ \hline \end{array}$ |
| Other | $\begin{array}{r} 223 \\ (89.7) \end{array}$ | $\begin{array}{r} 8 \\ (4.9) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (1.8) \end{array}$ | 5 $(3.7)$ | $\begin{array}{r} 241 \\ (100.0) \end{array}$ |
| Total Percentage | (71.9) | (6.2) | (9.2) | (12.6) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 9976 \\ (9724) \end{array}$ | $\begin{array}{r} 794 \\ (840) \end{array}$ | $\begin{array}{r} 1161 \\ (1251) \end{array}$ | $\begin{array}{r} 1640 \\ (1704) \end{array}$ | $\begin{array}{r} 13571 \\ (13519) \end{array}$ |
| p<0.001 |  |  |  |  |  |
| Income Above 60\% Median Value | $\begin{array}{r} 7594 \\ (78.5) \end{array}$ | $\begin{array}{r} 514 \\ (5.7) \end{array}$ | $\begin{array}{r} 598 \\ (6.9) \end{array}$ | $\begin{array}{r} 810 \\ (8.8) \end{array}$ | $\begin{array}{r} 9516 \\ (100.0) \end{array}$ |
| Continued |  |  |  |  |  |

[^37]Table 10.31: Mother's Frequency of Smoking by selected background characteristics MCS4


Notes See Table 10.1

Table 10.32: Father's Frequency of Smoking by selected background characteristics MCS4


[^38]Table 10.32: Father's Frequency of Smoking by selected background characteristics MCS4


Notes: See Table 10.2).

Table 10.33: Mother's frequency of Smoking by Father's frequency of Smoking MCS4


[^39]|  |  | Mother's frequency of smoking |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | None | Less than 5 a day | $\begin{aligned} & \hline 6-10 \mathrm{a} \\ & \text { day } \\ & \hline \end{aligned}$ | More than a 10 pack | Total | $\begin{gathered} \text { Col } \\ \text { Total } \end{gathered}$ |
|  | Every day | $\begin{array}{r} 254 \\ (67.3) \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ (10.0) \\ \hline \end{array}$ | $\begin{array}{r} 29 \\ (8.6) \\ \hline \end{array}$ | $\begin{array}{r} 54 \\ (14.1) \\ \hline \end{array}$ | $\begin{array}{r} 373 \\ (100.0) \\ \hline \end{array}$ | (3.1) |
|  | Several days a week | $\begin{array}{r} 1577 \\ (77.6) \\ \hline \end{array}$ | $\begin{array}{r} 109 \\ (5.4) \\ \hline \end{array}$ | $\begin{array}{r} 137 \\ (7.2) \end{array}$ | $\begin{array}{r} 189 \\ (9.7) \\ \hline \end{array}$ | $\begin{array}{r} 2012 \\ (100.0) \\ \hline \end{array}$ | (16.0) |
|  | 1-2 days a week | $\begin{array}{r} 2591 \\ (70.9) \end{array}$ | $\begin{array}{r} 278 \\ (7.9) \end{array}$ | $\begin{array}{r} 327 \\ (8.8) \end{array}$ | $\begin{array}{r} 438 \\ (12.5) \end{array}$ | $\begin{array}{r} 3634 \\ (100.0) \end{array}$ | (26.4) |
|  | 1-2 days a month | $\begin{array}{r} 1605 \\ (70.9) \\ \hline \end{array}$ | $\begin{array}{r} 136 \\ (6.2) \\ \hline \end{array}$ | $\begin{array}{r} 223 \\ (10.5) \\ \hline \end{array}$ | $\begin{array}{r} 290 \\ (12.4) \\ \hline \end{array}$ | $\begin{array}{r} 2254 \\ (100.0) \\ \hline \end{array}$ | (16.8) |
|  | Less than once a month | $\begin{array}{r} 1661 \\ (66.6) \end{array}$ | $\begin{array}{r} 113 \\ (5.5) \\ \hline \end{array}$ | $\begin{array}{r} 245 \\ (11.7) \\ \hline \end{array}$ | $\begin{array}{r} 371 \\ (16.2) \end{array}$ | $\begin{array}{r} 2390 \\ (100.0) \\ \hline \end{array}$ | (18.1) |
|  | Never | $\begin{array}{r} 2290 \\ (75.3) \\ \hline \end{array}$ | $\begin{array}{r} 121 \\ (4.6) \\ \hline \end{array}$ | $\begin{array}{r} 200 \\ (8.4) \\ \hline \end{array}$ | $\begin{array}{r} 298 \\ (11.7) \\ \hline \end{array}$ | $\begin{array}{r} 2909 \\ (100.0) \\ \hline \end{array}$ | (19.5) |
|  | Total Percentage | $\begin{array}{r} 9978 \\ (71.9) \\ \hline \end{array}$ | $\begin{array}{r} 793 \\ (6.2) \end{array}$ | $\begin{aligned} & 1161 \\ & (9.2) \\ & \hline \end{aligned}$ | $\begin{array}{r} 1640 \\ (12.6) \end{array}$ | $\begin{array}{r} 13572 \\ (100.0) \\ \hline \end{array}$ | (100.0) |
|  | Observed Number Weighted Number | $\begin{array}{r} 9978 \\ (9726) \end{array}$ | $\begin{array}{r} 793 \\ (839) \end{array}$ | $\begin{array}{r} 1161 \\ (1251) \end{array}$ | $\begin{array}{r} 1640 \\ (1704) \end{array}$ | $\begin{array}{r} 13572 \\ (13520) \end{array}$ |  |
|  |  |  |  |  |  | $\mathrm{p}<0.001$ |  |

Notes: See Table 10.1.


Notes: See Tables 10.1 and 10.2 Sample includes couples only.

BMI: Parents' weight ${ }^{38}$
As mentioned in the introduction, several initiatives have been launched by the government to tackle rising rates of obesity. Nationally, based on 2007 estimates, only 40 per cent of adults fell in the 'normal' or underweight range of Body Mass Index (BMI), leaving 37 per cent as overweight (but not obese) and 24 per cent

[^40]obese (Department of Health, 2008). This varied significantly by age and gender. Higher rates of being overweight and obese were recorded among women and older people. Among men in England, 63 per cent were in the normal range at age 16-24 dropping to 44 per cent among those aged 25-34 years. Among women the difference is less stark, dropping from 61 per cent to 54 per cent between 16-24 years and 25-34 years (Department of Health, 2008). BMI is also known to vary significantly by a number of social background factors, with high BMI being associated with disadvantage (Scharoun-Lee et al., 2009; Wang and Beydoun, 2007). In this chapter, we use cut-off points derived from the World Health Organization to determine categories of being underweight (BMI<18.49), normal (BMI:18.5-24.99), overweight (BMI:25-29.99), obese (BMI:30-34.99) and severe/morbid/super obese (BMI>35.0) (World Health Organization, 2000).

Among MCS parents, we find very high rates of obesity and overweight, with 44 per cent of mothers and over two-thirds of fathers having BMI above normal (Tables 10.24 and 10.25). As with the literature, we find a strong social pattern. Mothers with higher degree-level qualifications were more likely than mothers with no qualifications to be of normal weight ( $66 \%$ compared to $48 \%$ ). Mothers in workless couples were the least likely to fall into this weight category (38\%). Among ethnic groups, black mothers were most likely to be in the high BMI categories. Otherwise, black African mothers are among the healthiest of any ethnic group on all indicators reviewed so far in this chapter. This may point to either the inadequacies of measuring adiposity through BMI for some ethnic groups (a measurement issue) or to a real difference in adiposity. Age was significantly associated with body mass; unlike most other health indicators, there were no significant country differences in patterns of being overweight and obese among mothers.

Among fathers, BMI patterns were similar to mothers, though not identical (Table 10.26). Among the highly educated, fathers as well as mothers were the most likely to have normal BMI. However, fathers with medium level qualifications were the least likely to be in the 'normal' weight category, deviating from the linear trend clear among mothers. Welsh fathers had the highest levels of obesity. In another deviation from a linear trend, fathers in two-earner couples were more likely to be overweight but not obese. Less than a quarter of black Caribbean fathers were in the normal category, while over half of Bangladeshi fathers were. Yet despite this contrast, ethnic differences were only of borderline significance ( $p=0.09$ ). There was an association of age with BMI, where older fathers were significantly more likely to exceed the normal range.

When comparing mothers' and fathers' BMI category, fathers were generally heavier than mothers, though there was clear evidence of a correlation between the weight of parents. Of children who were growing up in two-parent households, very few had both mother and father in the normal weight range - just 19 per cent. Finally, Figure 10.4 shows the distribution of weight category by self-rated health. Parents with higher BMI are clearly seen more likely to report poorer current health. For example, those in poor health are 10 times more likely to be severe/morbid/super obese than those reporting excellent health - observed for both mothers and fathers. This is one initial indicator of the wider adverse health effects of obesity. As these parents age, in
the absence of weight loss, we may begin to see the adverse effects of being severely overweight including elevated risks of chronic diseases and eventually, lower life expectancy.

Table 10.36: Mother's Body Mass category by selected background characteristics MCS4

|  | Underweight | Normal | Overweight | Obese | Severe/Super/ Morbidly Obese | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No UK Qualifications ${ }^{39}$ | $\begin{array}{r} 46 \\ (2.9) \\ \hline \end{array}$ | $\begin{array}{r} 652 \\ (47.8) \\ \hline \end{array}$ | $\begin{array}{r} 437 \\ (30.1) \\ \hline \end{array}$ | $\begin{array}{r} 182 \\ (12.2) \\ \hline \end{array}$ | $\begin{array}{r} 97 \\ (7.0) \\ \hline \end{array}$ | $\begin{array}{r} 1414 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L1 (< 5 GCSE AC) | $\begin{array}{r} 28 \\ (3.9) \\ \hline \end{array}$ | $\begin{array}{r} 365 \\ (49.6) \end{array}$ | $\begin{array}{r} 208 \\ (26.2) \end{array}$ | $\begin{array}{r} 99 \\ (13.2) \end{array}$ | $\begin{array}{r} 51 \\ (7.1) \end{array}$ | $\begin{array}{r} 751 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L2 (5 GCSE A-C/ 1 A-Level) | $\begin{array}{r} 76 \\ (2.7) \end{array}$ | $\begin{array}{r} 1456 \\ (49.8) \\ \hline \end{array}$ | $\begin{array}{r} 904 \\ (29.9) \end{array}$ | $\begin{array}{r} 355 \\ (11.5) \\ \hline \end{array}$ | $\begin{array}{r} 183 \\ (6.1) \\ \hline \end{array}$ | $\begin{array}{r} 2974 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 30 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 889 \\ (52.3) \\ \hline \end{array}$ | $\begin{array}{r} 502 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 210 \\ (11.8) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (5.4) \\ \hline \end{array}$ | $\begin{array}{r} 1729 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 72 \\ (2.0) \\ \hline \end{array}$ | $\begin{array}{r} 2036 \\ (57.9) \\ \hline \end{array}$ | $\begin{array}{r} 955 \\ (26.4) \\ \hline \end{array}$ | $\begin{array}{r} 353 \\ (9.9) \\ \hline \end{array}$ | $\begin{array}{r} 148 \\ (3.9) \\ \hline \end{array}$ | $\begin{array}{r} 3564 \\ (100.0) \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 17 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 509 \\ (65.9) \\ \hline \end{array}$ | $\begin{array}{r} 188 \\ (21.9) \\ \hline \end{array}$ | $\begin{array}{r} 66 \\ (7.3) \\ \hline \end{array}$ | $\begin{array}{r} 20 \\ (2.5) \\ \hline \end{array}$ | $\begin{array}{r} 800 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (2.5) | (53.4) | (27.9) | (11.0) | (5.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 269 \\ (280) \\ \hline \end{array}$ | $\begin{array}{r} 5907 \\ (6002) \\ \hline \end{array}$ | $\begin{array}{r} 3194 \\ (3127) \\ \hline \end{array}$ | $\begin{array}{r} 1265 \\ (1234) \\ \hline \end{array}$ | $\begin{array}{r} 597 \\ (592) \\ \hline \end{array}$ | $\begin{array}{r} 11232 \\ (11235) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Two Natural Parents | $\begin{array}{r} 161 \\ (2.0) \end{array}$ | $\begin{gathered} 4362 \\ (53.6) \end{gathered}$ | $\begin{array}{r} 2395 \\ (28.4) \end{array}$ | $\begin{array}{r} 943 \\ (11.0) \end{array}$ | $\begin{array}{r} 420 \\ (4.9) \end{array}$ | $\begin{array}{r} 8281 \\ (100.0) \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 19 \\ (2.8) \\ \hline \end{array}$ | $\begin{array}{r} 352 \\ (51.4) \\ \hline \end{array}$ | $\begin{array}{r} 181 \\ (27.3) \\ \hline \end{array}$ | $\begin{array}{r} 73 \\ \text { (11.4) } \\ \hline \end{array}$ | $\begin{array}{r} 44 \\ (7.3) \\ \hline \end{array}$ | $\begin{array}{r} 669 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 89 \\ (4.1) \\ \hline \end{array}$ | $\begin{array}{r} 1193 \\ (53.3) \\ \hline \end{array}$ | $\begin{array}{r} 619 \\ (26.1) \\ \hline \end{array}$ | $\begin{array}{r} 249 \\ (10.8) \\ \hline \end{array}$ | $\begin{array}{r} 133 \\ (5.7) \\ \hline \end{array}$ | $\begin{array}{r} 2283 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (2.5) | (53.4) | (27.9) | (11.0) | (5.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 269 \\ (280) \\ \hline \end{array}$ | $\begin{array}{r} 5907 \\ (6002) \\ \hline \end{array}$ | $\begin{array}{r} 3195 \\ (3131) \\ \hline \end{array}$ | $\begin{array}{r} 1265 \\ (1234) \\ \hline \end{array}$ | $\begin{array}{r} 597 \\ (592) \\ \hline \end{array}$ | $\begin{array}{r} 11233 \\ (11239) \\ \hline \end{array}$ |
|  |  |  |  |  |  | $\mathrm{p}<0.001$ |
| White | $\begin{array}{r} 220 \\ (2.4) \\ \hline \end{array}$ | $\begin{array}{r} 5218 \\ (54.3) \\ \hline \end{array}$ | $\begin{array}{r} 2739 \\ (27.5) \end{array}$ | $\begin{array}{r} 1064 \\ (10.5) \end{array}$ | $\begin{array}{r} \hline 511 \\ (5.2) \end{array}$ | $\begin{array}{r} 9752 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 5 \\ (4.3) \end{array}$ | $\begin{array}{r} 52 \\ (59.4) \end{array}$ | $\begin{array}{r} 24 \\ (25.4) \end{array}$ | $\begin{array}{r} 6 \\ (5.7) \end{array}$ | $\begin{array}{r} 6 \\ (5.2) \end{array}$ | $\begin{array}{r} 93 \\ (100.0) \end{array}$ |
| Indian | $\begin{array}{r} 12 \\ (2.8) \end{array}$ | $\begin{array}{r} 166 \\ (57.8) \\ \hline \end{array}$ | $\begin{array}{r} 79 \\ (25.5) \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ (11.8) \end{array}$ | $\begin{array}{r} 8 \\ (2.1) \end{array}$ | $\begin{array}{r} 291 \\ (100.0) \\ \hline \end{array}$ |
| Pakistani | $\begin{array}{r} 15 \\ (3.7) \\ \hline \end{array}$ | $\begin{array}{r} 177 \\ (42.4) \\ \hline \end{array}$ | $\begin{array}{r} 128 \\ (29.2) \\ \hline \end{array}$ | $\begin{array}{r} 64 \\ (16.0) \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ (8.7) \\ \hline \end{array}$ | $\begin{array}{r} 420 \\ (100.0) \\ \hline \end{array}$ |
| Bangladeshi | $\begin{array}{r} 2 \\ (1.4) \end{array}$ | $\begin{array}{r} 82 \\ (44.2) \end{array}$ | $\begin{array}{r} 53 \\ (35.6) \end{array}$ | $\begin{array}{r} 19 \\ (15.5) \end{array}$ | $\begin{array}{r} 8 \\ (3.3) \end{array}$ | $\begin{array}{r} 164 \\ (100.0) \end{array}$ |
| Black Caribbean | $\begin{array}{r} 2 \\ (4.9) \\ \hline \end{array}$ | $\begin{array}{r} 49 \\ (34.0) \\ \hline \end{array}$ | $\begin{array}{r} 47 \\ (30.3) \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ (21.5) \\ \hline \end{array}$ | $\begin{array}{r} 11 \\ (9.2) \\ \hline \end{array}$ | $\begin{array}{r} 135 \\ (100.0) \\ \hline \end{array}$ |
| Black African | $\begin{array}{r} 2 \\ (0.5) \end{array}$ | $\begin{array}{r} 56 \\ (33.8) \end{array}$ | $\begin{array}{r} 74 \\ (41.4) \\ \hline \end{array}$ | $\begin{array}{r} 42 \\ (19.3) \end{array}$ | $\begin{array}{r} 12 \\ (4.9) \end{array}$ | $\begin{array}{r} 186 \\ (100.0) \\ \hline \end{array}$ |
| Other | $\begin{array}{r} 11 \\ (5.1) \\ \hline \end{array}$ | $\begin{array}{r} 107 \\ (56.5) \\ \hline \end{array}$ | $\begin{array}{r} 51 \\ (26.6) \\ \hline \end{array}$ | $\begin{array}{r} 18 \\ (8.4) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (3.3) \\ \hline \end{array}$ | $\begin{array}{r} 192 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (2.5) | (53.4) | (27.9) | (11.0) | (5.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 269 \\ (280) \\ \hline \end{array}$ | $\begin{array}{r} 5907 \\ (6002) \end{array}$ | $\begin{array}{r} 3195 \\ (3131) \\ \hline \end{array}$ | $\begin{array}{r} 1265 \\ (1234) \\ \hline \end{array}$ | $\begin{array}{r} 597 \\ (592) \\ \hline \end{array}$ | $\begin{array}{r} 11233 \\ (11239) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Income Above 60\% Median Value | $\begin{array}{r} 156 \\ (2.0) \end{array}$ | $\begin{gathered} 4434 \\ (55.5) \end{gathered}$ | $\begin{array}{r} 2300 \\ (28.0) \end{array}$ | $\begin{array}{r} 847 \\ (10.0) \end{array}$ | $\begin{array}{r} \hline 372 \\ (4.6) \end{array}$ | $\begin{array}{r} 8109 \\ (100.0) \end{array}$ |

[^41]Table 10.36: Mother's Body Mass category by selected background characteristics MCS4

|  | Underweight | Normal | Overweight | Obese | Severe/Super/ Morbidly Obese | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |
| Income Below 60\% Median Value | $\begin{array}{r} 113 \\ (3.9) \\ \hline \end{array}$ | $\begin{array}{r} 1473 \\ (47.9) \\ \hline \end{array}$ | $\begin{array}{r} 889 \\ (27.3) \\ \hline \end{array}$ | $\begin{array}{r} 418 \\ (13.8) \\ \hline \end{array}$ | $\begin{array}{r} 225 \\ (7.1) \\ \hline \end{array}$ | $\begin{array}{r} 3118 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (2.5) | (53.4) | (27.9) | (11.0) | (5.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 269 \\ (280) \\ \hline \end{array}$ | $\begin{array}{r} 5907 \\ (6002) \\ \hline \end{array}$ | $\begin{array}{r} 3189 \\ (3126) \\ \hline \end{array}$ | $\begin{array}{r} 1265 \\ (1234) \\ \hline \end{array}$ | $\begin{array}{r} 597 \\ (592) \\ \hline \end{array}$ | $\begin{array}{r} 11227 \\ (11234) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Professional/ Managerial Job | $\begin{array}{r} 42 \\ (1.3) \end{array}$ | $\begin{array}{r} 1604 \\ (59.1) \end{array}$ | $\begin{array}{r} 747 \\ (27.4) \\ \hline \end{array}$ | $\begin{array}{r} 257 \\ (8.9) \\ \hline \end{array}$ | $\begin{array}{r} 95 \\ (3.3) \\ \hline \end{array}$ | $\begin{array}{r} 2745 \\ (100.0) \\ \hline \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 83 \\ (2.1) \end{array}$ | $\begin{array}{r} 2299 \\ (52.8) \end{array}$ | $\begin{array}{r} 1276 \\ (28.0) \end{array}$ | $\begin{array}{r} 532 \\ (12.0) \end{array}$ | $\begin{array}{r} 228 \\ (5.0) \end{array}$ | $\begin{array}{r} 4418 \\ (100.0) \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 144 \\ (3.6) \\ \hline \end{array}$ | $\begin{array}{r} 2004 \\ (50.4) \\ \hline \end{array}$ | $\begin{array}{r} 1172 \\ (28.0) \\ \hline \end{array}$ | $\begin{array}{r} 476 \\ (11.2) \\ \hline \end{array}$ | $\begin{array}{r} 274 \\ (6.8) \\ \hline \end{array}$ | $\begin{array}{r} 4070 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (2.5) | (53.4) | (27.9) | (11.0) | (5.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 269 \\ (280) \\ \hline \end{array}$ | $\begin{array}{r} 5907 \\ (6002) \\ \hline \end{array}$ | $\begin{array}{r} 3195 \\ (3131) \\ \hline \end{array}$ | $\begin{array}{r} 1265 \\ (1234) \\ \hline \end{array}$ | $\begin{array}{r} 597 \\ (592) \\ \hline \end{array}$ | $\begin{array}{r} 11233 \\ (11239) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Teenage at birth of CM | $\begin{array}{r} 27 \\ (4.8) \\ \hline \end{array}$ | $\begin{array}{r} 376 \\ (56.2) \\ \hline \end{array}$ | $\begin{array}{r} 178 \\ (26.5) \\ \hline \end{array}$ | $\begin{array}{r} 63 \\ (8.7) \\ \hline \end{array}$ | $\begin{array}{r} 28 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 672 \\ (100.0) \\ \hline \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 63 \\ (3.6) \\ \hline \end{array}$ | $\begin{array}{r} 891 \\ (51.6) \\ \hline \end{array}$ | $\begin{array}{r} 497 \\ (26.7) \\ \hline \end{array}$ | $\begin{array}{r} 201 \\ (11.3) \\ \hline \end{array}$ | $\begin{array}{r} 123 \\ (6.9) \\ \hline \end{array}$ | $\begin{array}{r} 1775 \\ (100.0) \\ \hline \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 73 \\ (2.4) \end{array}$ | $\begin{array}{r} 1596 \\ (51.5) \end{array}$ | $\begin{array}{r} 856 \\ (27.8) \end{array}$ | $\begin{array}{r} 386 \\ (12.6) \end{array}$ | $\begin{array}{r} 180 \\ (5.7) \end{array}$ | $\begin{array}{r} 3091 \\ (100.0) \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 69 \\ (1.9) \end{array}$ | $\begin{array}{r} 1937 \\ (54.7) \\ \hline \end{array}$ | $\begin{array}{r} 1057 \\ (28.5) \end{array}$ | $\begin{array}{r} 376 \\ (9.9) \end{array}$ | $\begin{array}{r} 172 \\ (5.0) \\ \hline \end{array}$ | $\begin{array}{r} 3611 \\ (100.0) \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 37 \\ (1.8) \\ \hline \end{array}$ | $\begin{array}{r} 1107 \\ (54.7) \\ \hline \end{array}$ | $\begin{array}{r} 607 \\ (28.5) \\ \hline \end{array}$ | $\begin{array}{r} 239 \\ (10.9) \\ \hline \end{array}$ | $\begin{array}{r} 94 \\ (4.2) \\ \hline \end{array}$ | $\begin{array}{r} 2084 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (2.5) | (53.4) | (27.9) | (11.0) | (5.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 269 \\ (280) \\ \hline \end{array}$ | $\begin{array}{r} 5907 \\ (6002) \\ \hline \end{array}$ | $\begin{array}{r} 3195 \\ (3131) \\ \hline \end{array}$ | $\begin{array}{r} 1265 \\ (1234) \\ \hline \end{array}$ | $\begin{array}{r} 597 \\ (592) \\ \hline \end{array}$ | $\begin{array}{r} 11233 \\ (11239) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| England | $\begin{array}{r} 180 \\ (2.5) \\ \hline \end{array}$ | $\begin{array}{r} 3740 \\ (53.5) \\ \hline \end{array}$ | $\begin{array}{r} 2006 \\ (27.7) \\ \hline \end{array}$ | $\begin{array}{r} 808 \\ (11.0) \\ \hline \end{array}$ | $\begin{array}{r} 379 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 7113 \\ (100.0) \\ \hline \end{array}$ |
| Wales | $\begin{array}{r} 35 \\ (2.0) \end{array}$ | $\begin{array}{r} 854 \\ (53.6) \end{array}$ | $\begin{array}{r} 469 \\ (28.3) \\ \hline \end{array}$ | $\begin{array}{r} 198 \\ (10.8) \\ \hline \end{array}$ | $\begin{array}{r} 91 \\ (5.3) \\ \hline \end{array}$ | $\begin{array}{r} 1647 \\ (100.0) \\ \hline \end{array}$ |
| Scotland | $\begin{array}{r} 28 \\ (2.3) \\ \hline \end{array}$ | $\begin{array}{r} 732 \\ (53.7) \\ \hline \end{array}$ | $\begin{array}{r} 367 \\ (27.5) \\ \hline \end{array}$ | $\begin{array}{r} 146 \\ (11.1) \\ \hline \end{array}$ | $\begin{array}{r} 72 \\ (5.5) \\ \hline \end{array}$ | $\begin{array}{r} 1345 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 26 \\ (2.4) \\ \hline \end{array}$ | $\begin{array}{r} 581 \\ (52.0) \\ \hline \end{array}$ | $\begin{array}{r} 353 \\ (30.7) \\ \hline \end{array}$ | $\begin{array}{r} 113 \\ (10.2) \\ \hline \end{array}$ | $\begin{array}{r} 55 \\ (4.7) \\ \hline \end{array}$ | $\begin{array}{r} 1128 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (2.4) | (53.4) | (28.1) | (10.9) | (5.2) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 269 \\ (272) \end{array}$ | $\begin{array}{r} 5907 \\ (6005) \end{array}$ | $\begin{array}{r} 3195 \\ (3160) \end{array}$ | $\begin{array}{r} 1265 \\ (1228) \end{array}$ | $\begin{array}{r} 597 \\ (589) \end{array}$ | $\begin{array}{r} 11233 \\ (11254) \end{array}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.916$ |

Notes: See Table 10.1

Table 10.37: Father's Body Mass category by selected background characteristics MCS4

|  | Underweight | Normal | Overweight | Obese | Severe/ Super/ Morbidly Obese | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { No UK } \\ & \text { Qualifications }{ }^{40} \end{aligned}$ | $\begin{array}{r} 10 \\ (1.0) \end{array}$ | $\begin{array}{r} 365 \\ (34.9) \end{array}$ | $\begin{array}{r} 496 \\ (43.7) \end{array}$ | $\begin{array}{r} 164 \\ (15.2) \end{array}$ | $\begin{array}{r} 61 \\ (5.2) \end{array}$ | $\begin{array}{r} 1096 \\ (100.0) \\ \hline \end{array}$ |
| $\begin{aligned} & \text { NVQ L1 (< } 5 \text { GCSE } \\ & \text { A-C) } \end{aligned}$ | $\begin{array}{r} 5 \\ (1.3) \end{array}$ | $\begin{array}{r} 150 \\ (31.2) \end{array}$ | $\begin{array}{r} 209 \\ (42.1) \end{array}$ | $\begin{array}{r} 85 \\ (17.0) \end{array}$ | $\begin{array}{r} 39 \\ (8.4) \end{array}$ | $\begin{array}{r} 488 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L2 (5 GCSE AC/ 1 A-Level) | $\begin{array}{r} 10 \\ (0.5) \end{array}$ | $\begin{array}{r} 582 \\ (29.4) \end{array}$ | $\begin{array}{r} 1006 \\ (48.2) \\ \hline \end{array}$ | $\begin{array}{r} 367 \\ (17.1) \end{array}$ | $\begin{array}{r} 108 \\ (4.8) \end{array}$ | $\begin{array}{r} 2073 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L3 (2+ A-Level) | $\begin{array}{r} 7 \\ (0.5) \\ \hline \end{array}$ | $\begin{array}{r} 382 \\ (28.6) \end{array}$ | $\begin{array}{r} 629 \\ (49.7) \\ \hline \end{array}$ | $\begin{array}{r} 215 \\ (17.0) \\ \hline \end{array}$ | $\begin{array}{r} 58 \\ (4.2) \\ \hline \end{array}$ | $\begin{array}{r} 1291 \\ (100.0) \\ \hline \end{array}$ |
| NVQ L4 (Degree Level) | $\begin{array}{r} 6 \\ (0.1) \end{array}$ | $\begin{array}{r} 819 \\ (32.8) \end{array}$ | $\begin{array}{r} 1227 \\ (48.1) \end{array}$ | $\begin{array}{r} 387 \\ (15.5) \end{array}$ | $\begin{array}{r} 88 \\ (3.4) \end{array}$ | $\begin{array}{r} 2527 \\ (100.0) \end{array}$ |
| NVQ L5 (Higher Degree Level) | $\begin{array}{r} 7 \\ (0.7) \end{array}$ | $\begin{array}{r} 361 \\ (38.5) \end{array}$ | $\begin{array}{r} 446 \\ (46.9) \end{array}$ | $\begin{array}{r} 107 \\ (11.2) \end{array}$ | $\begin{array}{r} 27 \\ (2.8) \end{array}$ | $\begin{array}{r} 948 \\ (100.0) \end{array}$ |
| Total Percentage | $\begin{array}{r} 45 \\ (0.5) \end{array}$ | $\begin{array}{r} 2659 \\ (32.1) \end{array}$ | $\begin{array}{r} 4013 \\ (47.3) \end{array}$ | $\begin{array}{r} 1325 \\ (15.7) \end{array}$ | $\begin{array}{r} 381 \\ (4.3) \end{array}$ | $\begin{array}{r} 8423 \\ (100.0) \end{array}$ |
| Observed Number <br> Weighted Number | $\begin{array}{r} 45 \\ (43) \\ \hline \end{array}$ | $\begin{array}{r} 2659 \\ (2671) \\ \hline \end{array}$ | $\begin{array}{r} 4013 \\ (3937) \\ \hline \end{array}$ | $\begin{array}{r} 1325 \\ (1308) \\ \hline \end{array}$ | $\begin{array}{r} 381 \\ (361) \\ \hline \end{array}$ | $\begin{array}{r} 8423 \\ (8321) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| England | $\begin{array}{r} 28 \\ (0.4) \\ \hline \end{array}$ | $\begin{array}{r} 1775 \\ (32.5) \\ \hline \end{array}$ | $\begin{array}{r} 2487 \\ (46.7) \\ \hline \end{array}$ | $\begin{array}{r} 846 \\ (16.0) \end{array}$ | $\begin{array}{r} 238 \\ (4.3) \end{array}$ | $\begin{array}{r} 5374 \\ (100.0) \end{array}$ |
| Wales | $\begin{array}{r} 8 \\ (0.7) \end{array}$ | $\begin{array}{r} 330 \\ (26.7) \end{array}$ | $\begin{array}{r} 607 \\ (50.6) \end{array}$ | $\begin{array}{r} 229 \\ (17.1) \end{array}$ | $\begin{array}{r} 65 \\ (4.8) \end{array}$ | $\begin{array}{r} 1239 \\ (100.0) \end{array}$ |
| Scotland | $\begin{array}{r} 5 \\ (1.0) \\ \hline \end{array}$ | $\begin{array}{r} 335 \\ (32.8) \\ \hline \end{array}$ | $\begin{array}{r} 504 \\ (49.0) \\ \hline \end{array}$ | $\begin{array}{r} 145 \\ (13.7) \\ \hline \end{array}$ | $\begin{array}{r} 36 \\ (3.4) \\ \hline \end{array}$ | $\begin{array}{r} 1025 \\ (100.0) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{array}{r} 4 \\ (0.5) \end{array}$ | $\begin{array}{r} 221 \\ (28.4) \end{array}$ | $\begin{array}{r} 418 \\ (51.8) \end{array}$ | $\begin{array}{r} 107 \\ (13.5) \end{array}$ | $\begin{array}{r} 42 \\ (5.8) \end{array}$ | $\begin{array}{r} 792 \\ (100.0) \end{array}$ |
| Total Percentage | $\begin{array}{r} 45 \\ (0.6) \\ \hline \end{array}$ | $\begin{array}{r} 2661 \\ (31.3) \\ \hline \end{array}$ | $\begin{array}{r} 4016 \\ (48.0) \\ \hline \end{array}$ | $\begin{array}{r} 1327 \\ (15.7) \\ \hline \end{array}$ | $\begin{array}{r} 381 \\ (4.4) \\ \hline \end{array}$ | $\begin{array}{r} 8430 \\ (100.0) \\ \hline \end{array}$ |
| Observed Number <br> Weighted number | $\begin{array}{r} 45 \\ (47) \\ \hline \end{array}$ | $\begin{array}{r} 2661 \\ (2591) \\ \hline \end{array}$ | $\begin{array}{r} 4016 \\ (3977) \\ \hline \end{array}$ | $\begin{array}{r} 1327 \\ (1297) \end{array}$ | $\begin{array}{r} 381 \\ (368) \\ \hline \end{array}$ | $\begin{array}{r} 8430 \\ (8279) \\ \hline \end{array}$ |
|  |  |  |  |  |  | $\mathrm{p}=0.019$ |
| Two Natural Parents | $\begin{array}{r} 42 \\ (0.5) \end{array}$ | $\begin{array}{r} 2451 \\ (31.4) \end{array}$ | $\begin{array}{r} 3782 \\ (48.2) \end{array}$ | $\begin{gathered} 1227 \\ (15.5) \end{gathered}$ | $\begin{array}{r} 356 \\ (4.4) \end{array}$ | $\begin{array}{r} 7858 \\ (100.0) \end{array}$ |
| Reconstituted Family | $\begin{array}{r} 3 \\ (1.0) \\ \hline \end{array}$ | $\begin{array}{r} 194 \\ (39.3) \\ \hline \end{array}$ | $\begin{array}{r} 217 \\ (36.8) \\ \hline \end{array}$ | $\begin{array}{r} 91 \\ (19.0) \\ \hline \end{array}$ | $\begin{array}{r} 23 \\ (3.8) \\ \hline \end{array}$ | $\begin{array}{r} 528 \\ (100.0) \\ \hline \end{array}$ |
| Lone-parent Family | $\begin{array}{r} 0 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ (42.8) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (40.8) \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ (10.2) \end{array}$ | $\begin{array}{r} 2 \\ (6.1) \\ \hline \end{array}$ | $\begin{array}{r} 44 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | $\begin{array}{r} 45 \\ (0.5) \end{array}$ | $\begin{array}{r} 2661 \\ (32.1) \end{array}$ | $\begin{array}{r} 4016 \\ (47.3) \end{array}$ | $\begin{array}{r} 1327 \\ (15.7) \end{array}$ | $\begin{array}{r} 381 \\ (4.3) \end{array}$ | $\begin{array}{r} 8430 \\ (100.0) \end{array}$ |
| Observed Number Weighted Number | $\begin{array}{r} 45 \\ (43) \\ \hline \end{array}$ | $\begin{array}{r} 2661 \\ (2672) \\ \hline \end{array}$ | $\begin{array}{r} 4016 \\ (3940) \\ \hline \end{array}$ | $\begin{array}{r} 1327 \\ (1311) \\ \hline \end{array}$ | $\begin{array}{r} 381 \\ (361) \\ \hline \end{array}$ | $\begin{array}{r} 8430 \\ (8328) \\ \hline \end{array}$ |
| $\mathrm{p}=0.018$ |  |  |  |  |  |  |
| White | $\begin{array}{r} 32 \\ (0.5) \\ \hline \end{array}$ | $\begin{array}{r} 2268 \\ (31.8) \\ \hline \end{array}$ | $\begin{array}{r} 3553 \\ (47.4) \\ \hline \end{array}$ | $\begin{array}{r} 1207 \\ (16.1) \\ \hline \end{array}$ | $\begin{array}{r} \hline 340 \\ (4.3) \\ \hline \end{array}$ | $\begin{array}{r} 7400 \\ (100.0) \\ \hline \end{array}$ |
| Mixed | $\begin{array}{r} 1 \\ (0.8) \end{array}$ | $\begin{array}{r} 18 \\ (28.6) \\ \hline \end{array}$ | $\begin{array}{r} 26 \\ (50.4) \end{array}$ | $\begin{array}{r} 8 \\ (14.1) \end{array}$ | $\begin{array}{r} 3 \\ (6.0) \\ \hline \end{array}$ | $\begin{array}{r} 56 \\ (100.0) \\ \hline \end{array}$ |
| Indian | $\begin{array}{r} 4 \\ (1.5) \\ \hline \end{array}$ | $\begin{array}{r} 88 \\ (35.5) \\ \hline \end{array}$ | $\begin{array}{r} 106 \\ (44.7) \\ \hline \end{array}$ | $\begin{array}{r} 30 \\ (13.5) \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ (4.8) \\ \hline \end{array}$ | $\begin{array}{r} 238 \\ (100.0) \\ \hline \end{array}$ |
| Continued |  |  |  |  |  |  |
| Pakistani | 5 | 120 | 143 | 32 | 14 | 314 |

[^42]Table 10.37: Father's Body Mass category by selected background characteristics MCS4

|  | Underweight | Normal | Overweight | Obese | Severe/ Super/ Morbidly Obese | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1.8) | (35.3) | (48.6) | (8.9) | (5.5) | (100.0) |
| Bangladeshi | $\begin{array}{r} 1 \\ (0.5) \end{array}$ | $\begin{array}{r} 59 \\ (54.0) \end{array}$ | $\begin{array}{r} 41 \\ (37.9) \end{array}$ | $\begin{array}{r} 5 \\ (5.3) \end{array}$ | $\begin{array}{r} 2 \\ (2.3) \end{array}$ | $\begin{array}{r} 108 \\ (100.0) \end{array}$ |
| Black Caribbean | $\begin{array}{r} 0 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 21 \\ (24.4) \\ \hline \end{array}$ | $\begin{array}{r} 40 \\ (57.4) \\ \hline \end{array}$ | $\begin{array}{r} 10 \\ (15.1) \\ \hline \end{array}$ | 1 $(3.2)$ | $\begin{array}{r} 72 \\ (100.0) \\ \hline \end{array}$ |
| Black African | $\begin{array}{r} 0 \\ (0.0) \\ \hline \end{array}$ | $\begin{array}{r} 29 \\ (25.5) \\ \hline \end{array}$ | $\begin{array}{r} 48 \\ (46.9) \\ \hline \end{array}$ | $\begin{array}{r} 16 \\ (21.5) \\ \hline \end{array}$ | $\begin{array}{r} 6 \\ (6.1) \\ \hline \end{array}$ | $\begin{array}{r} 99 \\ (100.0) \\ \hline \end{array}$ |
| Other | $\begin{array}{r} 2 \\ (0.7) \\ \hline \end{array}$ | $\begin{array}{r} 58 \\ (39.2) \\ \hline \end{array}$ | $\begin{array}{r} 58 \\ (42.6) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (14.2) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (3.3) \\ \hline \end{array}$ | $\begin{array}{r} 142 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (0.5) | (32.1) | (47.3) | (15.7) | (4.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 45 \\ (43) \end{array}$ | $\begin{array}{r} 2661 \\ (2672) \end{array}$ | $\begin{array}{r} 4015 \\ (3938) \end{array}$ | $\begin{array}{r} 1327 \\ (1311) \end{array}$ | $\begin{array}{r} 381 \\ (361) \end{array}$ | $\begin{array}{r} 8429 \\ (8326) \end{array}$ |
| $\mathrm{p}=0.089$ |  |  |  |  |  |  |
| Income Above 60\% Median Value | $\begin{array}{r} 24 \\ (0.3) \\ \hline \end{array}$ | $\begin{array}{r} 2114 \\ (30.8) \end{array}$ | $\begin{array}{r} 3393 \\ (49.0) \\ \hline \end{array}$ | $\begin{array}{r} 1108 \\ (16.0) \end{array}$ | $\begin{array}{r} 287 \\ (3.9) \end{array}$ | $\begin{array}{r} 6926 \\ (100.0) \\ \hline \end{array}$ |
| Income Below 60\% Median Value | $\begin{array}{r} 21 \\ (1.6) \end{array}$ | $\begin{array}{r} 542 \\ (38.3) \\ \hline \end{array}$ | $\begin{array}{r} 623 \\ (39.0) \end{array}$ | $\begin{array}{r} 218 \\ (14.4) \end{array}$ | $\begin{array}{r} 94 \\ (6.9) \end{array}$ | $\begin{array}{r} 1498 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (0.5) | (32.1) | (47.3) | (15.7) | (4.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 45 \\ (43) \\ \hline \end{array}$ | $\begin{array}{r} 2656 \\ (2668) \\ \hline \end{array}$ | $\begin{array}{r} 4016 \\ (3940) \\ \hline \end{array}$ | $\begin{array}{r} 1326 \\ (1310) \\ \hline \end{array}$ | $\begin{array}{r} 381 \\ (361) \\ \hline \end{array}$ | $\begin{array}{r} 8424 \\ (8323) \\ \hline \end{array}$ |
| p<0.001 |  |  |  |  |  |  |
| Professional/ Managerial Job | $\begin{array}{r} 15 \\ (0.4) \end{array}$ | $\begin{array}{r} 1081 \\ (31.6) \\ \hline \end{array}$ | $\begin{array}{r} 1716 \\ (49.8) \end{array}$ | $\begin{array}{r} 504 \\ (14.7) \\ \hline \end{array}$ | $\begin{array}{r} 122 \\ (3.5) \\ \hline \end{array}$ | $\begin{array}{r} 3438 \\ (100.0) \\ \hline \end{array}$ |
| Job Lower than Professional/ Managerial | $\begin{array}{r} 14 \\ (0.3) \end{array}$ | $\begin{array}{r} 1281 \\ (31.4) \end{array}$ | $\begin{array}{r} 2005 \\ (47.9) \end{array}$ | $\begin{array}{r} 664 \\ (16.0) \end{array}$ | $\begin{array}{r} 197 \\ (4.4) \end{array}$ | $\begin{array}{r} 4161 \\ (100.0) \end{array}$ |
| No Job or Unclassified Job | $\begin{array}{r} 16 \\ (2.1) \\ \hline \end{array}$ | $\begin{array}{r} 299 \\ (37.3) \\ \hline \end{array}$ | $\begin{array}{r} 295 \\ (33.6) \\ \hline \end{array}$ | $\begin{array}{r} 159 \\ (19.2) \\ \hline \end{array}$ | $\begin{array}{r} 62 \\ (7.8) \\ \hline \end{array}$ | $\begin{array}{r} 831 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (0.5) | (32.1) | (47.3) | (15.7) | (4.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 45 \\ (43) \\ \hline \end{array}$ | $\begin{array}{r} 2661 \\ (2672) \end{array}$ | $\begin{array}{r} 4016 \\ (3940) \\ \hline \end{array}$ | $\begin{array}{r} 1327 \\ (1311) \end{array}$ | $\begin{array}{r} 381 \\ (361) \\ \hline \end{array}$ | $\begin{array}{r} 8430 \\ (8328) \\ \hline \end{array}$ |
| $\mathrm{p}<0.001$ |  |  |  |  |  |  |
| Teenage at birth of CM | $\begin{array}{r} 5 \\ (4.0) \\ \hline \end{array}$ | $\begin{array}{r} 68 \\ (49.5) \\ \hline \end{array}$ | $\begin{array}{r} 54 \\ (32.8) \\ \hline \end{array}$ | $\begin{array}{r} 19 \\ (10.2) \\ \hline \end{array}$ | $\begin{array}{r} 4 \\ (3.5) \\ \hline \end{array}$ | $\begin{array}{r} 150 \\ (100.0) \\ \hline \end{array}$ |
| 20-24 yrs at birth of CM | $\begin{array}{r} 6 \\ (1.0) \\ \hline \end{array}$ | $\begin{array}{r} 287 \\ (40.5) \\ \hline \end{array}$ | $\begin{array}{r} 281 \\ (38.1) \\ \hline \end{array}$ | $\begin{array}{r} 98 \\ (15.2) \\ \hline \end{array}$ | $\begin{array}{r} 38 \\ (5.2) \\ \hline \end{array}$ | $\begin{array}{r} 710 \\ (100.0) \\ \hline \end{array}$ |
| 25-29 yrs at birth of CM | $\begin{array}{r} 9 \\ (0.5) \end{array}$ | $\begin{array}{r} 539 \\ (31.9) \end{array}$ | $\begin{array}{r} 829 \\ (47.0) \end{array}$ | $\begin{array}{r} 277 \\ (16.0) \end{array}$ | $\begin{array}{r} 90 \\ (4.5) \end{array}$ | $\begin{array}{r} 1744 \\ (100.0) \end{array}$ |
| 30-34 yrs at birth of CM | $\begin{array}{r} 10 \\ (0.2) \\ \hline \end{array}$ | $\begin{array}{r} 874 \\ (30.9) \\ \hline \end{array}$ | $\begin{array}{r} 1423 \\ (48.9) \\ \hline \end{array}$ | $\begin{array}{r} 468 \\ (16.0) \\ \hline \end{array}$ | $\begin{array}{r} 125 \\ (4.1) \end{array}$ | $\begin{array}{r} 2900 \\ (100.0) \\ \hline \end{array}$ |
| Over 34 yrs at birth of CM | $\begin{array}{r} 15 \\ (0.6) \\ \hline \end{array}$ | $\begin{array}{r} 893 \\ (30.1) \\ \hline \end{array}$ | $\begin{array}{r} 1429 \\ (49.2) \\ \hline \end{array}$ | $\begin{array}{r} 465 \\ (15.8) \\ \hline \end{array}$ | $\begin{array}{r} 124 \\ (4.3) \\ \hline \end{array}$ | $\begin{array}{r} 2926 \\ (100.0) \\ \hline \end{array}$ |
| Total Percentage | (0.5) | (32.1) | (47.3) | (15.7) | (4.3) | (100.0) |
| Observed Number Weighted Number | $\begin{array}{r} 45 \\ (43) \\ \hline \end{array}$ | $\begin{array}{r} 2661 \\ (2672) \\ \hline \end{array}$ | $\begin{array}{r} 4016 \\ (3940) \\ \hline \end{array}$ | $\begin{array}{r} 1327 \\ (1311) \\ \hline \end{array}$ | $\begin{array}{r} 381 \\ (361) \\ \hline \end{array}$ | $\begin{array}{r} 8430 \\ (8328) \\ \hline \end{array}$ |
| $\mathrm{p}=0.005$ |  |  |  |  |  |  |

Notes: See Table 10.2

Table 10.38: Mother's BMI category by Father's BMI category MCS4

|  |  | Mother's weight category |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Underweight | Normal | Overweight | Obese | Severe/ Super/ Morbidly Obese | Total |
|  | Underweight | $\begin{array}{r} 1 \\ (0.9) \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ (49.7) \\ \hline \end{array}$ | $\begin{array}{r} 9 \\ (32.7) \\ \hline \end{array}$ | $\begin{array}{r} 5 \\ (8.6) \\ \hline \end{array}$ | $\begin{array}{r} 2 \\ (8.2) \\ \hline \end{array}$ | $\begin{array}{r} 34 \\ (100.0) \\ \hline \end{array}$ |
|  | Normal | $\begin{array}{r} 62 \\ (3.2) \end{array}$ | $\begin{array}{r} 1327 \\ (58.9) \end{array}$ | $\begin{array}{r} 586 \\ (26.0) \end{array}$ | $\begin{array}{r} 190 \\ (8.0) \end{array}$ | $\begin{array}{r} 85 \\ (3.9) \end{array}$ | $\begin{array}{r} 2250 \\ (100.0) \end{array}$ |
|  | Overweight | $\begin{array}{r} 51 \\ (1.6) \end{array}$ | $\begin{gathered} 1891 \\ (55.2) \end{gathered}$ | $\begin{array}{r} 1027 \\ (28.6) \end{array}$ | $\begin{array}{r} 386 \\ (10.5) \end{array}$ | $\begin{array}{r} 156 \\ (4.0) \end{array}$ | $\begin{array}{r} 3511 \\ (100.0) \end{array}$ |
|  | Obese | $\begin{array}{r} 14 \\ (0.7) \\ \hline \end{array}$ | $\begin{array}{r} 493 \\ (43.3) \\ \hline \end{array}$ | $\begin{array}{r} 364 \\ (32.4) \\ \hline \end{array}$ | $\begin{array}{r} 180 \\ (14.7) \\ \hline \end{array}$ | $\begin{array}{r} 91 \\ (9.0) \\ \hline \end{array}$ | $\begin{array}{r} 1142 \\ (100.0) \\ \hline \end{array}$ |
|  | Severe/ Super/Morbidly Obese | $\begin{array}{r} 3 \\ (0.9) \end{array}$ | $\begin{array}{r} 97 \\ (30.4) \end{array}$ | $\begin{array}{r} 100 \\ (33.4) \end{array}$ | $\begin{array}{r} 60 \\ (21.4) \end{array}$ | $\begin{array}{r} 44 \\ (13.9) \end{array}$ | $\begin{array}{r} 304 \\ (100.0) \end{array}$ |
|  | Total Percentage | $\begin{array}{r} 131 \\ (1.9) \end{array}$ | $\begin{array}{r} 3825 \\ (53.5) \end{array}$ | $\begin{gathered} 2086 \\ (28.6) \end{gathered}$ | $\begin{array}{r} 821 \\ (10.8) \end{array}$ | $\begin{array}{r} \hline 378 \\ (5.2) \end{array}$ | $\begin{array}{r} 7241 \\ (100.0) \end{array}$ |
|  | Observed Number Weighted Number | $\begin{array}{r} 131 \\ (138) \\ \hline \end{array}$ | $\begin{array}{r} 3825 \\ (3827) \\ \hline \end{array}$ | $\begin{array}{r} 2086 \\ (2045) \\ \hline \end{array}$ | $\begin{array}{r} 821 \\ (773) \\ \hline \end{array}$ | $\begin{array}{r} 378 \\ (369) \\ \hline \end{array}$ | $\begin{array}{r} 7241 \\ (7152) \end{array}$ |
|  | p<0.001 |  |  |  |  |  |  |

Figure 10.11: Distribution of BMI category by General Health Status MCS4


In this chapter we have shown that across almost all indicators, parents with less socioeconomically advantaged characteristics are less healthy than those with more advantaged socioeconomic characteristics. This applies across a number of domains that reflect socioeconomic status including qualifications, family type and family work status and the relationship holds for both physical and mental health. We also show some interesting patterns of physical and mental health by ethnicity, showing the relative good health of black African mothers and fathers compared to all other ethnic groups, together with the relative poor health of black Caribbean parents. We also report how Bangladeshi mothers were more likely to rate their own health as poor, although also more likely not to report any longstanding illness. Such a pattern was also found in Bangladeshi parents' reports of their children and may reflect cultural differences in the interpretation of good health. We also found that younger parents, and particularly those who were teenagers at the birth of the cohort child, were most likely to report poorer health, although the trend did not extend to reporting longstanding illness. We also saw that smoking and obesity posed a particular threat to the health of disadvantaged parents, although high frequency of alcohol consumption had a very different social profile, being associated with advantaged parents. Being overweight or obese was seen to be a growing problem as the MCS parents get older. Less than a third of fathers were of normal weight. By comparing BMI weight category with self-rated health, we speculated that many of the adverse health effects of being overweight and obese may manifest themselves more clearly in the future. Additionally, Chapter 9 also showed a strong association between child BMI and maternal BMI (Table 9.29), which gives further cause for concern. While this may paint a fairly bleak picture, it should also be remembered that most parents did report good health, were satisfied with their lives and were free of illness. In this chapter, our analyses have presented only bivariate and cross-sectional relationships and therefore do not control for a number of confounding factors that could account for the observed trends. Nevertheless, these relationships could indicate some areas on which to build future investigations and policy development.

Although this chapter has focused on the health of adults, that of parents and children is clearly interrelated through lifestyle, diet, exercise and mental health. Chapter 9 showed that children whose parents smoked more had higher levels of asthma, and children whose families engaged in physical activities with them were also more likely to be those who partook in sports independently. In the literature, links are also made between the alcohol consumption of parents of young children with their children's own subsequent substance abuse as teenagers (Hayatbakhsh et al., 2007). We are yet to analyse such associations in these data, although from this base, we are perfectly placed to understand the long-term impact of parents' lifestyle choices on their children's health. Families are the first line of care for all generations. Some MCS children may find themselves acting as carers before long. These findings on patterns of health disadvantage indicate the situations where the support of health services may be most needed and - given the correlation between the health of mothers and fathers - show that interventions should take into account the health of the whole family to be effective.

## References

Black, C. (2008) Review of the health of the working age population: Working for a healthier tomorrow. London: Department of Health and Department for Work and Pensions.

Calderwood, L., Kelly, Y. and Panico, L. (2007) Parental Health and Wellbeing. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Second Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.

Campbell, J., Wright, C., Moseley, A., Chilvers, R., Richards, S. and Stabb, L. (2007) Avoiding long-term incapacity for work: Developing an early intervention in primary care. Exeter: Peninsula Medical School - Universities of Exeter and Plymouth.

Davy, M. (2007) Socio-economic inequalities in smoking: an examination of generational trends in Great Britain. Health Statistics Quarterly, 34, 26-34.

Department for Work and Pensions (2008) Improving health and work: changing lives. London: Department for Work and Pensions and Department of Health.

Department of Health (2006) Statistics on Alcohol: England, 2006. Department of Health Information Centre.

Department of Health (2009) Statistics on Obesity, Physical Activity and Diet: England, February 2009. Department of Health Information Centre.

Department of Health (2009a) Change 4 Life.
http://www.nhs.uk/change4life/Pages/change-for-life.aspx (accessed 24 December 2009).

Department of Health (2009b) Alcohol Misuse. http://www.dh.gov.uk/en/publichealth/healthimprovement/alcoholmisuse/index.htm (accessed 24 December 2009).

Graham, H., Francis, B., Inskip, H. M., Harman, J. and Group, S. S. (2006) Socioeconomic lifecourse influences on women's smoking status in early adulthood. Journal of Epidemiology and Community Health, 60, 228-233.

Hayatbakhsh, M. R., Alati, R., Hutchinson, D. M., Jamrozik, K., Najman, J. M., Mamun, A. A. et al. (2007) Association of Maternal Smoking and Alcohol Consumption with Young Adults' Cannabis Use: A Prospective Study. American Journal of Epidemiology, 166(5), 592-598.

Hennekens, C. and Buring, J. (1987) Epidemiology in Medicine. Philadelphia, USA: Lippincott, Williams \& Wilkins.

Kahn, R., Wilson, K. and Wise, P. (2005) Intergenerational Health Disparaties: Socioeconomic Status, Women's Health Conditions, and Child Behavior Problems. Public Health Reports, 120, 399-408.

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E. et al. (2003) Screening for serious mental illness in the general population. Archives of General Psychiatry, 60(2), 184-189.

Lader, D. (2009) Drinking: adults' behaviour and knowledge in 2008. Newport: Office for National Statistics.

Lelliott, P., Tulloch, S., Boardman, J., Harvey, S., Henderson, M. and Knapp, M. (2008) Mental Health and Work. London: Royal College of Psychiatry.

National Centre for Social Research (2008) Health Survey for England 2007: Latest Trends. London: National Centre for Social Research and University College London.

Pattenden, S., Antova, T., Neuburger, M., Nikiforov, B., De Sario, M., Grize, L. et al. (2006) Parental smoking and children's respiratory health: independent effects of prenatal and postnatal exposure. Tobacco Control, 15, 294-301.

Power, C. and Elliott, J. (2006) Cohort profile: 1958 British birth cohort (National Child Development Study). International Journal of Epidemiology, 35(1), 34-41.

Roberts, T. and Ketende, S. C. (2008) Parental Health. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Third Survey: A User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.

Scharoun-Lee, M., Kaufman, J. S., Popkin, B. M. and Gordon-Larson, P. (2009) Obesity, race/ethnicity and life course socioeconomic status across the transition from adolescence to adulthood. Journal of Epidemiology and Community Health, 63, 133-139.

Snelgrove, J. W., Pickhart, H. and Stafford, M. (2009). A multilevel analysis of social capital and self-rated health: Evidence from the British Household Panel Survey. Social Science and Medicine, 68(11), 1993-2001.

Wang, Y. and Beydoun, M. (2007) The Obesity Epidemic in the United States Gender, Age, Socioeconomic, Racial/Ethnic, and Geographic Charactersitics: A Systematic Review and Meta-Regression Analysis. Epidemiologic Reviews, 29, 628.

Wickrama, K. A. S., Conger, D., Wallace, L. E. and Elder, G. H. J. (1999) The International Transmission of Health-Risk Behaviors: Adolescent Lifestyles and Gender Moderating Effects. Journal of Health and Social Behavior, 40(3), 258-272.

World Health Organization (2000) Obesity: Preventing and Managing the Global Epidemic. Geneva: World Health Organization.

## Chapter 11

## PARENTS' EMPLOYMENT AND EDUCATION

Sosthenes C. Ketende and Heather Joshi

## Chapter overview

This chapter looks at the employment and education of the parents of the Millennium Cohort children. It summarises findings about:

- Mothers' and fathers' employment (full or part-time, in education, unemployed, etc)
- Earners in families
- Mothers not in employment
- Changes in employment since the previous survey
- Educational qualifications gained by parents since the previous survey


## Introduction

The employment, occupational class and education of the cohort child's parents are important aspects of the family in which the child is growing up. They influence the resources available to the home and the time and skills the parents bring to the family as well as the labour market, and have already been shown to be strong correlates of the child's progress (e.g. Blanden and Machin, 2010; Hansen, 2010).

The employment patterns of the parents of Millennium Cohort Study (MCS) children are recorded at a time when a long upward trend in women's employment and a period of stability in men's employment was, at least temporarily, interrupted. The overall level of men's employment turned down in the middle of 2008, and women's employment followed with a drop in the last quarter (Kent, 2009; ONS, 2009). In the second quarter of 2008, 91 per cent of fathers in two-parent families, 72 per cent of mothers in two-parent families and 56 per cent of lone parents had paid work. A year later these percentages were 89, 71 and still 56 respectively. By April to June 2008, 6.7 million dependent children in the UK were living in households with at least one earner, and 1.8 million were in a 'workless household' with no adult earners. Over the following 12 months the number of children in workless families changed little, but the effect of the recession could be seen in the increase of over 145,000 children in households with at least one adult who was not employed. Looking back over the previous decade, the numbers of children in families with a paid worker were almost exactly the same in 1998, although the number in workless households had fallen by 2008. As percentages of all children, those in workless households had gone down 3 points to 15 per cent since 1998, while those in employed households had risen by the same amount to 85 per cent (ONS, 2010).

Fieldwork for MCS4 was spread over the calendar year of 2008. Most of the interviews with parents, and hence the reports of their employment, were in the first two-quarters of that year in England and Wales, before the downturn in employment trends. But more of the fieldwork in Scotland and Northern Ireland took place in the last two-quarters of 2008, which should be borne in mind when comparing MCS results across countries, or MCS with the Labour Force Survey for the Second Quarter.

The tabulations in this chapter on parents are generally drawn from respondents to the MCS4 main instrument who were female, but not necessarily natural mothers. This excludes 404 male main respondents. The 98 lone fathers among them are, however, included in tables on lone parenthood. Sixty-eight of the lone fathers were in employment (unweighted numbers). Tables on fathers are taken from the partner questionnaire, excluding any women who answered that questionnaire ( $\mathrm{n}=316$ of whom 181 employed). The tabulations on fathers also exclude 1,760 cases where there was a partner in the household but no data on partner characteristics, or only proxy data (249 observations).

In this chapter we first examine the employment and economic activity of mothers and fathers when the cohort child was aged 7 . We consider each parent in turn and then in combination. Comparisons are also made with the employment rates of mothers and fathers who responded at earlier sweeps. Among mothers employed at MCS4 we report the type of occupation and the use of employers' flexible employment arrangements, as these may make it easier or possible to balance work and family responsibilities. Reasons for not being employed are reported by those who were not employed. Changes in families' combined employment status from earlier sweeps are described, which also show up changes in partnership status. Finally, we document the extent to which parents acquired new educational or vocational qualifications since MCS3.

## Mothers' employment at MCS4

The Labour Force Survey for the second quarter of 2008 shows 71 per cent as the employment rate of mothers whose youngest child was aged $5-10$, and 57 per cent for those with a child under 5 (ONS, 2008). The MCS4 estimate for mothers whose cohort children were about 7 years old (shown in Table 11.1) is that 61 per cent of the mothers were in paid work at the time of the survey (including those on leave).

|  | England | Wales | Scotland | Northern Ireland | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whole sample |  |  |  |  |  |
| Currently employed full-time | $\begin{gathered} 15.6 \\ (1369) \end{gathered}$ | $\begin{gathered} 18.7 \\ (384) \end{gathered}$ | $\begin{gathered} 17.7 \\ (320) \end{gathered}$ | $\begin{aligned} & 19.8 \\ & (290) \end{aligned}$ | $\begin{gathered} 16.1 \\ (2363) \end{gathered}$ |
| Currently employed part-time | $\begin{gathered} 45.4 \\ (3747) \end{gathered}$ | $\begin{gathered} 44.4 \\ (847) \end{gathered}$ | $\begin{aligned} & 48.2 \\ & (780) \end{aligned}$ | $\begin{aligned} & 41.6 \\ & (566) \\ & \hline \end{aligned}$ | $\begin{gathered} 45.4 \\ (5940) \\ \hline \end{gathered}$ |
| Looking after family and home | $\begin{gathered} \hline 34.5 \\ (3021) \end{gathered}$ | $\begin{aligned} & 31.1 \\ & (577) \end{aligned}$ | $\begin{aligned} & 27.9 \\ & (391) \end{aligned}$ | $\begin{aligned} & 34.9 \\ & (437) \end{aligned}$ | $\begin{gathered} 33.8 \\ (4426) \end{gathered}$ |
| Out of work | $\begin{gathered} 3.0 \\ (249) \end{gathered}$ | $\begin{aligned} & 3.7 \\ & (81) \end{aligned}$ | $\begin{gathered} 3.3 \\ (51) \end{gathered}$ | $\begin{aligned} & 2.5 \\ & (32) \\ & \hline \end{aligned}$ | $\begin{gathered} 3.1 \\ (413) \end{gathered}$ |
| In education or government training scheme | $\begin{gathered} 1.5 \\ (137) \end{gathered}$ | $\begin{aligned} & 2.2 \\ & (43) \end{aligned}$ | $\begin{aligned} & \hline 2.8 \\ & (39) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 1.3 \\ & (14) \\ & \hline \end{aligned}$ | $\begin{gathered} 1.6 \\ (233) \\ \hline \end{gathered}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample | (8523) | (1932) | (1581) | (1339) | (13375) |
| Total weighted sample | 8562 | 1931 | 1575 | 1345 | 13374 |
| P-value | <0.001 |  |  |  |  |
| Currently employed only |  |  |  |  |  |
| Currently employed full-time | $\begin{gathered} \hline 25.6 \\ (1369) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 29.6 \\ & (384) \end{aligned}$ | $\begin{aligned} & 26.9 \\ & (320) \end{aligned}$ | $\begin{aligned} & 32.2 \\ & (290) \end{aligned}$ | $\begin{gathered} 26.2 \\ (2363) \end{gathered}$ |
| Currently employed part-time | $\begin{gathered} 74.4 \\ (3747) \end{gathered}$ | $\begin{array}{r} 70.4 \\ (847) \\ \hline \end{array}$ | $\begin{array}{r} 73.1 \\ (780) \\ \hline \end{array}$ | $\begin{array}{r} 67.8 \\ (566) \\ \hline \end{array}$ | $\begin{gathered} 73.8 \\ (5940) \\ \hline \end{gathered}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample | (5116) | (1231) | (1100) | (856) | (8303) |
| Total weighted sample | 5225 | 1217 | 1038 | 825 | 8224 |
| P value | 0.002 |  |  |  |  |

Notes: Column percentages weighted; number of observations (unweighted) in parentheses. Weighting allows for sample design and attrition to MCS4. (dovwt1 for the separate countries and dovwt2 for UK analysis.) Sample includes all main respondents at MCS4 who were female, including adoptive, step and grandmothers.

It makes sense that the MCS estimate should be between the two rates quoted for the two groups in the Labour Force Survey as many of the MCS families would fall into the category of having a child under 5 , a younger sibling of the cohort member. The two sources would also be expected to differ in respect of the month of data collection, as noted above. Nearly 34 per cent of mothers were looking after family and home, 3 per cent were out of work but looking for work, and just under 2 per cent were in education or on a training scheme. Variations across the UK shown in Table 11.1 were statistically significant: Scotland had the lowest proportion of mothers looking after the family and home ( $28 \%$ ) compared with 35 per cent each in England and Northern Ireland. Scotland also had the highest proportions out of work or in training/education and the highest proportion in part-time work (44\%). Northern Ireland and Wales had higher proportions of all mothers in full-time work. Of those currently employed, 27 per cent worked full-time and 73 per cent part-time. The fulltime proportion is highest in Northern Ireland (32\%) and Wales (30\%). These intercountry differences have not been adjusted to allow for the different (though overlapping) months of interviewing noted above, but a similar pattern of differences was observed at MCS3 across countries. This was, however, a 4-point upward shift in the employment rate and corresponding decline in the proportion looking after home and family.

The differences in mother's employment participation by the level of her qualification remain marked (Table 11.2). Graduates at degree or postgraduate (NVQ 4 or 5) level had a 78 per cent employment rate, compared to 23 per cent for mothers with no qualifications. The proportion of the employed who were employed full-time was also highest for the graduates (32\%), falling to 14 per cent for the least qualified (with the exception of a high full-time proportion among the small number of workers with overseas or other qualifications). These patterns are very similar to the crosssectional rate recorded at MCS3 with a slight widening of differentials between the three most qualified groups and the least. Figure 11.1 shows that just over one-third ( $36 \%$ ) of all mothers had NVQ levels 4 and 5, but their over-representation in employment means that they make up over half ( $55 \%$ ) of the full-timers, and 42 per cent of the part-timers. By contrast, mothers with no qualifications are 11 per cent of the whole sample, but only 2 per cent of the full-timers and 5 per cent of the parttimers.

Table 11.2: Mothers' current economic activity by highest educational achievement at sweep 4

|  | $\begin{aligned} & \hline \text { NVQ } \\ & 4 / 5 \end{aligned}$ | $\begin{aligned} & \hline \text { NVQ } \\ & 3 \end{aligned}$ | $\begin{aligned} & \hline \text { NVQ } \\ & 1 / 2 \end{aligned}$ | Overseas and other qualifications | None of these | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Whole Sample |  |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & \hline 24.8 \\ & (1338) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 18.6 \\ & (411) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 10.7 \\ & (523) \\ & \hline \end{aligned}$ | $\begin{aligned} & 10.4 \\ & (30) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.3 \\ & (59) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 16.1 \\ & (2361) \\ & \hline \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & 53.1 \\ & (2578) \end{aligned}$ | $\begin{aligned} & 49.6 \\ & (1001) \end{aligned}$ | $\begin{aligned} & 45.6 \\ & (1995) \end{aligned}$ | $\begin{aligned} & 22.9 \\ & (84) \end{aligned}$ | $\begin{aligned} & 20.1 \\ & (282) \end{aligned}$ | $\begin{aligned} & \hline 45.4 \\ & (5940) \end{aligned}$ |
| Looking after family and home | $\begin{aligned} & 18.2 \\ & (892) \\ & \hline \end{aligned}$ | $\begin{aligned} & 26.6 \\ & (533) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 38.4 \\ & (1703) \end{aligned}$ | $\begin{aligned} & 61.2 \\ & (233) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 71.8 \\ & (1064) \end{aligned}$ | $\begin{aligned} & \hline 33.8 \\ & (4425) \end{aligned}$ |
| Out of work | $\begin{aligned} & 2.2 \\ & (111) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2.3 \\ & (48) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.8 \\ & (177) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.0 \\ & (15) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 4.2 \\ & (62) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.1 \\ & (413) \\ & \hline \end{aligned}$ |
| In education or government training scheme | $\begin{aligned} & \hline 1.6 \\ & (91) \end{aligned}$ | $\begin{aligned} & \hline 2.9 \\ & (56) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.4 \\ & (69) \end{aligned}$ | $1.4$ <br> (5) | $\begin{aligned} & \hline 0.7 \\ & (12) \end{aligned}$ | $\begin{aligned} & 1.6 \\ & (233) \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample | (5010) | (2049) | (4467) | (367) | (1479) | (13372) |
| Total weighted sample | 4751 | 2021 | 4723 | 372 | 1502 | 13369 |
| P | <0.001 |  |  |  |  |  |
| Currently employed only |  |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & \hline 31.9 \\ & (1338) \\ & \hline \end{aligned}$ | $\begin{aligned} & 27.3 \\ & (411) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 19.0 \\ & (523) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 31.2 \\ & (30) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 14.3 \\ & (59) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 26.2 \\ & (2361) \\ & \hline \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & \hline 68.1 \\ & (2578) \\ & \hline \end{aligned}$ | $\begin{aligned} & 72.7 \\ & (1001) \end{aligned}$ | $\begin{aligned} & 81.0 \\ & (1995) \\ & \hline \end{aligned}$ | $\begin{aligned} & 68.8 \\ & (84) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 85.7 \\ & (282) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 73.8 \\ & (5940) \\ & \hline \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample Total weighted sample | $\begin{aligned} & 3916 \\ & 3705 \end{aligned}$ | $\begin{aligned} & \hline(1412) \\ & 1380 \end{aligned}$ | $\begin{aligned} & (2518) \\ & 2662 \end{aligned}$ | $\begin{aligned} & (114) \\ & 124 \end{aligned}$ | $\begin{aligned} & (341) \\ & 351 \end{aligned}$ | $\begin{aligned} & (8301) \\ & 8222 \end{aligned}$ |
| P value | <0.001 |  |  |  |  |  |

Column percentages weighted; unweighted observations in parentheses.
Sample as in Table 11.1, with valid data on qualifications.

Figure 11.1: Educational profile of mothers by employment status


Mothers' employment by ethnic group is shown in Table 11.3. The Pakistani and Bangladeshi group have by far the lowest employment rate (17\%). White and Indian mothers each have employment rates around 64 per cent, while black mothers and other ethnic groups have rates close to 50 per cent. Black mothers have the highest rate of full-time work among those employed ( $50 \%$ ). All ethnic groups showed some increase in both types of employment since the MCS3 survey, but the overall pattern of mothers' economic activity by ethnicity remained.
11.3: Mothers' economic activity status at sweep 4 by ethnicity

|  | White | Indian | Pakistani and Bangladeshi | Black or Black British | Other (inc. Mixed) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Whole sample |  |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & 16.1 \\ & (2080) \end{aligned}$ | $\begin{aligned} & 24.7 \\ & (74) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.6 \\ & (25) \\ & \hline \end{aligned}$ | $\begin{aligned} & 26.0 \\ & (123) \\ & \hline \end{aligned}$ | $\begin{aligned} & 18.5 \\ & (60) \end{aligned}$ | $\begin{aligned} & 16.1 \\ & (2362) \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & 48.2 \\ & (5491) \\ & \hline \end{aligned}$ | $\begin{aligned} & 39.2 \\ & (135) \\ & \hline \end{aligned}$ | $\begin{aligned} & 13.5 \\ & (110) \\ & \hline \end{aligned}$ | $\begin{aligned} & 26.3 \\ & (112) \\ & \hline \end{aligned}$ | $\begin{aligned} & 30.7 \\ & (90) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 45.4 \\ & (5938) \\ & \hline \end{aligned}$ |
| Looking after family and home | $\begin{aligned} & \hline 31.1 \\ & (3385) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 33.4 \\ & (113) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 78.8 \\ & (597) \\ & \hline \end{aligned}$ | $\begin{aligned} & 39.9 \\ & (178) \\ & \hline \end{aligned}$ | $\begin{aligned} & 45.3 \\ & (152) \end{aligned}$ | $\begin{aligned} & \hline 33.8 \\ & (4425) \end{aligned}$ |
| Out of work | $\begin{aligned} & \hline 3.1 \\ & (364) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.0 \\ & (6) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.0 \\ & (19) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.3 \\ & (13) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.1 \\ & \text { (11) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.1 \\ & (413) \\ & \hline \end{aligned}$ |
| In education or government training scheme | $\begin{aligned} & \hline 1.5 \\ & (186) \end{aligned}$ | $\begin{aligned} & 0.6 \\ & (4) \end{aligned}$ | $\begin{aligned} & 1.1 \\ & (8) \end{aligned}$ | $\begin{aligned} & \hline 5.4 \\ & (29) \end{aligned}$ | $\begin{aligned} & 2.4 \\ & (6) \end{aligned}$ | $\begin{aligned} & \hline 1.6 \\ & (233) \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted n Total weighted n | $\begin{aligned} & \hline(11506) \\ & 11778 \\ & \hline \end{aligned}$ | $\begin{aligned} & (332) \\ & 263 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { (759) } \\ & 561 \\ & \hline \end{aligned}$ | $\begin{aligned} & (455) \\ & 453 \\ & \hline \end{aligned}$ | $\begin{aligned} & (319) \\ & 315 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline(13371) \\ & 13370 \\ & \hline \end{aligned}$ |
| P -value | <0.001 |  |  |  |  |  |


| 11.3: Mothers' economic activity status at sweep 4 by ethnicity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Indian | Pakistani and Bangladeshi | Black or Black British | Other (inc. Mixed) | Total |
| Continued |  |  |  |  |  |  |
| Currently employed only |  |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & \hline 25.0 \\ & (2080) \\ & \hline \end{aligned}$ | $\begin{aligned} & 38.7 \\ & (74) \end{aligned}$ | $\begin{aligned} & 21.0 \\ & (25) \\ & \hline \end{aligned}$ | $\begin{aligned} & 49.8 \\ & (123) \\ & \hline \end{aligned}$ | $\begin{aligned} & 37.6 \\ & (60) \\ & \hline \end{aligned}$ | $\begin{aligned} & 26.2 \\ & (2362) \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & \hline 75.0 \\ & (5491) \\ & \hline \end{aligned}$ | $\begin{aligned} & 61.3 \\ & (135) \\ & \hline \end{aligned}$ | $\begin{aligned} & 79.0 \\ & (110) \\ & \hline \end{aligned}$ | $\begin{aligned} & 50.2 \\ & (112) \\ & \hline \end{aligned}$ | $\begin{aligned} & 62.4 \\ & (90) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 73.8 \\ & (5938) \\ & \hline \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted n | (7571) | (209) | (135) | (235) | (150) | (8300) |
| Total weighted n | 7564 | 168 | 96 | 237 | 155 | 8221 |
| P-value | <0.001 |  |  |  |  |  |

Sample as in Table 11.1 with valid data on ethnic group.
Over 4 in 10 mothers had three or more children in the home by the time the cohort child was 7 (Table 11.4). These mothers had distinctly lower employment rates than those with only one or two children - 10 per cent employed full-time and 37 per cent accounting for 46 per cent of families) had an overall employment rate ( $71 \%$ ) close to the 73 per cent reported by mothers with only one child, but their chances of being employed full-time were distinctly lower.

Mothers with three or more children show less change in participation over time, likely reflecting the arrival of younger siblings which raised their proportion among all mothers from 36 to 41 per cent since MCS3. Longitudinal analysis is needed to check whether the arrival of a new child prompted the mothers to give up work (rather than take maternity leave).

|  | One child | Two children | Three children or more | Total |
| :---: | :---: | :---: | :---: | :---: |
| Whole sample |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & 28.7 \\ & (515) \end{aligned}$ | $\begin{aligned} & \hline 18.1 \\ & (1230) \end{aligned}$ | $\begin{aligned} & 9.8 \\ & (618) \end{aligned}$ | $\begin{aligned} & 16.1 \\ & (2363) \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & \hline 44.4 \\ & (749) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 52.8 \\ & (3164) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 37.3 \\ & (2027) \\ & \hline \end{aligned}$ | $\begin{aligned} & 45.4 \\ & (5940) \\ & \hline \end{aligned}$ |
| Looking after family and home | $\begin{aligned} & 18.1 \\ & (298) \\ & \hline \end{aligned}$ | $\begin{aligned} & 24.8 \\ & (1397) \\ & \hline \end{aligned}$ | $\begin{aligned} & 49.1 \\ & (2731) \\ & \hline \end{aligned}$ | $\begin{aligned} & 33.8 \\ & (4426) \end{aligned}$ |
| Out of work | $\begin{array}{\|l\|} \hline 5.6 \\ \text { (99) } \\ \hline \end{array}$ | $\begin{aligned} & 3.0 \\ & (189) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.4 \\ & (125) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.1 \\ & (413) \\ & \hline \end{aligned}$ |
| In education or government training scheme | $\begin{aligned} & 3.2 \\ & (50) \end{aligned}$ | $\begin{aligned} & \hline 1.4 \\ & (91) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.4 \\ & (92) \end{aligned}$ | $\begin{aligned} & 1.6 \\ & (233) \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample | (1711) | (6071) | (5593) | (13375) |
| Total weighted sample | 1739 | 6187 | 5448 | 13374 |
| P -values | <0.001 |  |  |  |
| Currently employed only |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & \hline 39.3 \\ & (515) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 25.5 \\ & (1230) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 20.9 \\ & (618) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 26.2 \\ & (2363) \\ & \hline \end{aligned}$ |
| Currently employed part-time | $\begin{array}{\|l\|} \hline 60.7 \\ (749) \\ \hline \end{array}$ | $\begin{aligned} & 74.5 \\ & (3164) \end{aligned}$ | $\begin{aligned} & 79.1 \\ & (2027) \end{aligned}$ | $\begin{aligned} & 73.8 \\ & (5940) \\ & \hline \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample | (1264) | (4394) | (2645) | (8303) |
| Total weighted sample | 1271 | 4387 | 2566 | 8224 |
| P | <0.001 |  |  |  |

Column percentages weighted; unweighted obs in parentheses. Sample of mothers as Table 11.1.

Looking over the four sweeps of the survey, from 2001-2 to 2008, in Table 11.5, one can see a slow aggregate rise in maternal employment rates. These rose from 49 per cent when the child was 9 months old to 61 per cent at age 7 . These figures resemble the trajectory of maternal employment rates produced from longitudinal data in the British Household Panel Survey (BHPS) by Brewer and Paull (2006). Averaging the employment rates observed after a first birth, these authors found around 40 per cent of mothers in employment during the child's first year, percentages in the mid-50s at ages $1-5$, approaching 60 per cent at ages 6 and 7, rising to 70 per cent at ages 12-13. One reason this profile is somewhat lower than the MCS one reflected in Table 11.5 is that the BHPS births concerned were earlier, right across the 1990s, when maternal employment rates were still rising rapidly. Another is that the cross-MCS table is for cohort members of all birth orders not just first births.

| Table 11.5: Mothers' economic activity status at MCS sweeps1-4: UK |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Mothers' economic activity status | Sweep of MCS |  |  |  |  |
|  | MCS1 | MCS2 | MCS3 | MCS4 |  |
|  | 9 mth | $3 y r$ | $5 y r$ | 7 yr |  |
| All currently in employment | 48.0 | 53.3 | 57.8 | 61.3 |  |
| Currently employed full-time | 13.0 | 13.2 | 14.3 | 16.1 |  |
|  | $(2440)$ | $(2058)$ | $(2175)$ | $(2363)$ |  |
| Currently employed part-time | 35.0 | 41.1 | 43.5 | 45.4 |  |
|  | $(5815)$ | $(5747)$ | $(5990)$ | $(5940)$ |  |
| Looking after family and home | 51.1 | 42.0 | 37.9 | 33.8 |  |
|  | $(9890)$ | $(6799)$ | $(5600)$ | $(4426)$ |  |
| Not employed and seeking work | 0.4 | 1.2 | 3.0 | 3.1 |  |
|  | $(101)$ | $(401)$ | $(410)$ | $(413)$ |  |
| In education or government training scheme | 0.7 | 1.2 | 1.4 | 1.6 |  |
|  | $(146)$ | $(225)$ | $(221)$ | $(233)$ |  |
| Total per cent | 100 | 100 | 100 | 100 |  |
| Unweighted sample size | $(18392)$ | $(15230)$ | $(14396)$ | $(13375)$ |  |
| Weighted observations | 18398 | 15013 | 14451 | 13374 |  |

Sample: All MCS1 mothers (natural, adoptive, foster and step). All MCS2 mothers (natural, adoptive, foster and step). All MCS3 mothers (natural, adoptive, foster and step) who completed the main or partner interview (excluding any others who completed these interviews). Unit non-response weight also used. MCS4 as Table 11.1 Note: At MCS1 the questions on which these codes are based were in a different section of the questionnaire (childcare section) which we know to have produced slightly different responses from those in the MCS1 employment section. The main variable used here is NWRK (if not in paid work last week) - at MCS1.

Over the four sweeps of MCS, the cross-sectional proportion of mothers describing themselves as looking after the home and family fell from just over one-half (51\%) at MCS1 to just over one-third (34\%) at MCS4. The small proportion in education or training rose steadily from 0.7 per cent to 1.6 per cent at MCS4. The proportion of all mothers not employed and seeking paid work rose from 0.4 per cent at MCS1 to 3.0 per cent at both MCS3 and MCS4. The biggest change was in the percentage of mothers employed part-time, from 35 per cent at MCS1 to 45 per cent at MCS4, having already become the largest category at MCS3. The rate of full-time employment stayed around 13 per cent for the first two sweeps, and then started to rise to 16 per cent at MCS4. These cross-sections do not, however, reveal the full extent of individual women's movements in and out of employment, for which longitudinal analysis is required (see Figure 11.2).

| Mothers' economic activity status | Sweep of MCS - UK per cent |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | MCS1 | MCS2 | MCS3 | MCS4 |
|  | 9mth | 3 yr | 5 yr | 7yr |
| Mothers in couples <br> Total currently in employment | 52.2 | 56.8 | 61.8 | 68.9 |
| Currently employed full-time | $\begin{aligned} & \hline 14.0 \\ & (2257) \end{aligned}$ | $\begin{aligned} & \hline 13.6 \\ & (1818) \end{aligned}$ | $\begin{aligned} & \hline 14.9 \\ & (1846) \end{aligned}$ | $\begin{aligned} & \hline 15.4 \\ & (1504) \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & 38.2 \\ & (5350) \end{aligned}$ | $\begin{aligned} & 43.2 \\ & (5131) \end{aligned}$ | $\begin{aligned} & \hline 46.9 \\ & (5217) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 46.2 \\ & (3959) \\ & \hline \end{aligned}$ |
| Unweighted sample size for $100 \%$ * Weighted observations | $\begin{aligned} & \hline(7607) \\ & 8226 \end{aligned}$ | $\begin{aligned} & \text { (6949) } \\ & 7065 \end{aligned}$ | (7063) | $\begin{aligned} & \hline(8867) \\ & 8743 \end{aligned}$ |
| Lone mothers <br> Total currently in employment | 21.3 | 34.7 | 41.1 | 48.5 |
| Currently employed full-time | $\begin{aligned} & \hline 6.1 \\ & (183) \end{aligned}$ | $\begin{aligned} & \hline 9.0 \\ & (250) \end{aligned}$ | $\begin{aligned} & \hline 12.0 \\ & (329) \end{aligned}$ | $\begin{aligned} & \hline 14.6 \\ & (420) \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & 15.2 \\ & (465) \end{aligned}$ | $\begin{gathered} 25.7 \\ (632) \end{gathered}$ | $\begin{array}{\|l\|} \hline 29.1 \\ (773) \\ \hline \end{array}$ | $\begin{aligned} & 33.9 \\ & (951) \end{aligned}$ |
| Unweighted sample size for 100\%* Weighted observations | $\begin{aligned} & \hline(648) \\ & 566 \end{aligned}$ | $\begin{aligned} & \text { (882) } \\ & 887 \end{aligned}$ | $\begin{aligned} & (1102) \\ & 1151 \end{aligned}$ | $\begin{array}{\|l\|} \hline(2798) \\ 2982 \\ \hline \end{array}$ |

Sample: as Table 11.5 less couples where the partner did not respond.

* The other categories of not employed are missed from the table but cell per cents are based on total sample.
$F$ statistics on within sweep differences by partnership status are all significant at $<0.05$.
The employment rate of lone mothers at MCS4, 49 per cent (Table 11.6), remains below that of mothers with partners (69\%), as it had been at previous sweeps, and it has been for lone parents with dependent children of all ages over the previous 10 years (Kent, 2009). However, both MCS and the Labour Force Survey show the gap between mothers has narrowed. It is particularly part-time employment which is more common, and feasible, for mothers with a partner who may contribute to both earning cash and caring for children. Mothers with partners are also more likely than lone mothers to work full-time. Note that the absolute numbers of lone mothers in the sample increased more than two-and-a-half fold between MCS3 and MCS4, despite sample attrition. This reflects the net outcome of family break-up and re-partnering, as time goes by and the children get older. Despite the considerable movements in and out of lone motherhood, the employment profile of lone and partnered mothers remains similar across MCS3 and 4, each gaining 7 points on the employment rate, 20 points apart.


## Fathers' employment at MCS4

Of the 8,878 resident fathers who provided information, the majority were in full-time work ( $85 \%$ overall), while 6 per cent each were employed part-time or out of work and seeking work (Table 11.7). Two per cent said they were looking after the family at home, and 0.5 per cent were in education or training. More than 9 out of 10 workers were full-time. There was very little variation in this pattern across the four countries of the UK. Rates of unemployment were slightly higher in Scotland and Wales, but this does not reach a conventional level of statistical significance. In the case of Scotland this could reflect the later fieldwork period. The overall employment rate for fathers had also been 91 per cent at MCS3. The employment rate in BHPS for fathers reported by Brewer and Paull (2006) was similar.

|  | England | Wales | Scotland | Northern Ireland | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Whole sample of fathers |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & \hline 85.1 \\ & (4772) \end{aligned}$ | $\begin{aligned} & 84.8 \\ & (1083) \end{aligned}$ | $\begin{aligned} & \hline 85.6 \\ & (946) \\ & \hline \end{aligned}$ | $\begin{aligned} & 86.8 \\ & (712) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 85.2 \\ & (7513) \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & 6.2 \\ & (408) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.5 \\ & (84) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5.6 \\ & (51) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5.7 \\ & (51) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.1 \\ & (594) \end{aligned}$ |
| Looking after family and home | $\begin{aligned} & \hline 2.2 \\ & (124) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.9 \\ & (27) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 1.4 \\ & \hline(15) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.7 \\ & (14) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2.1 \\ & (180) \\ & \hline \end{aligned}$ |
| Out of work | $\begin{aligned} & \hline 5.9 \\ & (363) \end{aligned}$ | $\begin{aligned} & 6.6 \\ & (88) \end{aligned}$ | $\begin{aligned} & 7.0 \\ & (52) \end{aligned}$ | $\begin{aligned} & 5.2 \\ & (41) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.1 \\ & (544) \end{aligned}$ |
| In education or government training scheme | $\begin{array}{\|l\|} \hline 0.5 \\ (35) \\ \hline \end{array}$ | $\begin{aligned} & 0.2 \\ & (3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.5 \\ & (5) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.6 \\ & (4) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.5 \\ & (47) \\ & \hline \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample Total weighted sample | $\begin{aligned} & \hline(5702) \\ & 5667 \end{aligned}$ | $\begin{aligned} & \text { (1285) } \\ & 1255 \end{aligned}$ | $\begin{aligned} & \hline(1069) \\ & 1006 \end{aligned}$ | $\begin{aligned} & (822) \\ & 782 \end{aligned}$ | $\begin{aligned} & \hline(8878) \\ & 8757 \end{aligned}$ |
| P -value | 0.072 |  |  |  |  |
| Currently employed only |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & 93.2 \\ & (4772) \end{aligned}$ | $\begin{aligned} & 92.9 \\ & (1083) \end{aligned}$ | $\begin{aligned} & 93.9 \\ & (946) \\ & \hline \end{aligned}$ | $\begin{aligned} & 93.9 \\ & (712) \\ & \hline \end{aligned}$ | $\begin{aligned} & 93.3 \\ & (7513) \end{aligned}$ |
| Currently employed part-time | $\begin{aligned} & 6.8 \\ & (408) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 7.1 \\ (84) \end{array}$ | $\begin{aligned} & \hline 6.1 \\ & (51) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 6.1 \\ & (51) \end{aligned}$ | $\begin{aligned} & 6.7 \\ & (594) \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample | (5180) | (1167) | (997) | (763) | (8107) |
| Total weighted sample | 5177 | 1145 | 917 | 723 | 7997 |
| P -value | 0.734 |  |  |  |  |

Column percentages weighted; unweighted obs in parentheses.
Sample: all male-partner respondents described as fathers including adoptive, step and grandfathers who responded to the partner questionnaire

Fathers' employment rates do vary significantly by ethnicity. Table 11.8 shows that the Pakistani/Bangladeshi group have an unemployment rate of 15 per cent, well above the 6 per cent average, as do black fathers at 11 per cent and the 'other ethnic group' (mainly mixed) at 9 per cent. Indians, on the other hand, have unemployment rates below those of whites. The Pakistani and Bangladeshi fathers are also distinct for their high rates of part-time employment, 32 per cent among those in employment.

Table 11.8: Fathers' economic activity status by ethnicity at sweep 4

|  | White | Indian | Pakistani and Bangladeshi | Black /Black British | Other (inc. Chinese \& Mixed) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Whole sample of fathers |  |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & \hline 86.9 \\ & (6696) \\ & \hline \end{aligned}$ | $\begin{aligned} & 88.6 \\ & (212) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 57.0 \\ & (251) \end{aligned}$ | $\begin{aligned} & \hline 75.1 \\ & (147) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 73.4 \\ & (144) \end{aligned}$ | $\begin{aligned} & 85.2 \\ & (7450) \end{aligned}$ |
| Currently employed parttime | $\begin{aligned} & 5.1 \\ & (402) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.7 \\ & (19) \\ & \hline \end{aligned}$ | $\begin{aligned} & 26.4 \\ & (125) \\ & \hline \end{aligned}$ | $\begin{aligned} & 7.5 \\ & (17) \\ & \hline \end{aligned}$ | $\begin{aligned} & 12.6 \\ & (24) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.1 \\ & (587) \\ & \hline \end{aligned}$ |
| Looking after family and home | $\begin{aligned} & 2.1 \\ & (148) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.0 \\ & \text { (3) } \end{aligned}$ | $\begin{aligned} & 1.9 \\ & (10) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.0 \\ & (8) \end{aligned}$ | $\begin{aligned} & 4.8 \\ & (9) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.1 \\ & (178) \end{aligned}$ |
| Out of work | $\begin{aligned} & 5.5 \\ & (406) \end{aligned}$ | $\begin{aligned} & 3.8 \\ & (13) \end{aligned}$ | $\begin{aligned} & 14.6 \\ & (67) \end{aligned}$ | $\begin{aligned} & 10.8 \\ & (21) \\ & \hline \end{aligned}$ | $\begin{aligned} & 9.2 \\ & (24) \end{aligned}$ | $\begin{aligned} & 6.0 \\ & (531) \\ & \hline \end{aligned}$ |
| In education or government training scheme | $\begin{aligned} & 0.5 \\ & (36) \end{aligned}$ | $\begin{aligned} & 0.0 \\ & (0) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.1 \\ & (1) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.6 \\ & (10) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.0 \\ & (0) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0.5 \\ & (47) \\ & \hline \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted n | (7688) | (247) | (454) | (203) | (201) | (8793) |
| Total weighted sample | 7814 | 194 | 324 | 201 | 190 | 8723 |
| P -values | <0.001 |  |  |  |  |  |
| Currently employed only |  |  |  |  |  |  |
| Currently employed full-time | $\begin{aligned} & \hline 94.5 \\ & (6696) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 93.0 \\ & (212) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 68.4 \\ & (251) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 90.9 \\ & (147) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 85.3 \\ & (144) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 93.3 \\ & (7450) \\ & \hline \end{aligned}$ |
| Currently employed parttime | $\begin{aligned} & 5.5 \\ & (402) \\ & \hline \end{aligned}$ | $\begin{aligned} & 7.0 \\ & (19) \\ & \hline \end{aligned}$ | $\begin{aligned} & 31.6 \\ & (125) \\ & \hline \end{aligned}$ | $\begin{aligned} & 9.1 \\ & (17) \\ & \hline \end{aligned}$ | $\begin{aligned} & 14.7 \\ & (24) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.7 \\ & (587) \\ & \hline \end{aligned}$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted n | (7098) | (231) | (376) | (164) | (168) | (8037) |
| Total weighted n | 7183 | 185 | 270 | 166 | 164 | 7968 |

Column percentages weighted; unweighted obs in parentheses.
Sample: all male-partner respondents described as fathers including adoptive, step and grandfathers, for whom relevant data known.

## Earners in families

Table 11.9 shows that just over 1 in 10 of the families was headed by a dual full-time earning couple, and just under 1 in 20 by a workless couple. Lone parents (including here lone fathers) were split almost equally between earners and workless (13\% each), bringing the total of workless families to 18 per cent. The most common arrangement was still the 1.5 earner couple where the father is employed full-time and the mother part-time. This applies to one-third of families, well ahead of the traditional male breadwinner arrangement (19\%). Cases where the mother is the major or sole earner are relatively rare, around 2.5 per cent each. Notable departures from this general pattern within ethnic groups include Indian families having almost double the rate of dual full-time earners. Pakistani and Bangladeshi families, given low female employment, have the highest proportion of male sole earning families, and also, given their high male unemployment rates, the highest incidence of noearner couples (Table 11.10). Black families have slightly higher than average dual full-time couples (14\%), but markedly high rates of workless lone parenthood. The relatively high rate of Pakistani/Bangladeshi mothers being employed when their partners are not (9.6\%) is a new feature since MCS3, but otherwise these patterns are similar to those observed at previous sweeps.

Table 11.9: Parents' partnership and economic status by country at sweep 4

|  | England | Wales | Scotland | N. Ireland | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 11.1 | 14.6 | 13.1 | 14.8 | 11.5 |
| Both employed full-time | $(880)$ | $(263)$ | $(216)$ | $(183)$ | $(1542)$ |
| Both employed, father full-time | 34.0 | 31.6 | 34.4 | 29.5 | 33.6 |
| and mother part-time | $(2559)$ | $(557)$ | $(513)$ | $(347)$ | $(3976)$ |
| Both employed, father part-time | 2.6 | 3.6 | 2.6 | 2.9 | 2.6 |
| and mother full-time or part-time | $(213)$ | $(64)$ | $(34)$ | $(37)$ | $(348)$ |
| Mother employed, father not | 2.4 | 1.6 | 2.4 | 2.1 | 2.4 |
| employed | $(232)$ | $(33)$ | $(32)$ | $(25)$ | $(322)$ |
| Father employed, mother not | 19.6 | 16.8 | 18.2 | 18.4 | 19.3 |
| employed | $(1601)$ | $(297)$ | $(245)$ | $(203)$ | $(2346)$ |
|  | 4.8 | 4.9 | 4.2 | 3.3 | 4.7 |
| Both not employed | $(407)$ | $(89)$ | $(42)$ | $(36)$ | $(574)$ |
|  | 12.3 | 12.9 | 14.0 | 13.8 | 12.6 |
| Lone parent employed | $(888)$ | $(220)$ | $(179)$ | $(144)$ | $(1431)$ |
|  | 13.2 | 14.1 | 11.1 | 15.2 | 13.2 |
| Lone parent not employed | $(956)$ | $(239)$ | $(122)$ | $(148)$ | $(1465)$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted sample | $(7736))$ | $(1762)$ | $(122)$ | $(1123)$ | $(12004)$ |
| Total weighted sample | 7787 | 1737 | 1357 | 1111 | 12055 |
| P value | 0.003 |  |  |  |  |

Column percentages weighted; unweighted obs in parentheses. Sample: lone mothers and lone fathers who answered the main questionnaire and female main respondents with a response from the partner.

| Table 11.10: Parents' partnership and economic status by mothers' ethnicity |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | White | Indian | Pakistani/ <br> Bangladeshi | Black | Other/ <br> Mixed | Total |
|  | 11.6 | 21.3 | 2.3 | 13.6 | 12.9 | 11.5 |
| Both employed full-time | $(1380)$ | $(56)$ | $(11)$ | $(57)$ | $(38)$ | $(1542)$ |
| Both employed, father full-time and | 36.1 | 30.5 | 6.7 | 10.7 | 20.6 | 33.6 |
| mother part-time | $(3735)$ | $(94)$ | $(48)$ | $(40)$ | $(57)$ | $(3974)$ |
| Both employed, father part-time | 2.7 | 4.6 | 2.9 | 1.0 | 2.4 | 2.6 |
| and mother full-time or part-time | $(305)$ | $(11)$ | $(19)$ | $(5)$ | $(8)$ | $(348)$ |
| Mother employed, father not | 2.0 | 3.7 | 9.6 | 3.9 | 3.3 | 2.4 |
| employed | $(213)$ | $(14)$ | $(67)$ | $(16)$ | $(12)$ | $(322)$ |
| Father employed, mother not | 18.3 | 22.8 | 47.4 | 9.2 | 22.9 | 19.3 |
| employed | $(1855)$ | $(69)$ | $(305)$ | $(39)$ | $(78)$ | $(2346)$ |
|  | 4.3 | 2.9 | 13.1 | 5.7 | 7.7 | 4.7 |
| Both not employed | $(416)$ | $(12)$ | $(86)$ | $(31)$ | $(28)$ | $(573)$ |
|  | 12.7 | 7.3 | 4.4 | 23.0 | 11.9 | 12.6 |
| Lone parent employed | $(1272)$ | $(15)$ | $(22)$ | $(90)$ | $(30)$ | $(1429)$ |
|  | 12.4 | 6.9 | 13.5 | 32.8 | 18.3 | 13.2 |
| Lone parent not employed | $(1199)$ | $(20)$ | $(80)$ | $(121)$ | $(45)$ | $(1465)$ |
| Total per cent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Total unweighted n | $(10375)$ | 291 | $(638)$ | $(399)$ | $(296)$ | $(11999)$ |
| Total weighted n | 10667 | 229 | 470 | 397 | 290 | 12052 |
| P-value | $<0.001$ |  |  |  |  |  |

Col percentages weighted; unweighted obs in parentheses. Sample as Table 11.10, subject to availability of ethnic goup data.

The occupations of employed mothers at MCS4 are tabulated against the National Statistics Socio-Economic Classification (NS-SEC) of the fathers in Table 11.1,
where this information is known. The table also includes information on the occupations of lone mothers, and of those whose partner has no job or gave no information about it. As there are various different bases for percentages of interest we show only weighted sample numbers in the body of the table. These enable us to say that there are roughly 5,700 cases $(42.7 \%$ of cases out of 13,422 ) observations where there is information on two occupations. Their share in the total sample is reported in bold on the diagonal of the top left hand corner of Table 11.11. In just over one-third ( $37 \%$ ) of these dual earning couples, mother's and the father's occupation is in the same NS-SEC (though not of course necessarily in exactly the same occupation). Following the rough ranking implicit in the ordering of the NS-SEC groups, 35 per cent of these pairs showed a higher rank for the father and 28 per cent for the mother. Thus, parents both doing the same kind of job is not 'the norm', although there is a tendency for each member of the couple to have jobs at the same general end of the occupational structure. Thirty-eight per cent of the dual earners each have jobs within the top two bands.

Table 11.11: Fathers' NS-SEC by mothers' NS-SEC, if employed at MCS4

|  |  | Mothers' NS-SEC MCS4 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Managerial \& professional | Intermediate | Small emp. \& self-emp. | Lower- <br> sup. <br>  <br> tech. | Semiroutine and routine | Not employed | Total |
| Fathers' NS-SEC MCS4 | Managerial \& professional | 10.5 | 4.1 | 1.9 | 0.5 | 3.7 | 7.3 | $\begin{gathered} 27.9 \\ 3671 \end{gathered}$ |
|  | Intermediate | 1.0 | 0.7 | 0.2 | 0.1 | 0.7 | 0.7 | $\begin{gathered} 3.3 \\ 467 \end{gathered}$ |
|  | Small employer \& self-employed | 2.3 | 1.5 | 1.4 | 0.3 | 1.6 | 3.7 | $\begin{gathered} \hline 10.8 \\ 1453 \end{gathered}$ |
|  | Lower supervisory \& technical | 1.4 | 1.4 | 0.4 | 0.2 | 2.0 | 2.3 | $\begin{aligned} & \hline 7.7 \\ & 1063 \end{aligned}$ |
|  | Semi-routine \& routine | 1.5 | 1.6 | 0.3 | 0.5 | 2.9 | 4.3 | $\begin{aligned} & \hline 11.0 \\ & 1590 \end{aligned}$ |
|  | Not employed or non respondent | 2.5 | 1.3 | 0.7 | 0.4 | 2.8 | 9.3 | $\begin{aligned} & \hline 16.9 \\ & 2380 \end{aligned}$ |
|  | Lone mother | 3.0 | 2.4 | 0.7 | 0.5 | 4.0 | 11.7 | $\begin{aligned} & \hline 22.2 \\ & 2798 \end{aligned}$ |
|  | Total | $\begin{gathered} 22.2 \\ 3130 \end{gathered}$ | $\begin{gathered} \hline 12.9 \\ 1753 \end{gathered}$ | $\begin{gathered} \hline 5.4 \\ 698 \end{gathered}$ | $\begin{gathered} \hline 2.5 \\ 318 \end{gathered}$ | $\begin{aligned} & \hline 17.7 \\ & 2330 \end{aligned}$ | $\begin{gathered} 39.2 \\ 5193 \end{gathered}$ | $\begin{aligned} & \hline 100.0 \\ & 13422 \end{aligned}$ |

Cell contents are weighted total (weighted) percentages. Sample as Table 11.1 where mothers' NS-SEC known. Lone fathers not included.

The other cells in the table tell us that fathers with higher ranked occupations are more likely to have an employed partner than those with lower ranked occupations, or no occupation to report. Over half ( $53 \%$ ) of lone mothers were not employed. Looking to the bottom row, we can see that the higher the level of the mother's occupation the more likely she is to be living with a partner. Thirty per cent of nonemployed mothers were lone parents. Even among those mothers who had a partner, the availability of information on the partner's occupation falls broadly with the level of the mother's NS-SEC and is least where the woman is not employed.
Provisions for combining employment and motherhood

The new millennium can be contrasted with previous decades by the spread of family-friendly measures that make it easier to combine motherhood and paid work. Mothers were asked about their use of a set of family-friendly employer provisions. Some were statutory obligations on employers, while others might be negotiated and/or facilitated by legislation such as the right to request flexible arrangements. For a positive response, the mother would have had to have access to the provision and to be using it. We do not know how many mothers had access to such arrangements but were not using them.

Table 11.12 records the use of statutory arrangements for taking leave by a broad classification of the occupation of their job, as given by the National Statistics SocioEconomic Classification (NS-SEC). These statutory entitlements to leave were: time off for family emergencies, maternity leave, adoptive leave and parental leave (the right to unpaid time off work to attend to a child's needs). The latter two entitlements were used by very few mothers at this survey, though parental leave had been somewhat more popular at MCS3. The small size of the sample may account for the absence of significant differences between occupation groups. However, the mothers employed in the top two occupational categories - managerial/professional and intermediate (jointly accounting for $60 \%$ of all jobs) were significantly more likely to take time off for family emergencies (32\%) than the average (27\%). These two groups were also significantly more likely than others to take maternity leave.

| Table 11.12: Percentage of employed mothers in each NS-SEC group who reported they were <br> using statutory arrangements at MCS4 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  <br> professional | Inter- <br> mediate | Small employer, <br> self-employed, <br> low supervisory <br> and technical | Semi-routine <br> and routine | Total |  |
| Time off for family <br> emergencies | 32.8 |  |  |  |  |  |
| $(1080)$ | 31.7 | 11.9 | 21.7 | 26.6 | $<0.001$ |  |
| Maternity leave | 9.8 | $(565)$ | $(110)$ | $(502)$ | $(2257)$ |  |
| Adoptive leave | $(338)$ | 7.5 | 4.0 | 6.3 | 7.6 | $<0.001$ |
|  | 0.2 | $(150)$ | $(38)$ | $(162)$ | $(688)$ |  |
| Parental leave | 0.4 | 0.4 | 0.2 | 0.1 | 0.2 | 0.270 |
|  | $(15)$ | $(8)$ | $(1)$ | $(4)$ | $(21)$ |  |
| Total <br> unweighted $n$ <br> weighted $n$ | $(3134)$ | $(8)$ | 0.2 | 0.3 | 0.3 | 0.890 |

Sample: Employed mothers as in Table 11.1 with valid NS-SEC data.
The use of all these provisions has fallen since MCS3, presumably due to the children being older and arrangements for their education being more settled. Table 11.13 shows the use of these statutory rights in the four UK countries. There is no significant difference between countries apart from above average use of maternity leave in Northern Ireland.

Table 11.13: Percentage of employed mothers in each country who reported using statutory arrangements at MCS4

|  | England | Wales | Scotland | Northern <br> Ireland | Total | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Time off for family | 26.2 | 25.8 | 30.3 | 25.6 | 26.5 | 0.084 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| emergencies | $(1364)$ | $(324)$ | $(356)$ | $(227)$ | $(2271)$ |  |
| Maternity leave | 7.2 | 10.0 | 8.0 | 12.1 | 7.6 | 0.001 |
|  | $(375)$ | $(118)$ | $(85)$ | $(117)$ | $(695)$ |  |
| Adoptive leave | 0.2 | 0.0 | 0.5 | 0.4 | 0.2 | 0.160 |
|  | $(10)$ | $(0)$ | $(7)$ | $(4)$ | $(21)$ |  |
| Parental leave | 0.2 | 0.6 | 1.0 | 0.5 | 0.3 | 0.110 |
|  | $(14)$ | $(5)$ | $(12)$ | $(6)$ | $(37)$ |  |
| Total unweighted sample | $(5116)$ | $(1231)$ | $(1100)$ | $(856)$ | $(8303)$ |  |
| Total weighted sample | 5225 | 1217 | 1038 | 825 | 8224 |  |

Obs coefficients; count in parentheses. Sample: employed mothers as in Table 11.1.
Non-statutory provisions which employers may offer the parents of young children are shown in Table 11.14, and their take-up by employed mothers at MCS4, crossclassified by their occupational status. The provision most frequently taken up was the use of a telephone for family reasons (17\%), followed by being able to work from home occasionally (11\%). Mothers with managerial jobs or intermediate white collar jobs were much more likely than others to use these facilities, though for the use of a telephone it was women in intermediate jobs who made the most use. The next most common arrangement reported was school-term working contracts (8\%) where, unlike other provisions, take-up was most likely among mothers in semi-routine and routine jobs. Various forms of employer help with childcare were less common, but all were more likely to be received by mothers in the 'better' two categories of occupational status. To summarise: 62 per cent received none of these benefits, and hence 38 per cent had received at least one. The proportion receiving none among those in semi-routine and routine jobs was 72 per cent.

|  | Managerial \& professional | Intermediate | Small employer, self-employed, low supervisory and technical | Semiroutine and routine | Total | P-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Financial help with childcare/childcare vouchers | $\begin{aligned} & 9.9 \\ & (292) \end{aligned}$ | $\begin{aligned} & 6.7 \\ & (114) \end{aligned}$ | $\begin{aligned} & 2.5 \\ & (20) \end{aligned}$ | $\begin{aligned} & 2.4 \\ & (56) \end{aligned}$ | $\begin{aligned} & 6.1 \\ & (482) \end{aligned}$ | <0.001 |
| Workplace nursery or creche | $\begin{aligned} & 2.7 \\ & (85) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.3 \\ & (40) \end{aligned}$ | $0.7$ <br> (5) | $\begin{aligned} & 1.2 \\ & (27) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.9 \\ & (157) \end{aligned}$ | 0.001 |
| Care for children after school hours or during school holidays | $\begin{aligned} & 9.1 \\ & (282) \end{aligned}$ | $\begin{aligned} & 7.3 \\ & (129) \end{aligned}$ | $\begin{aligned} & \hline 3.1 \\ & (33) \end{aligned}$ | $\begin{aligned} & \hline 4.1 \\ & \text { (98) } \end{aligned}$ | $\begin{aligned} & \hline 6.5 \\ & (542) \end{aligned}$ | <0.001 |
| Career breaks for personal reasons | $\begin{aligned} & 1.0 \\ & (42) \end{aligned}$ | $\begin{aligned} & \hline 1.3 \\ & (26) \end{aligned}$ | $\begin{aligned} & 0.8 \\ & (7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.7 \\ & (19) \end{aligned}$ | $\begin{aligned} & 0.9 \\ & (94) \end{aligned}$ | 0.350 |
| Job-sharing | $\begin{aligned} & 5.2 \\ & (169) \end{aligned}$ | $\begin{aligned} & 4.3 \\ & (81) \end{aligned}$ | $\begin{aligned} & \hline 1.3 \\ & (11) \end{aligned}$ | $\begin{aligned} & \hline 2.1 \\ & (44) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.6 \\ & (305) \\ & \hline \end{aligned}$ | <0.001 |
| Working at or from home occasionally | $\begin{aligned} & 23.3 \\ & (704) \end{aligned}$ | $\begin{aligned} & 9.5 \\ & (156) \end{aligned}$ | $\begin{aligned} & \hline 3.7 \\ & (37) \end{aligned}$ | $\begin{aligned} & 1.1 \\ & (23) \end{aligned}$ | $\begin{aligned} & 11.3 \\ & (920) \end{aligned}$ | <0.001 |
| School term-time contracts | $\begin{aligned} & \hline 6.7 \\ & (193) \end{aligned}$ | $\begin{aligned} & \hline 9.1 \\ & (161) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2.6 \\ & (27) \end{aligned}$ | $\begin{aligned} & 11.6 \\ & (245) \end{aligned}$ | $\begin{aligned} & \hline 8.1 \\ & (626) \\ & \hline \end{aligned}$ | <0.001 |
| Continued |  |  |  |  |  |  |
| A telephone to use for family reasons | $\begin{aligned} & 21.4 \\ & (700) \end{aligned}$ | $\begin{aligned} & 23.4 \\ & (409) \end{aligned}$ | $\begin{aligned} & \hline 5.7 \\ & (60) \end{aligned}$ | $\begin{aligned} & \hline 11.4 \\ & (271) \end{aligned}$ | $\begin{aligned} & \hline 16.9 \\ & (1440) \end{aligned}$ | <0.001 |
| None of the above | $\begin{aligned} & 49.7 \\ & (1558) \end{aligned}$ | $\begin{aligned} & 53.9 \\ & (951) \end{aligned}$ | $\begin{aligned} & 85.8 \\ & (874) \\ & \hline \end{aligned}$ | $\begin{aligned} & 71.7 \\ & (1704) \end{aligned}$ | $\begin{aligned} & 61.7 \\ & (5087) \\ & \hline \end{aligned}$ | <0.001 |

Table 11.14: Percentage of employed mothers in each NS-SEC group who reported using nonstatutory flexible employed arrangements and provisions at sweep 4
$\left.\begin{array}{|l|l|l|l|l|l|l|}\hline & \begin{array}{l}\text { Managerial \& } \\ \text { professional }\end{array} & \begin{array}{l}\text { Inter- } \\ \text { mediate }\end{array} & \begin{array}{l}\text { Small employer, } \\ \text { self-employed, } \\ \text { low supervisory } \\ \text { and technical }\end{array} & \begin{array}{l}\text { Semi- } \\ \text { routine } \\ \text { and } \\ \text { routine }\end{array} & \text { Total } & \text { P-value } \\ \hline \text { Total } & (3134) & (1753) & (1016) & (2335) & (8238) & \\ \hline 2986 & 1736 & 1062 & 2381 & 8166\end{array}\right]$

Obs coefficients; count in parentheses. Sample: employed mothers as in Table 11.1 with valid data.
There are some differences by country in the receipt of non-statutory benefits (Table 11.15). Northern Ireland and Wales are less likely to have mothers receiving financial help with childcare from employers. Northern Ireland has a bigger minority awarded career breaks for personal reasons. Job-sharing is nearly twice the national average, at 5.8 per cent, in Scotland. Occasional working from home is most common in England. School term contracts are relatively common in England and Northern Ireland whereas the use of a telephone for family reasons is more common in Wales and Scotland. On the whole there is no significant difference between countries on using at least one of these arrangements ( $\mathrm{P}=0.229$ ).

Table 11.15: Percentage of employed mothers in each country who reported using at MCS4 non-statutory flexible arrangements

|  | England | Wales | Scotland | Northern Ireland | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Financial help with childcare/childcare vouchers | $\begin{gathered} 6.2 \\ (320) \end{gathered}$ | $\begin{gathered} 4.1 \\ (44) \\ \hline \end{gathered}$ | $\begin{array}{r} 7.2 \\ (87) \\ \hline \end{array}$ | $\begin{aligned} & 4.5 \\ & (35) \end{aligned}$ | $\begin{gathered} 6.1 \\ (486) \end{gathered}$ | 0.02 |
| Workplace nursery or creche | $\begin{gathered} 2.0 \\ (107) \end{gathered}$ | $\begin{array}{r} 1.5 \\ (22) \\ \hline \end{array}$ | $\begin{array}{r} 2.2 \\ (22) \\ \hline \end{array}$ | $\begin{aligned} & 1.0 \\ & (7) \\ & \hline \end{aligned}$ | $\begin{gathered} 1.9 \\ (158) \end{gathered}$ | 0.311 |
| Care for children after school hours or during school holidays | $\begin{gathered} \hline 6.5 \\ (341) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 6.1 \\ & (80) \end{aligned}$ | $\begin{gathered} \hline 6.6 \\ (77) \end{gathered}$ | $\begin{gathered} \hline 6.3 \\ (47) \end{gathered}$ | $\begin{gathered} 6.5 \\ (545) \\ \hline \end{gathered}$ | 0.923 |
| Career breaks for personal reasons | $\begin{aligned} & 0.9 \\ & (48) \\ & \hline \end{aligned}$ | $\begin{gathered} 0.7 \\ (11) \end{gathered}$ | $\begin{gathered} 1.0 \\ (13) \\ \hline \end{gathered}$ | $\begin{aligned} & 2.6 \\ & (22) \end{aligned}$ | $\begin{aligned} & 0.9 \\ & (94) \\ & \hline \end{aligned}$ | 0.001 |
| Job-sharing | $\begin{gathered} \hline 3.4 \\ (175) \end{gathered}$ | $\begin{aligned} & \hline 3.2 \\ & (38) \end{aligned}$ | $\begin{gathered} \hline 5.8 \\ (67) \end{gathered}$ | $\begin{aligned} & \hline 3.3 \\ & (28) \end{aligned}$ | $\begin{gathered} 3.6 \\ (308) \end{gathered}$ | 0.008 |
| Working at or from home occasionally | $\begin{array}{r} 11.9 \\ (622) \\ \hline \end{array}$ | $\begin{gathered} 10.7 \\ (125) \\ \hline \end{gathered}$ | $\begin{gathered} 9.5 \\ (118) \end{gathered}$ | $\begin{gathered} \hline 6.8 \\ (65) \\ \hline \end{gathered}$ | $\begin{gathered} 11.4 \\ (930) \\ \hline \end{gathered}$ | 0.001 |
| School term-time contracts | $\begin{gathered} 8.7 \\ (431) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5.5 \\ (69) \end{gathered}$ | $\begin{aligned} & \hline 5.1 \\ & (57) \end{aligned}$ | $\begin{array}{r} \hline 7.9 \\ (71) \\ \hline \end{array}$ | $\begin{gathered} 8.1 \\ (628) \end{gathered}$ | <0.001 |
| A telephone to use for family reasons | $\begin{aligned} & 16.0 \\ & (815) \end{aligned}$ | $\begin{gathered} 19.2 \\ (233) \end{gathered}$ | $\begin{aligned} & 20.5 \\ & (236) \end{aligned}$ | $\begin{gathered} 18.3 \\ (162) \end{gathered}$ | $\begin{gathered} 16.8 \\ (1446) \end{gathered}$ | 0.004 |
| None of the above | $\begin{gathered} 61.6 \\ (3153) \end{gathered}$ | $\begin{gathered} 64.0 \\ (788) \\ \hline \end{gathered}$ | $\begin{aligned} & 60.2 \\ & (644) \end{aligned}$ | $\begin{gathered} 64.5 \\ (545) \end{gathered}$ | $\begin{gathered} 61.7 \\ (5130) \end{gathered}$ | 0.229 |
| Total unweighted sample | (5116) | (1231) | (1100) | (856) | (8303) |  |
| Total weighted sample | 5225 | 1217 | 1038 | 825 | 8224 |  |

Obs coefficients; count in parentheses. Sample: employed mothers as in Table 11.1 with valid data.

## Mothers not in employment

As noted above, 38 per cent of MCS mothers at sweep 4 were not employed (including 3 per cent who were looking for work and classifiable as unemployed). A further 2 per cent were undertaking training or education. Mothers who were not employed were asked about their reasons for not working and had the option to give more than one reason (Table 11.16). The reasons most commonly cited were:

- Prefer to look after my children myself ( $48 \%$ );
- Prefer to be at home with the family rather than working ( $37 \%$ );
- Cannot earn enough to pay for childcare (8\%);
- No jobs with the right hours for me (7\%); and
- Have a new baby (7\%).

Only 3.6 per cent of these non-employed MCS mothers said that they were unable to find suitable childcare.

Note that those with a new baby are not the same women as the employed mothers with recent births who were on maternity leave. Some of those who had given birth since the previous sweep gave other reasons for not being employed. Altogether 62 per cent of the non-employed mothers gave at least one of the 'preferring to be at home/look after my own children' responses.

Table 11.16: Non-employed mothers' reasons for not looking for paid employment at MCS4 by country

|  |  | $\frac{\boldsymbol{0}}{\frac{0}{\pi}}$ | $\begin{aligned} & \text { 즈 } \\ & \text { त్む } \\ & \text { O} \end{aligned}$ |  | $\stackrel{\overline{\mathrm{I}}}{\stackrel{\circ}{\circ}}$ | $\begin{aligned} & \frac{0}{\pi} \\ & \frac{1}{N} \\ & 2 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| There are no jobs in the right place for me | $\begin{aligned} & \hline 1.8 \\ & (65) \end{aligned}$ | $\begin{gathered} \hline 3.1 \\ (18) \\ \hline \end{gathered}$ | $\begin{aligned} & 2.1 \\ & (9) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 2.9 \\ (14) \end{gathered}$ | $\begin{gathered} 2.0 \\ (106) \end{gathered}$ | 0.331 |
| There are no jobs with the right hours for me | $\begin{gathered} 7.9 \\ (232) \\ \hline \end{gathered}$ | $\begin{aligned} & 5.8 \\ & (39) \end{aligned}$ | $\begin{gathered} 6.4 \\ (34) \\ \hline \end{gathered}$ | $\begin{aligned} & 5.8 \\ & (31) \end{aligned}$ | $\begin{gathered} 7.6 \\ (336) \\ \hline \end{gathered}$ | 0.075 |
| There are no jobs available for me | $\begin{gathered} \hline 0.6 \\ (19) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 1.3 \\ (10) \\ \hline \end{array}$ | $\begin{aligned} & 0.9 \\ & (4) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.1 \\ & (5) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 0.7 \\ (38) \\ \hline \end{gathered}$ | 0.410 |
| I am in full-time education | $\begin{aligned} & \hline 2.8 \\ & (97) \\ & \hline \end{aligned}$ | $\begin{array}{r} 4.3 \\ (32) \\ \hline \end{array}$ | $\begin{gathered} \hline 6.6 \\ (33) \\ \hline \end{gathered}$ | $\begin{aligned} & 1.4 \\ & (6) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 3.1 \\ (168) \\ \hline \end{gathered}$ | 0.005 |
| I am on a training course | $\begin{array}{r} 2.3 \\ (80) \\ \hline \end{array}$ | $\begin{array}{r} 2.2 \\ (15) \\ \hline \end{array}$ | $\begin{aligned} & 1.2 \\ & (5) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.6 \\ & (7) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 2.2 \\ (107) \\ \hline \end{gathered}$ | 0.281 |
| My family would lose benefits if I was earning | $\begin{gathered} 4.7 \\ (147) \\ \hline \end{gathered}$ | $\begin{aligned} & 6.1 \\ & (41) \end{aligned}$ | $\begin{gathered} \hline 5.6 \\ (22) \\ \hline \end{gathered}$ | $\begin{gathered} 3.3 \\ (17) \end{gathered}$ | $\begin{gathered} 4.9 \\ (227) \\ \hline \end{gathered}$ | 0.197 |
| I am caring for an elderly or ill relative or friend | $\begin{gathered} \hline 3.3 \\ (118) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 4.2 \\ & (37) \end{aligned}$ | $\begin{array}{r} \hline 3.6 \\ (18) \\ \hline \end{array}$ | $\begin{aligned} & 1.8 \\ & (9) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 3.3 \\ (182) \\ \hline \end{gathered}$ | 0.151 |
| I cannot work because of poor health | $\begin{gathered} 5.2 \\ (177) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6.9 \\ (55) \\ \hline \end{gathered}$ | $\begin{array}{r} \hline 6.9 \\ (33) \\ \hline \end{array}$ | $\begin{gathered} \hline 6.9 \\ (35) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5.7 \\ (300) \\ \hline \end{gathered}$ | 0.266 |
| I prefer not to work | $\begin{gathered} 5.5 \\ (186) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 3.9 \\ & (22) \end{aligned}$ | $\begin{gathered} 6.0 \\ (31) \\ \hline \end{gathered}$ | $\begin{aligned} & 3.9 \\ & (20) \end{aligned}$ | $\begin{gathered} 5.4 \\ (259) \\ \hline \end{gathered}$ |  |
| Prefer to be at home with the family rather than working | $\begin{gathered} 38.3 \\ (1370) \\ \hline \end{gathered}$ | $\begin{array}{r} 30.2 \\ (205) \\ \hline \end{array}$ | $\begin{array}{r} 28.9 \\ (142) \\ \hline \end{array}$ | $\begin{array}{r} 46.3 \\ (220) \\ \hline \end{array}$ | $\begin{gathered} 36.8 \\ (1937) \\ \hline \end{gathered}$ | <0.001 |
| I prefer to look after my children myself | $\begin{gathered} \hline 48.8 \\ (1706) \\ \hline \end{gathered}$ | $\begin{aligned} & 41.9 \\ & (294) \end{aligned}$ | $\begin{gathered} 38.8 \\ (187) \end{gathered}$ | $\begin{aligned} & 55.5 \\ & (268) \end{aligned}$ | $\begin{gathered} 47.3 \\ (2455) \end{gathered}$ | <0.001 |
| I cannot earn enough to pay for childcare | $\begin{gathered} 7.7 \\ (232) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 8.7 \\ & (52) \end{aligned}$ | $\begin{gathered} \hline 6.6 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 7.8 \\ (36) \\ \hline \end{gathered}$ | $\begin{gathered} 7.5 \\ (352) \\ \hline \end{gathered}$ | 0.717 |
| I cannot find suitable childcare | $\begin{gathered} \hline 3.5 \\ (106) \\ \hline \end{gathered}$ | $\begin{aligned} & 4.8 \\ & (29) \end{aligned}$ | $\begin{aligned} & \hline 3.5 \\ & (15) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.6 \\ & (14) \end{aligned}$ | $\begin{gathered} \hline 3.5 \\ (164) \\ \hline \end{gathered}$ | 0.359 |
| My husband/partner disapproves | $\begin{gathered} 1.3 \\ (41) \\ \hline \end{gathered}$ | $\begin{aligned} & 0.3 \\ & (3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.1 \\ & (1) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.5 \\ & \text { (2) } \\ & \hline \end{aligned}$ | $\begin{gathered} 1.0 \\ (47) \\ \hline \end{gathered}$ | <0.001 |
| I have a new baby | $\begin{gathered} 7.3 \\ (230) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 7.5 \\ & (50) \end{aligned}$ | $\begin{aligned} & 6.1 \\ & (23) \end{aligned}$ | $\begin{aligned} & \hline 5.1 \\ & (23) \end{aligned}$ | $\begin{gathered} 7.0 \\ (326) \end{gathered}$ | 0.407 |
| Total unweighted sample Total weighted sample | $\begin{array}{r} (3407) \\ 3337 \end{array}$ | $\begin{gathered} \hline(701) \\ 713 \\ \hline \end{gathered}$ | $\begin{gathered} (481) \\ 536 \end{gathered}$ | $\begin{gathered} (483) \\ 519 \end{gathered}$ | $\begin{gathered} (5072) \\ 5281 \end{gathered}$ |  |

Notes: observed sample numbers in parentheses. Sample: non-employed mothers as in Table 11.1.
There are a few significant differences across UK countries in the frequency with which these replies were given. The non-employed mothers in Northern Ireland are the most emphatic that they prefer to be at home, and the non-employed mothers in Scotland are most likely to be in full-time education. The tiny minority giving the disapproval of their husband as a reason for not working are more numerous in England than elsewhere.

When the non-workers' reasons are classified by family income the distinction between not working from choice and having little choice becomes more apparent (Table 11.17). Where family income is under the poverty line, non-workers are more likely than those in better-off families to say that their family would lose benefits if they earned, that they have caring responsibilities for an adult, and that they are in poor health themselves. Women in 'poor' families constitute over half of the non-
working mothers. Although they are less likely to cite a preference for looking after their own family than the better-off non-workers, such preferences are still dominant in their responses; 62 per cent gave at least one of the 'I prefer' responses.

Table 11.17: Non-employed mothers' reasons for not looking for paid employment at MCS4 by income poverty status

|  | Above 60\% median | Below 60\% median | Total | P-value |
| :---: | :---: | :---: | :---: | :---: |
| There are no jobs in the right place for me | $\begin{aligned} & \hline 1.7 \\ & (36) \end{aligned}$ | $\begin{aligned} & \hline 2.2 \\ & (70) \end{aligned}$ | $\begin{aligned} & \hline 2.0 \\ & (106) \\ & \hline \end{aligned}$ | 0.205 |
| There are no jobs with the right hours for me | $\begin{aligned} & 8.3 \\ & (166) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.7 \\ & (170) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 7.5 \\ & (336) \\ & \hline \end{aligned}$ | 0.0721 |
| There are no jobs available for me | $\begin{aligned} & \hline 0.7 \\ & (13) \end{aligned}$ | $\begin{aligned} & \hline 0.7 \\ & (25) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.7 \\ & (38) \\ & \hline \end{aligned}$ | 0.951 |
| I am in full-time education | $\begin{aligned} & \hline 3.1 \\ & (79) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.1 \\ & (89) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3.1 \\ & (168) \\ & \hline \end{aligned}$ | 0.947 |
| I am on a training course | $\begin{aligned} & 2.1 \\ & (43) \end{aligned}$ | $\begin{aligned} & 2.3 \\ & (64) \end{aligned}$ | $\begin{aligned} & 2.2 \\ & (107) \end{aligned}$ | 0.750 |
| My family would lose benefits if I was earning | $\begin{aligned} & 2.7 \\ & (58) \\ & \hline \end{aligned}$ | $\begin{aligned} & 6.5 \\ & (169) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.8 \\ & (227) \\ & \hline \end{aligned}$ | <0.001 |
| I am caring for an elderly or ill relative or friend | $\begin{aligned} & 2.7 \\ & (67) \end{aligned}$ | $\begin{aligned} & 3.8 \\ & (115) \end{aligned}$ | $\begin{aligned} & 3.3 \\ & (182) \end{aligned}$ | 0.043 |
| I cannot work because of poor health | $\begin{aligned} & 4.8 \\ & (111) \end{aligned}$ | $\begin{aligned} & 6.3 \\ & (189) \end{aligned}$ | $\begin{aligned} & 5.6 \\ & (300) \end{aligned}$ | 0.057 |
| I prefer not to work | $\begin{aligned} & 7.3 \\ & (148) \end{aligned}$ | $\begin{aligned} & 3.8 \\ & (110) \end{aligned}$ | $\begin{aligned} & 5.4 \\ & (258) \\ & \hline \end{aligned}$ | <0.001 |
| Prefer to be at home with the family rather than working | $\begin{aligned} & \hline 44.8 \\ & (978) \\ & \hline \end{aligned}$ | $\begin{aligned} & 31.1 \\ & (955) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 37.4 \\ & (1933) \\ & \hline \end{aligned}$ | <0.001 |
| I prefer to look after my children myself | $\begin{aligned} & 53.5 \\ & (1176) \end{aligned}$ | $\begin{aligned} & \hline 43.1 \\ & (1277) \end{aligned}$ | $\begin{aligned} & 47.8 \\ & (2453) \end{aligned}$ | <0.001 |
| I cannot earn enough to pay for childcare | $\begin{aligned} & 8.7 \\ & (169) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 6.7 \\ & (183) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 7.6 \\ & (352) \\ & \hline \end{aligned}$ | 0.033 |
| I cannot find suitable childcare | $\begin{aligned} & \hline 3.1 \\ & (71) \end{aligned}$ | $\begin{aligned} & 3.8 \\ & (92) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3.5 \\ & (163) \end{aligned}$ | 0.243 |
| My husband/partner disapproves | $\begin{aligned} & 1.6 \\ & (29) \end{aligned}$ | $\begin{aligned} & 0.7 \\ & (17) \end{aligned}$ | $\begin{aligned} & 1.1 \\ & (46) \end{aligned}$ | 0.0116 |
| I have a new baby | $\begin{aligned} & \hline 6.9 \\ & (136) \end{aligned}$ | $\begin{aligned} & 7.3 \\ & (190) \end{aligned}$ | $\begin{aligned} & \hline 7.1 \\ & (326) \\ & \hline \end{aligned}$ | 0.650 |
| Total unweighted sample Total weighted sample | $\begin{aligned} & \hline(2227) \\ & 2359 \end{aligned}$ | $\begin{aligned} & \hline(2840) \\ & 2788 \end{aligned}$ | $\begin{aligned} & (5067) \\ & 5147 \end{aligned}$ |  |

Notes: observed sample numbers in parentheses. This table is based on a later question which, unlike the one on which Table 11.1 is based, allowed for more than one response to be given. A few cases identified as looking after the family in Table 11.1 mentioned education or training at this point.

## Change in employment since MCS3

To illustrate one of the many possibilities for looking longitudinally at the parents' employment histories, Figure 11.2 shows how many families stayed in the same situation in terms of the number of earners and number of parents between the age 5 and age 7 surveys.

Figure 11.2: Employment transitions of parents, MCS3 to MCS4


Based on cases present at both surveys, less those where, at either survey, a partner is present but not responding.
The majority of all family types stayed in their original positions. Dual earner couples and earning lone parents were most likely to stay in work (86\% and 75\% respectively. Among lone parents who at MCS3 had not been employed, the proportion staying the same was 68 per cent. Those initially in couples with one or no earner were also more likely than not to remain in the same position, but the changes they did make were somewhat more likely to be towards more work than less work. The chances of non-earning lone parents moving into work (with or without acquiring a partner) are greater than the chances of employed lone parents moving out of employment. In order to compare entries to and exits from employment across groups it is necessary to take account of the size of the base groups at MCS3. There were twice as many entries to employment by mothers originally in couples as exits ( 989 weighted cases versus 488). Among the lone parents at MCS3, there was a net increase in earners of 180 ( 310 versus 130). Among partners, there were 270 entries to employment and 214 exits,

Some mothers who changed employment status also changed partnership status. In total 116 of those originally in a couple changed work as well as partnership status, as did 63 of those lone mothers gaining a partner. The total net increase of employed parents represents 6 per cent of the longitudinal sample

## Adult education

At each survey, respondents have been asked if they have gained any qualifications since the last survey. Around one in six of the main respondents had done so, and around one in seven of the partners (Tables 11.19 and 11.20). There were small but statistically significant variations across the UK countries (Table 11.19). Parents in Wales were slightly more likely than average to have obtained new qualifications, while those in Northern Ireland were less likely to do so.

Table 11.19: Percentage of total gaining new qualifications since last interview, by country

|  | Main | Partner |
| :--- | :---: | :---: |
| England | $17.7(1534)$ | $14.2(693)$ |
| Wales | $20.5(417)$ | $15.1(172)$ |
| Scotland | $15.0(230)$ | $14.6(130)$ |
| Northern Ireland | $15.0(211)$ | $9.6(74)$ |
| Total per cent | $17.5(2392)$ | $13.9(1069)$ |
| Unweighted sample | $(13429)$ | $(7783)$ |
| P value | $<0.001$ | 0.0167 |

Observed sample numbers in parentheses. Sample: all respondents with valid data, irrespective of sex of the informant.

Those gaining qualifications were almost all adding to qualifications they already held at the previous survey. Only 6 per cent of the main respondents and 4 per cent of the partners with new qualifications previously had none. Indeed 39 per cent of the main respondents with new qualifications already had a degree-level qualification, as did 48 per cent of the partners. Whether the new qualification served to raise the NVQ level remains to be investigated.

Table 11.20: Percentage of those gaining qualifications between MCS3 and MCS4 by level attained at MCS3

|  | Main | Partners |
| :--- | :---: | :---: |
| NVQ level 5 (post graduate) | $10.1 \quad(250)$ | $16.3(187)$ |
| NVQ level 4 (graduate) | $28.6(669)$ | $31.8(328)$ |
| NVQ level 3 (A levels) | $17.5(379)$ | $16.3(163)$ |
| NVQ level 2 (GCSE A-C) | $28.5(609)$ | $24.9(252$ |
| NVQ level 1 (GCSE below C) | $6.8(154)$ | $3.9(40)$ |
| Overseas or other | $2.6(65)$ | $2.6(30)$ |
| None of these qualifications | $6.0(125)$ | $4.1(37)$ |
| Total per cent | $100.0(2251)$ | $100.0(1037)$ |

Notes: Sample - all main respondents who acquired new qualifications and were respondents at MCS3. Weighted column percentage and unweighted observations in parenthesis.

## Conclusions

As the cohort child passed into the primary school years we saw a continuing high level of employment amongst fathers and a continuing net increase in mothers with paid work. Employment was still more frequent for mothers in two-parent families but the participation of lone mothers continues to increase in parallel. However, there was still rotation in and out of employment. The outflows may become more
substantial in the period after 2008. Part-time jobs continued to dominate mothers' employment. Some groups of mothers still had little involvement in the labour force: those with low or no qualifications, or partners with lower level occupations, Pakistanis and Bangladeshis, or lone mothers. Employer provisions to help combine motherhood and work continue to be more favourable for mothers with intermediate, managerial/professional jobs. These mothers are in turn more likely, though not exclusively, to have partners in similar jobs than other mothers. The cohort children's experience of parental employment ranges from worklessness to dual full-time highflying careers. These contrasts will clearly be reflected in the inequality of family income at the time of this survey - examined in the next chapter - and are likely to have longer-term consequences for the family and the cohort child.

## References

Blanden, J. and Machin, S. (2010) Intergenerational Inequality in Early Years
Assessments. In K. Hansen, H. Joshi and S. Dex (eds) Children of the $21^{\text {st }}$ Century: the first five years. Bristol: Policy Press, pp.153-168.

Brewer, M. and Paull, G. (2006) Newborns and new schools: critical times in women's employment. DWP Research Report No. 308, London: DWP.

Hansen, K. (2010) Teacher Assessments in the first year of school. In K.Hansen, H. Joshi and S. Dex (eds) Children of the $21^{\text {st }}$ Century: the first five years. Bristol: Policy Press, pp. 201-216.

Kent, K. (2009) Employment changes over 30 years. Economic \& Labour Market Review, Vol 3, No 2, pp. 30-36.

ONS (2008) Work and Family: Two-thirds of mums are in employment. Available at: http://www.statistics.gov.uk/cci/nugget.asp?id=1655

ONS (2009) Women in the labour market: Impact of downturn. Available at: http://www.statistics.gov.uk/cci/nugget.asp?id=2145

ONS (2010) Work and worklessness among households: time series - calendar quarters. Available at:
http://www.statistics.gov.uk/statbase/Product.asp?vInk=14977

## Chapter 12

## INCOME AND POVERTY

Sosthenes C. Ketende, Heather Joshi and Robert T. Michael

## Chapter overview

This chapter looks at the income data on the families in MCS4 and is divided into four sections:

- Quintiles of equivalised net family income
- Families below official poverty line
- Subjective and qualitative indicators of poverty
- Dynamics of poverty: MCS3 to MCS4


## Introduction

This chapter reports the income data on the families in MCS4. It does so in a manner that facilitates comparison with the reports on previous MCS sweeps, and estimates the extent of income-based poverty affecting the cohort families. Eliminating child poverty by the year 2020 has been a major objective of government policy for the past decade. This was reaffirmed in the Child Poverty Act of March 2010, which established an independent Child Poverty Commission to advise on strategies to tackle child poverty, now embodied in the independent review of Poverty and Life Chances announced by the Conservative-Liberal Democrat coalition government in June 2010. It also established the setting of new Child Poverty Strategies in all four countries of the UK.

There are several official criteria for measuring child poverty which are used to monitor progress towards its goal. One measure uses a notion of relative income poverty, defined as living in households with net equivalent income below 60 per cent of the national median income of all households. This indicator put 26 per cent of UK children below the poverty line in 1998/99. This fell to around 23 per cent between 2000 and 2002, and reached a low of 21 per cent in 2004/5. It then fluctuated to 22 per cent in 2008/9, the latest estimate available. These figures cover dependent children of all ages and are published in the annual series on Households Below Average Income (HBAI) (DWP, 2010). Between 2001 and 2008 the MCS children, part of the generation for whom the anti-poverty campaign is intended, grew from infancy to age 7. It is therefore of considerable interest to measure relative income poverty among these children, both to compare with the official annual series and to then use the depth of information about them and their families to understand the determinants of poverty status. The behavioural correlates of poverty can also be documented.

The data collected on income in a multi-purpose survey can never be as detailed or accurate as those gathered in a survey with that specific purpose. As noted in the reports on MCS2 and 3, there are several other reasons why estimates of poverty rates from MCS are not completely comparable with those in the government publication (DWP, 2010). In this chapter we adopt the threshold of income poverty used in the Households Below Average Income Statistics (HBAI), as a line representing 60 per cent of median income, nationally. ${ }^{41}$ We construct an income variable which reduces the bias there may be from relying on the mid-point of grouped data when assigning cases to the poverty group, as well as the potential bias from incomplete response to the income question and from sample attrition. These efforts are detailed in the Methods section of the chapter on income and poverty in the report on MCS3 (Ketende and Joshi, 2008).

There are four sections in this chapter. Section 1 describes characteristics of families in different parts of the income distribution, reported by quintiles - equal-sized fifths of the distribution. Section 2 reports the findings on the proportion of families in poverty, using the standard definition of the poverty line described earlier. Section 3 discusses subjective and qualitative indicators of economic deprivation and compares these to the measures of poverty. Section 4 begins the discussion of the transitions into and from poverty between the MCS3 and MCS4 surveys.

## Quintiles of equivalised net family income

The survey asked main respondents to place the net income of themselves and their partner within a set of bands. Responses to the banded income question on net family income have been converted to a continuous variable (Ketende and Joshi, 2008). The spread of income within bands is estimated. Imputations were made for the open-ended classes and for those cases where a response was not given. It was also possible on this exercise to 'fill in' missing data for all but a few cases where the predictor variables used in the imputation were also missing. Twenty cases are thus excluded altogether, 1,559 are included although they gave no income data and 248 had open-ended responses which were imputed. Once we have an estimate for net family income, i.e. the combination of income to the main respondent and the partner, as reported by the main respondent, the variable is adjusted to allow for the different size and composition of families by dividing through by the number of 'equivalent adults' according to the modified OECD scale, where relative to a childless couple, the first adult has a weight of 0.67 , the second adult, or a child over 14 , has a weight of 0.33 , and any child under 14 has a weight of 0.20 . Each observation is then weighted to reflect the original sampling probability and differential sample attrition. The resulting distribution of equivalised income is divided into five equal, ascending groups, or quintiles, as shown in Table 12.1.

[^43]Table 12.1 Quintile distribution of equivalised weekly net family income at MCS4

| Quintiles | Weighted <br> percentages <br> $[95 \% \mathrm{Cl}]$ | Weekly Mean <br> OECD <br> equivalised <br> income <br> $[95 \% \mathrm{Cl}]$ | Weekly Mean <br> income <br> $[95 \% \mathrm{Cl}]$ | Weekly <br> Median <br> OECD <br> equivalised <br> income | Weekly <br> Median <br> income | (Unweighted <br> sample) <br> Weighted <br> sample |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bottom | 20.0 <br> $[18.5-21.5]$ | 135.0 <br> $[133.3-136.6]$ | 188.6 <br> $[185.0-192.3]$ | 142.1 | 188.2 | $(2856)$ |
| Second | 20.0 <br> $[18.9-21.1]$ | 238.6 <br> $[237.2-240.1]$ | 334.2 <br> $[329.8-338.7]$ | 240.0 | 337.6 | $(2868$ |
| Middle | 20.0 <br> $[18.9-21.0]$ | 348.0 <br> $[346.5-349.5]$ | 489.1 <br> $[484.5-493.7]$ | 341.7 | 478.2 | $(2767$ |
| Fourth | 20.0 <br> $[18.9-21.1]$ | 480.4 <br> $[478.1-482.7]$ | 677.4 <br> $[671.6-683.1]$ | 471.2 | 661.7 | $(2767$ |
| Top | 20.0 <br> $[18.2-21.8]$ | 813.9 <br> $[793.6-834.2]$ | 1134.5 <br> $[1102.2-1166.8]$ | 742.5 | 1049 | $(2768$ |
| Total | 100.0 <br> $[100.0-100.0]$ | 403.1 <br> $[389.1-417.1]$ | 564.7 <br> $[544.7-584.7]$ | 335.7 | 472.9 | $(13837)$ |

Notes: $95 \%$ confidence intervals [in brackets], show the range within which the true value is likely to fall, allowing for sampling error. Sample = all productive respondents to MCS4 where there was sufficient information to impute income, regardless of sex of respondent. Percentages weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).

Note, however, that the modified OECD equivalence scale (OECD, 2010) is designed to adjust incomes at the household, rather than the family unit, level. Over 93 per cent of the sample live in households with just one family unit, but for those who live in households with multiple family units the use of this equivalence scale is an approximation. The average equivalised net family income per week is estimated to be $£ 403$ at 2008 prices. Within the five income quintiles, the average rises from $£ 135$ per week in the bottom fifth to $£ 814$ per week in the top fifth. Before equivalisation, these would represent actual take-home income for a family of two parents and two children of between $£ 189$ and $£ 1,139$ (or roughly $£ 10,000$ to $£ 60,000$ in annual terms). The actual unequivalised average incomes in each income group are shown in the third column. The fourth confirms that the weighted sample sizes are identical in each quintile, by design, and the slight excess of unweighted cases in the bottom two groups reflects a relatively small impact of the sample design combined with differential attrition. The spread of incomes between the top and bottom quintile was in virtually the same ratio ( $6: 1$ ) at MCS3, when the overall average net equivalised income had been $£ 368$ per week. This means there was a nominal increase of 10 per cent between 2006 and 2008. Allowing for 6 per cent inflation over the two-year period, there was some real growth in incomes at all five quintiles ( $6 \%$ at the lowest, $4 \%$ at the second, $3 \%$ at the middle, $2 \%$ in the fourth and $4 \%$ in the top quintile). These changes seem quite modest for the sorts of earnings growth one would expect over two years for people in their mid-twenties to early forties, but we note that these are not the rates of growth experienced by the same individuals over time. Earnings growth may to some extent be offset in the average by entry to employment of relatively low earners. Income may also be affected by the loss or arrival of partners.

The next seven tables, 13.2 to 13.8, all have the same structure. They address the question of different subsets of families fit into the overall the distribution of income in the UK in similar positions; for example, Table 12.2 considers England, Wales, Scotland and Northern Ireland. If precisely the same proportion of each UK quintile the poorest 20 per cent, the next poorest 20 per cent, all the way up to the richest 20 per cent - resided in each of the four countries, the entries in Table 12.2 would all be
'20'. The table, however, shows the distribution within each country of the overall UK poorest 20 per cent, next-poorest 20 per cent, etc. England's distribution does not differ much from the overall UK distribution, which is not surprising since England constitutes the greatest part of this distribution. Scotland has a noticeably higher proportion of families in the upper quintiles while Wales has relatively more in the lower quintiles. Northern Ireland exhibits a different pattern -it has dramatically fewer families in the upper two quintiles. This same pattern was observed at MCS3. Northern Ireland was least likely to have families in the top income quintile (12\%), which was significantly below Scotland and England (the confidence limits for Northern Ireland and Wales just overlapped at $15 \%$ ).

Table 12.2 Quintile of equivalised net family income at MCS4 by country of interview per cent [row percentages]

|  | Bottom | Second | Middle | Fourth | Top | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| England | 19.7 | 18.7 | 19.6 | 20.3 | 21.6 | 100.0 |
|  | $(1878)$ | $(1725)$ | $(1699)$ | $(1726)$ | $(1845)$ | $(8873)$ |
| Wales | 22.8 | 21.5 | 20.5 | 18.1 | 17.1 | 100.0 |
|  | $(443)$ | $(424)$ | $(424)$ | $(355)$ | $(325)$ | $(1971)$ |
| Scotland | 17.3 | 19.2 | 20.1 | 22.3 | 21.0 | 100.0 |
|  | $(235)$ | $(271)$ | $(324)$ | $(395)$ | $(393)$ | $(1618)$ |
| Northern Ireland | 20.8 | 27.0 | 21.7 | 18.1 | 12.4 | 100.0 |
|  | $(270)$ | $(358)$ | $(301)$ | $(270)$ | $(176)$ | $(1375)$ |
| Weighted per cent | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 100.0 |
| Unweighted numbers | $(2826)$ | $(2778)$ | $(2748)$ | $(2746)$ | $(2739)$ | $(13837)$ |
| Weighted numbers | 2768 | 2767 | 2766 | 2767 | 2767 | 13836 |
| P value | $<0.001$ |  |  |  |  |  |

Notes: Sample: MCS4 main respondents.
Percentage weighted by weight1 adjusted for attrition to Wave 4 (dovwt1).
Unweighted observed sample in brackets.
Table 12.3 shows the percentage of families from a given country-and-samplestratum that falls into each of the five overall UK income quintiles. Those in each country that were selected from the economically disadvantaged strata are still disproportionately in the poorer quintiles. This table, like the previous one, displays disproportionately more of the poor families in Northern Ireland. The top two quintiles are over-represented in the economically 'advantaged' strata. The one stratum for which one might not expect a mechanical link to the distribution is the minority ethnic wards in England, but they display an even greater degree of economic disadvantage than the other disadvantaged English wards, as was the case when the wards were selected. We note, however, that these strata were defined in 1998/9, before the MCS started, and the present income figures reflect the families' circumstances in 2008, so the fact that these patterns are still so strong suggests there was very little overall redistribution of family income over that decade. Families sampled in the nondisadvantaged strata have only around a one-in-ten chance of being observed in the bottom fifth income class at MCS4, whereas the families sampled in ethnic minority wards of England had a just over four-in-ten (42\%) chance and those sampled in the other disadvantaged wards around a one-in-four chance. The respondents in the disadvantaged wards of Northern Ireland and in wards of England with high minority ethnic populations had the lowest chance of top-quintile income ( $5 \%$ and $7 \%$ respectively). Of families in 'advantaged' wards, England had the highest proportion
in the top income quintile (32\%), followed by Scotland (31\%), Wales (28\%) and Northern Ireland (22\%).

Table 12.3 Quintile of equivalised income by sampling stratum [row percentages]

|  | Bottom | Second | Middle | Fourth | Top | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| England - non- disadvantaged | 8.9 | 13.0 | 18.9 | 26.7 | 32.4 | 100.0 |
|  | $(337)$ | $(493)$ | $(717)$ | $(1012)$ | $(1228)$ | $(3787)$ |
|  | 25.1 | 24.1 | 22.9 | 16.0 | 11.9 | 100.0 |
|  | $(846)$ | $(812)$ | $(771)$ | $(541)$ | $(402)$ | $(3372)$ |
| Wales - non- disadvantaged | 42.4 | 28.3 | 13.8 | 8.6 | 6.9 | 100.0 |
|  | $(706)$ | $(472)$ | $(230)$ | $(143)$ | $(115)$ | $(1666)$ |
| Wales - disadvantaged | 12.4 | 15.4 | 19.1 | 25.1 | 28.0 | 100.0 |
|  | $(77)$ | $(96)$ | $(119)$ | $(156)$ | $(174)$ | $(622)$ |
| Scotland non-disadvantaged | 27.7 | 24.7 | 22.6 | 13.4 | 11.5 | 100.0 |
|  | $(387)$ | $(345)$ | $(315)$ | $(187)$ | $(161)$ | $(1395)$ |
| Scotland - disadvantaged | 8.0 | 14.0 | 17.5 | 29.0 | 31.5 | 100.0 |
|  | $(66)$ | $(16)$ | $145)$ | $(240)$ | $(261)$ | $(828)$ |
|  | 20.6 | 20.6 | 24.0 | 19.6 | 15.2 | 100.0 |
| Northern Ireland - non-disadvantaged | $(164)$ | $(164)$ | $(191)$ | $(156)$ | $(121)$ | $(796)$ |
|  | 9.9 | 19.5 | 23.5 | 25.3 | 21.8 | 100.0 |
| Northern Ireland - disadvantaged | $(53)$ | $(104)$ | $(125)$ | $(135)$ | $(116)$ | $(533)$ |
| Total | 26.3 | 31.0 | 22.0 | 15.4 | 5.4 | 100.0 |
|  | $(220)$ | $(260)$ | $(184)$ | $(129)$ | $(45)$ | $(838)$ |
| P value | 20.6 | 20.7 | 20.2 | 19.5 | 19.0 | 100.0 |

Notes: Sample: MCS4 main respondents.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).
Unweighted observed sample in brackets.
In Table 12.4 one sees a consistent pattern of improvement in family income as the age of the mother rises. For those families with a mother younger than 26 (who would have been a teenager at the cohort child's birth) nearly half - 47 per cent - are in the lowest quintile of the UK income distribution and only 2 per cent are in the highest quintile. By contrast, for the families in which the mother is over age 40, only 11 per cent are in that lowest quintile while 32 per cent are in the highest quintile.

Table 12.4 Quintile of equivalised net family income at MCS4 by mother's age [row percentages]

| Mothers' age at sweep 4 | Bottom | Second | Middle | Fourth | Top | Total |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<26$ | 47.2 | 27.6 | 18.9 | 4.3 | 2.0 | 100.0 |  |
|  | $(243)$ | $(144)$ | $(88)$ | $(22)$ | $(10)$ | $(507)$ |  |
| $26-30$ | 34.3 | 30.1 | 20.4 | 10.7 | 4.5 | 100.0 |  |
|  | $(765)$ | $(685)$ | $(451)$ | $(218)$ | $(94)$ | $(2213)$ |  |
| $31-35$ | 20.1 | 22.9 | 22.6 | 19.1 | 15.3 | 100.0 |  |
|  | $(687)$ | $(762)$ | $(721)$ | $(558)$ | $(461)$ | $(3189)$ |  |
| $36-40$ | 13.5 | 15.0 | 19.9 | 24.7 | 26.9 | 100.0 |  |
|  | $(632)$ | $(705)$ | $(908)$ | $(1044)$ | $(1070)$ | $(4359)$ |  |
| 41 and above | 11.1 | 13.7 | 17.8 | 25.2 | 32.2 | 100.0 |  |
|  | $(389)$ | $(473)$ | $(564)$ | $(798)$ | $(945)$ | $(3169)$ |  |
| Weighted per cent | 19.7 | 19.9 | 20.1 | 20.1 | 20.2 | 100.0 |  |
| Unweighted numbers | $(2716)$ | $(2769)$ | $(2732)$ | $(2640)$ | $(2580)$ | $(13437)$ |  |
| Weighted numbers | 2642 | 2667 | 2702 | 2700 | 2718 | 13430 |  |
| P value | $<0.001$ |  |  |  |  |  |  |

Notes: Sample: MCS4 main respondents.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).
Unweighted observed sample in brackets.

In Table 12.5 we see the key driving force underlying the distribution of family income, the labour-market status of the parents. In families in which both are employed ( 5,801 of almost 14,000 families) very few are in the lowest quintile of the income distribution while nearly two-thirds (63\%) are in the top two quintiles. In the two-adult families with neither employed the position is reversed with 94 per cent in the lowest two quintiles and a tiny percentage - 2 per cent - in the top two quintiles. The only families in even more impoverished circumstances are those headed by a lone parent who is not employed. Ninety-five per cent of them are in the lowest two quintiles and only 2 per cent are in the upper two quintiles. This pattern reflects the one observed from the age 5 survey. For completeness, Table 12.5 shows those two-parent cases where the earning status of the partner is not known. The incomes reported or imputed for these families are fairly evenly spread across the distribution.

| $\begin{array}{l}\text { Table } 12.5 \text { Quintile of equivalised net family income at MCS4 by parents' labour market } \\ \text { status [row percentages] }\end{array}$ |
| :--- | :--- |
| Cres |


| Combined labour-market <br> status | Bottom | Second | Middle | Fourth | Top | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Both in work | 2.6 | 10.5 | 23.5 | 31.0 | 32.4 | 100.0 |
|  | $(179)$ | $(675)$ | $(1444)$ | $(1773)$ | $(1837)$ | $(5908)$ |
| Main in work, partner not | 27.7 | 38.7 | 15.6 | 11.5 | 6.6 | 100.0 |
|  | $(95)$ | $(125)$ | $(56)$ | $(32)$ | $(15)$ | $(323)$ |
| Partner in work, main not | 13.9 | 26.6 | 23.6 | 16.3 | 19.7 | 100.0 |
|  | $(386)$ | $(687)$ | $(521)$ | $(371)$ | $(396)$ | $(2361)$ |
| Both not in work | 65.8 | 27.7 | 4.2 | 2.1 | 0.3 | 100.0 |
|  | $(405)$ | $(144)$ | $(18)$ | $(10)$ | $(2)$ | $(579)$ |
| Lone parent in work | 20.8 | 35.2 | 24.3 | 13.9 | 5.9 | 100.0 |
|  | $(309)$ | $(495)$ | $(343)$ | $(195)$ | $(79)$ | $(1421)$ |
| Lone parent not in work | 73.5 | 21.4 | 3.1 | 1.2 | 0.8 | 100.0 |
|  | $(1121)$ | $(300)$ | $(42)$ | $(19)$ | $(8)$ | $(1490)$ |
| Partner non-response | 19.4 | 22.8 | 21.7 | 18.5 | 17.6 | 100.0 |
|  | $(361)$ | $(436)$ | $(373)$ | $(299)$ | $(286)$ | $(1755)$ |
| Weighted per cent | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 100.0 |
| Unweighted numbers | $(2856)$ | $(2862)$ | $(2797)$ | $(2699)$ | $(2623)$ | $(13837)$ |
| Weighted numbers | 2768 | 2767 | 2767 | 2768 | 2766 | 13835 |
| P value |  |  |  |  |  |  |
| Nomer |  |  |  |  |  |  |

Notes: Sample: MCS4 main respondents and partners. Lone fathers are also included.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).
Unweighted observed sample in brackets.
The quintiles of equivalised income are tabulated against the highest educational qualification by MCS4 of each parent in turn in Table 12.6. Education levels are associated with income through affecting the chances of being employed (see Chapter 11) and earning power when employed. As one would expect, the level of education, or the labour-market skills as reflected by these qualifications, is dramatically influential in the location of the family in the distribution of income around half ( $53 \%$ of mothers) of those without any qualifications, academic or vocational, are in the lowest quintile, as are 32 per cent of fathers. In the top income group we find over half of the mothers and fathers with postgraduate qualifications, 40 and 36 per cent respectively of the fathers and mothers with first degree-level qualifications and only 5 per cent and 1 per cent of fathers and mothers with no formal qualifications, either academic or vocational. The two graduate groups of parents are correspondingly absent from the lowest quintile (around 3 per cent of
graduate fathers and around 6 per cent of graduate mothers). The pattern has changed little since sweep 3.

Table 12.6 Quintile of equivalised net family income at MCS4 by parents' education [row percentages]

|  |  | Bottom | Second | Middle | Fourth | Top | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NVQ level 5 | $\begin{gathered} \hline 5.1 \\ (39) \end{gathered}$ | $\begin{aligned} & 4.1 \\ & (52) \end{aligned}$ | $\begin{gathered} 9.0 \\ (95) \end{gathered}$ | $\begin{aligned} & 28.7 \\ & (274) \\ & \hline \end{aligned}$ | $\begin{aligned} & 53.1 \\ & (445) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (905) \\ & \hline \end{aligned}$ |
|  | NVQ level 4 | $\begin{gathered} 6.5 \\ (295) \\ \hline \end{gathered}$ | $\begin{aligned} & 11.0 \\ & (489) \end{aligned}$ | $\begin{array}{r} 17.0 \\ (758) \\ \hline \end{array}$ | $\begin{gathered} 29.7 \\ (1199) \\ \hline \end{gathered}$ | $\begin{gathered} 35.7 \\ (1375) \\ \hline \end{gathered}$ | $\begin{array}{r} 100.0 \\ (4116) \end{array}$ |
|  | NVQ level 3 | $\begin{aligned} & 13.8 \\ & \hline 13.8 \\ & (314) \end{aligned}$ | $\begin{aligned} & 21.0 \\ & (450) \\ & \hline \end{aligned}$ | $\begin{gathered} 26.2 \\ (566) \\ \hline \end{gathered}$ | $\begin{aligned} & 21.6 \\ & (413) \\ & \hline \end{aligned}$ | $\begin{aligned} & 17.4 \\ & (315) \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (2058) \end{aligned}$ |
|  | NVQ level 2 | $\begin{aligned} & 20.9 \\ & (790) \end{aligned}$ | $\begin{aligned} & 25.5 \\ & (954) \end{aligned}$ | $\begin{aligned} & 24.9 \\ & (882) \end{aligned}$ | $\begin{aligned} & 17.6 \\ & (576) \end{aligned}$ | $\begin{aligned} & 11.1 \\ & (355) \end{aligned}$ | $\begin{gathered} 100.0 \\ (3557) \end{gathered}$ |
|  | NVQ level 1 | $\begin{array}{r} 34.1 \\ (325) \\ \hline \end{array}$ | $\begin{aligned} & 28.2 \\ & (277) \\ & \hline \end{aligned}$ | $\begin{array}{r} 21.5 \\ (187) \\ \hline \end{array}$ | $\begin{aligned} & 10.0 \\ & (91) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 6.2 \\ & (49) \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (929) \\ & \hline \end{aligned}$ |
|  | Overseas or other qual. | $\begin{aligned} & 35.0 \\ & (141) \\ & \hline \end{aligned}$ | $\begin{aligned} & 30.6 \\ & (123) \end{aligned}$ | $\begin{aligned} & 20.5 \\ & (68) \end{aligned}$ | $\begin{aligned} & 6.8 \\ & (22) \\ & \hline \end{aligned}$ | $\begin{aligned} & 7.1 \\ & (18) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (372) \\ & \hline \end{aligned}$ |
|  | None of these | $\begin{aligned} & 52.9 \\ & (812) \end{aligned}$ | $\begin{aligned} & 27.7 \\ & (424) \end{aligned}$ | $\begin{array}{r} 13.5 \\ (176) \\ \hline \end{array}$ | $\begin{array}{r} 4.4 \\ (63) \\ \hline \end{array}$ | $\begin{aligned} & 1.4 \\ & (23) \end{aligned}$ | $\begin{array}{r} 100.0 \\ (1498) \\ \hline \end{array}$ |
|  | Weighted per cent | 19.7 | 19.9 | 20.1 | 20.1 | 20.2 | 100.0 |
|  | Unweighted numbers | (2716) | (2769) | (2732) | (2638) | (2580) | (13435) |
|  | Weighted numbers | 2640 | 2667 | 2702 | 2698 | 2718 | 13426 |
| P value |  | $<0.001$ |  |  |  |  |  |
|  | NVQ level 5 | $\begin{aligned} & 2.7 \\ & (30) \end{aligned}$ | $\begin{aligned} & \hline 5.5 \\ & (68) \end{aligned}$ | $\begin{aligned} & \hline 12.2 \\ & (140) \end{aligned}$ | $\begin{aligned} & 22.9 \\ & (257) \end{aligned}$ | $\begin{aligned} & \hline 56.7 \\ & (565) \end{aligned}$ | $\begin{gathered} 100.0 \\ (1060) \end{gathered}$ |
|  | NVQ level 4 | $\begin{gathered} 3.8 \\ (134) \\ \hline \end{gathered}$ | $\begin{gathered} 9.9 \\ (307) \\ \hline \end{gathered}$ | $\begin{aligned} & 17.0 \\ & (535) \\ & \hline \end{aligned}$ | $\begin{aligned} & 29.5 \\ & (876) \\ & \hline \end{aligned}$ | $\begin{gathered} 39.7 \\ (1103) \\ \hline \end{gathered}$ | $\begin{array}{r} 100.0 \\ (2955) \\ \hline \end{array}$ |
|  | NVQ level 3 | $\begin{gathered} \hline 8.9 \\ (149) \end{gathered}$ | $\begin{aligned} & 16.9 \\ & (279) \end{aligned}$ | $\begin{gathered} 25.4 \\ (390) \end{gathered}$ | $\begin{aligned} & 29.0 \\ & (416) \end{aligned}$ | $\begin{aligned} & 19.8 \\ & (283) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (1517) \end{aligned}$ |
|  | NVQ level 2 | $\begin{array}{r} 10.5 \\ (289) \\ \hline \end{array}$ | $\begin{aligned} & 21.1 \\ & (581) \\ & \hline \end{aligned}$ | $\begin{array}{r} 29.3 \\ (740) \\ \hline \end{array}$ | $\begin{array}{r} 23.1 \\ (547) \\ \hline \end{array}$ | $\begin{array}{r} 15.9 \\ (377) \\ \hline \end{array}$ | $\begin{array}{r} 100.0 \\ (2534) \\ \hline \end{array}$ |
|  | NVQ level 1 | $\begin{aligned} & 17.9 \\ & (111) \\ & \hline \end{aligned}$ | $\begin{aligned} & 27.7 \\ & (177) \\ & \hline \end{aligned}$ | $\begin{array}{r} 28.9 \\ (170) \\ \hline \end{array}$ | $\begin{aligned} & 17.1 \\ & (96) \\ & \hline \end{aligned}$ | $\begin{array}{r} 8.4 \\ (46) \\ \hline \end{array}$ | $\begin{aligned} & 100.0 \\ & (600) \\ & \hline \end{aligned}$ |
|  | Overseas or other qual. | $\begin{aligned} & 23.9 \\ & (111) \end{aligned}$ | $\begin{aligned} & 27.3 \\ & (119) \end{aligned}$ | $\begin{aligned} & 21.5 \\ & (75) \\ & \hline \end{aligned}$ | $\begin{aligned} & 16.9 \\ & (57) \end{aligned}$ | $\begin{aligned} & 10.4 \\ & (30) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (392) \end{aligned}$ |
|  | None of these | $\begin{array}{r} 32.2 \\ (384) \\ \hline \end{array}$ | $\begin{array}{r} 29.6 \\ (334) \\ \hline \end{array}$ | $\begin{array}{r} 20.5 \\ (218) \\ \hline \end{array}$ | $\begin{array}{r} 13.0 \\ (125) \\ \hline \end{array}$ | $\begin{array}{r} 4.7 \\ (47) \\ \hline \end{array}$ | $\begin{array}{r} 100.0 \\ (1108) \\ \hline \end{array}$ |
|  | Weighted per cent | 10.7 | 17.1 | 22.2 | 24.2 | 25.8 | 100.0 |
|  | Unweighted numbers | (1208) | (1865) | (2268) | (2374) | (2451) | (10166) |
|  | Weighted numbers | 1060 | 1698 | 2201 | 2401 | 2560 | 9919 |
| P value |  |  |  |  |  |  |  |

Sample: MCS4 mothers who are main respondents and partners who are fathers' of the cohort member.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).
Unweighted observed sample in brackets.
Table 12.7 shows the income distribution by some of the sources of state benefit income received by MCS families. All families in the study, by virtue of the way they were recruited, are recipients of Child Benefit, so this benefit is not shown in the table. Virtually all (98\%) reported receiving it. The other benefits, in some sense conditional on low income or incapacity to earn, were received by a smaller number of families, sometimes in combination, and in slightly smaller proportion than at MCS3. For example, Income Support, for those not expected to earn, was reported by 4 per cent of families, compared with 5 per cent at MCS3. This could reflect the net increase in employment, particularly of mothers over the two-year period (see Chapter 11). Receipt of Tax Credits, which provide in-work income supplementation, was reported in all income quintiles, but particularly the middle three. High-income families might not qualify for Working Tax Credits, nor would families with no earner.

The latter would often be eligible for Income Support. Ninety-one per cent of Income Support recipients were in the bottom two net income groups. There is a similar pattern for Housing Benefit, an income-tested subsidy of housing expenditure, often combined with other benefits ( 89 per cent in the bottom two income groups).

Table 12.7 Selected sources of income by quintile of equivalised net family income at MCS4 [row percentages]

|  | Bottom | Second | Middle | Fourth | Top | Total | Weighted <br> $\mathbf{N}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Child Tax Credit | 16.0 | 24.0 | 26.3 | 23.1 | 10.5 | 100.0 | 5804 |
|  | $(1025)$ | $(1521)$ | $(1551)$ | $(1292)$ | $(583)$ | $(5972)$ |  |
| Working Tax Credit | 18.4 | 34.3 | 24.9 | 16.3 | 6.1 | 100.0 | 2288 |
|  | $(509)$ | $(881)$ | $(560)$ | $(366)$ | $(151)$ | $(2467)$ |  |
| Income Support | 64.0 | 26.9 | 6.4 | 2.1 | 0.5 | 100.0 | 552 |
|  | $(366)$ | $(150)$ | $(27)$ | $(9)$ | $(2)$ | $(554)$ |  |
| Housing Benefit | 58.6 | 30.8 | 7.0 | 3.2 | 0.4 | 100.0 | 837 |
|  | $(497)$ | $(246)$ | $(48)$ | $(18)$ | $(3)$ | $(812)$ |  |
| Disability Living | 22.3 | 29.9 | 23.4 | 14.8 | 9.6 | 100.0 | 719 |
| Allowance or | $(174)$ | $(219)$ | $(161)$ | $(108)$ | $(65)$ | $(727)$ |  |
| Attendance Allowance |  |  |  |  |  |  | 280 |
| Incapacity Benefit | 36.4 | 35.5 | 19.8 | 5.7 | 2.5 | 100.0 | $(6)$ |
|  | $(112)$ | $(102)$ | $(64)$ | $(21)$ | $(305)$ |  |  |
| None of these | 23.4 | 16.4 | 14.0 | 16.8 | 29.3 | 100.0 | 6795 |
|  | $(1528)$ | $(1041)$ | $(952)$ | $(117)$ | $(1878)$ | $(6516)$ |  |
| Obs | 2839 | 2838 | 2770 | 2682 | 2620 | 13749 |  |
| Weighted sample | 2749 | 2748 | 2745 | 2755 | 2762 | 13759 | 13759 |
|  |  |  |  |  |  |  |  |

Notes: Sample: MCS4 main respondents. Unweighted observed sample in brackets.
Percentages weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).
Relatively few of the 5 per cent of families which reported receiving Disability Living Allowance or Attendance Allowance were in the top 40 per cent income group (25\%) and 52 per cent were in the bottom 40 per cent. Seventy-two per cent of the smaller group claiming Incapacity Benefit had incomes in the bottom 40 per cent. This illustrates the association of poor health as well as poor education with low income. The last row attempts to account for the overlap of different benefits by counting those families who receive none of them. It is not surprising that the top income group has the largest number of families not receiving any of these state benefits, but it is surprising that the bottom income group are the next least likely to report any of them. This could reflect failure to report some sources of income, and possibly the total level of income, or it could reflect the limited scope of benefits included in the table or failure to claim benefits for which they are entitled and merits further investigation.

## Families below official poverty line

The level of income that defines whether an MCS family is in poverty approximates the threshold level most commonly used in the official 2007-08 HBAI tables measuring poverty - a level of £236 net income per week for a childless couple and its equivalent level for families with children. That level corresponds to 60 per cent of the national median equivalised household income. Based on that income level, or its
equivalent for families with children, 29.6 per cent of the MCS4 families were in poverty, see Table 12.8.

| Table 12.8 Prevalence of income poverty at MCS4, UK [row per cent] |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Above 60\% median | Below 60\% median | Total |
| UK | 70.4 | 29.6 | 100.0 |
| Unweighted sample | $(9675)$ | $(4162)$ | $(13837)$ |
| Weighted sample | 9742 | 4094 | 13836 |

Notes: $\quad$ Sample: MCS4 main respondents as in Table 12.1.
Percentage weighted by weight1 adjusted for attrition to Wave 4 (dovwt1).
Unweighted observed sample in brackets.
Since the MCS is a nationally representative sample, that poverty level can be taken as an estimate of the extent of poverty in UK families who had a child close to age 7 during the time period of this survey - the 13 months beginning January 2008. However, this estimate of the poverty rate for these families is substantially above the official HBAI estimate, for the period April 2008 to March 2009: 22 per cent for children of all ages, 24 per cent for families where the youngest was under 5 , and 21 per cent for families where the youngest was aged 5 to10. A similarly higher poverty rate from the MCS surveys has been consistently noted at previous sweeps. The MCS and the Family Resource Survey (FRS) on which the HBAI estimates are based, are not comparable for several reasons. The FRS is a survey dedicated to the collection of very detailed economic data. It reports income on a household basis rather than collecting income band from only up to two adults/parents in the family unit. Moreover, the FRS reports on a somewhat different time period and collects supplementary income data, for example on rent paid directly to a landlord. In unpublished FRS data for families with a 7 -year-old child, the poverty rate was 20 per cent in 2008-9, and 22 per cent in 2007-8. In the comparisons which follow we use the published HBAI figures for all children for the period 2008-9, as 83 per cent of the MCS observations came from April 2008 onwards.

The MCS4 estimate of family poverty for these families is quite consistent with the estimates from earlier rounds of this survey. These showed that when the children were 9 months old (2001-2) the MCS-estimated rate of poverty was 29.4 per cent; when they were 3 years old (2003-4) the MCS2 estimate was 28.9 per cent; when they were age 5 (2006) it was 30.7 per cent; and, most recently, in MCS4 when they were age 7 (2008), the poverty rate is 29.6 per cent. All the last three estimates are corrected for non-response and are based on imputations of a continuous variable based on responses to the question where informants reported their income as falling into one of a set of bands (as mentioned in Section 1). All are also based on the maximum sample size with available data. All these estimates are within each other's sampling error, so we could say that, on our best estimates to date, the actual incidence of income poverty for the cohort families has not changed appreciably over the seven years of these four surveys. Given the flat time trend in the national estimate of childhood poverty reported above, it is not surprising that the MCS also finds no discernible trend in childhood poverty for these children as well. Table 12.9 compares the estimates of poverty rates for families in the MCS4 using two alternative ways of measuring family income. The 'imputed' values are created through interval regression (Ketende and Joshi, 2008), the method used in all the
previous tables in this chapter, while the 'band midpoint' method approximates the income by using the midpoint of each income category offered in the questionnaire. The table indicates that the imputed method puts an additional 2.3 per cent of all these families below the poverty line. While we consider the 'imputed' method superior, as it adds variation to the dataset and makes it possible to use otherwise missing cases, neither method necessarily yields an accurate measure. This should remind readers of a source of uncertainty in our calculation of poverty beyond sampling error in these data but does not suggest that the use of midpoints necessarily overstates the extent of poverty.

Table 12.9 UK poverty estimates at MCS4: Band midpoint versus imputed continuous income

|  | MCS4 band midpoint |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | MCS4 imputed | Above 60\% median | Below 60\% median | Total |
| Weighted cell percentages and (unweighted sample numbers) | Above 60\% median | $\begin{gathered} 71.0 \\ (8625) \\ \hline \end{gathered}$ | $\begin{aligned} & 0.0 \\ & (0) \end{aligned}$ | $\begin{gathered} 71.0 \\ (8625) \\ \hline \end{gathered}$ |
|  | Below 60\% median | $\begin{gathered} 2.3 \\ (307) \\ \hline \end{gathered}$ | $\begin{gathered} 26.7 \\ (3346) \\ \hline \end{gathered}$ | $\begin{gathered} 29.0 \\ (3653) \\ \hline \end{gathered}$ |
|  | Total | 73.3 | 26.7 | 100.0 |
| Weighted row and (column) percentage | Above 60\% median | $\begin{aligned} & 100.0 \\ & (96.8) \end{aligned}$ | $\begin{gathered} 0.0 \\ (0.0) \end{gathered}$ | $\begin{aligned} & 100.0 \\ & (71.0) \end{aligned}$ |
|  | Below 60\% median | $\begin{gathered} 8.1 \\ (3.2) \\ \hline \end{gathered}$ | $\begin{gathered} 91.9 \\ (100.0) \\ \hline \end{gathered}$ | $\begin{array}{r} 100.0 \\ (29.0) \\ \hline \end{array}$ |
|  | Row total per cent | 73.3 | 26.7 | 100.0 |
|  | Column total per cent | (100.0) | (100.0) | (100.0) |
| Unweighted sample |  | (8932) | (3346) | (12278) |
| Weighted sample |  | 9064 | 3298 | 12362 |
| P value |  | <0.001 |  |  |

Notes: Sample: MCS4 main respondents excluding cases with missing data on the banded income variable.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).
The analysis by country in Table 12.10 shows that the prevalence of poverty is highest in Wales and Northern Ireland ( $33 \%$ and $32 \%$ respectively) and lowest in Scotland (26\%). Within English regions, the poverty rate is highest in the North East ( $40 \%$ ), London ( $36 \%$ ) and the two other northern regions (35\%). Poverty is well below average in the South East outside London (20\%), in the South West (22\%) and in the East of England (24\%). This geographical pattern is similar to that reported at sweep 3, except that Northern Ireland had a higher poverty rate than Wales, and the poverty rate in London was below all the northern English regions, and regional differences generally were slightly lower. The HBAI estimates for all child-age poverty in 2008-9 also show a similar pattern between UK countries. Around HBAl's lower average of 22 per cent, the highest child poverty rate was in Wales ( $26 \%$ and the lowest in Scotland (21\%). Within England, the HBAI figures, like MCS showed generally higher child poverty rates in Northern and Midland regions, although the North East (28\%) came second to West Midlands (29\%). The HBAI estimates show that Inner London had a child poverty rate above the national average (27\%) but that Outer London's rate ( $20 \%$ ) was below the national average but above that of the South West and South East.

|  | Above 60\% median | Below 60\% median | Total |
| :---: | :---: | :---: | :---: |
| England | $\begin{gathered} 71.0 \\ (6134) \\ \hline \end{gathered}$ | $\begin{gathered} 29.0 \\ (2739) \\ \hline \end{gathered}$ | $\begin{array}{r} 100.0 \\ (8873) \\ \hline \end{array}$ |
| Wales | $\begin{gathered} 66.9 \\ (1329) \end{gathered}$ | $\begin{aligned} & 33.1 \\ & (642) \\ & \hline \end{aligned}$ | $\begin{array}{r} 100.0 \\ (1971) \end{array}$ |
| Scotland | $\begin{gathered} 73.7 \\ (1267) \\ \hline \end{gathered}$ | $\begin{array}{r} 26.3 \\ (351) \\ \hline \end{array}$ | $\begin{array}{r} 100.0 \\ (1618) \\ \hline \end{array}$ |
| Northern Ireland | $\begin{aligned} & 67.6 \\ & (945) \end{aligned}$ | $\begin{aligned} & 32.4 \\ & (430) \end{aligned}$ | $\begin{array}{r} 100.0 \\ (1375) \end{array}$ |
| Regions of England |  |  |  |
| North East | $\begin{aligned} & 60.5 \\ & (251) \end{aligned}$ | $\begin{array}{r} 39.5 \\ (151) \\ \hline \end{array}$ | $\begin{aligned} & 100.0 \\ & (402) \\ & \hline \end{aligned}$ |
| North West | $\begin{array}{r} 64.9 \\ (727) \\ \hline \end{array}$ | $\begin{array}{r} 35.1 \\ (404) \\ \hline \end{array}$ | $\begin{array}{r} 100.0 \\ (1131) \end{array}$ |
| Yorkshire and the Humber | $\begin{aligned} & 64.8 \\ & (617) \end{aligned}$ | $\begin{aligned} & 35.2 \\ & (399) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (1016) \end{aligned}$ |
| East Midlands | $\begin{array}{r} 74.1 \\ (549) \\ \hline \end{array}$ | $\begin{aligned} & 25.9 \\ & (192) \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (741) \end{aligned}$ |
| West Midlands | $\begin{aligned} & 67.1 \\ & (618) \end{aligned}$ | $\begin{aligned} & 32.9 \\ & (402) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (1020) \end{aligned}$ |
| East of England | $\begin{aligned} & 76.4 \\ & (741) \\ & \hline \end{aligned}$ | $\begin{aligned} & 23.6 \\ & (257) \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (998) \end{aligned}$ |
| London | $\begin{array}{r} 64.0 \\ (910) \\ \hline \end{array}$ | $\begin{array}{r} 36.0 \\ (503) \\ \hline \end{array}$ | $\begin{array}{r} 100.0 \\ (1413) \\ \hline \end{array}$ |
| South East | $\begin{gathered} 80.3 \\ (1111) \end{gathered}$ | $\begin{aligned} & 19.7 \\ & (268) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (1379) \end{aligned}$ |
| South West | $\begin{gathered} 78.0 \\ (609) \\ \hline \end{gathered}$ | $\begin{aligned} & 22.0 \\ & (163) \\ & \hline \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (772) \\ & \hline \end{aligned}$ |
| Total per cent UK | 70.4 | 29.6 | 100.0 |
| Unweighted sample | (9674) | (4162) | (13836) |
| Weighted sample | 9741 | 4094 | 13835 |

Notes: $\quad$ Sample: MCS4 main respondents, as in Table 12.1
Percentage weighted by weight1 adjusted for attrition to Wave 4 (dovwt1).
Unweighted observed sample in brackets.
The prevalence of income poverty by family size and partnership status is shown in Table 12.11. As at MCS3 and in HBAI, families with large numbers of children (for whom the equivalence scale recognised more need) are more likely to be below the poverty line. Among those with four or more children, according to MCS4, 59 per cent had net equivalised income below the poverty line. The families least likely to be below the line were those with two children, for whom the poverty rate was 24 per cent. In other words, poor families are likely to have either many children or only one. Note from Table 3.13 in Chapter 3 that families with one child are also more likely to have only one parent, the high poverty rates of one-child families are likely to reflect the high poverty risk of lone parents, shown in the bottom part of Table 12.11. There is also a slightly higher child poverty rate in HBAI statistics for families with one compared to two children. Both sources show markedly higher rates for families with three or more children.

Table 12.11: Incidence of income poverty by number of children, number of parents and the marital status of couples

|  |  | Above 60\% median | Below 60\% median | Total |
| :---: | :---: | :---: | :---: | :---: |
| Number of children under 14 years old | One child | $\begin{gathered} 71.9 \\ (2402) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 28.1 \\ & (932) \\ & \hline \end{aligned}$ | $\begin{gathered} 100.0 \\ (3334) \end{gathered}$ |
|  | Two children | $\begin{gathered} 76.5 \\ (5243) \end{gathered}$ | $\begin{gathered} 23.5 \\ (1630) \end{gathered}$ | $\begin{aligned} & 100.0 \\ & (6873) \end{aligned}$ |
|  | Three children | $\begin{gathered} \hline 64.0 \\ (1679) \\ \hline \end{gathered}$ | $\begin{gathered} 36.0 \\ (1055) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 100.0 \\ & (2734) \end{aligned}$ |
|  | Four or more children | $\begin{aligned} & 41.4 \\ & (351) \end{aligned}$ | $\begin{aligned} & 58.6 \\ & (545) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (896) \end{aligned}$ |
| Total per cent |  | 70.8 | 29.2 | 100.0 |
| Unweighted sample |  | (9675) | (4162) | (13837) |
| Weighted sample |  | 9796 | 4039 | 13835 |
| Partnership status at MCS4 | Married | $\begin{gathered} 84.5 \\ (6695) \\ \hline \end{gathered}$ | $\begin{gathered} 15.5 \\ (1497) \\ \hline \end{gathered}$ | $\begin{aligned} & 100.0 \\ & (8192) \\ & \hline \end{aligned}$ |
|  | Cohabiting | $\begin{gathered} 70.5 \\ (1890) \end{gathered}$ | $\begin{aligned} & 29.5 \\ & (814) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (2704) \end{aligned}$ |
|  | Lone parent | $\begin{gathered} 37.2 \\ (1067) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 62.8 \\ (1844) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 100.0 \\ (2911) \\ \hline \end{gathered}$ |
| Total per cent |  | 70.8 | 29.2 | 100.0 |
| Unweighted sample |  | (9652) | (4155) | (13807) |
| Weighted sample |  | 9766 | 4032 | 13798 |

Notes: Sample: MCS4 main respondents.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2). Unweighted observed sample in brackets.

Families in which only one parent resides with the child are much more likely to be in poverty ( $63 \%$ ) compared to married couples ( $16 \%$ ) or cohabiting couples ( $30 \%$ ). The lone-parent figure is lower than the estimate at MCS3 - 70 per cent - but still exceeds the HBAI rate of poverty for lone parents with children of all ages (34\%). The presence of other adults in some lone parents' households may help to explain this discrepancy (their income would be counted in HBAI but not MCS), as could under-reporting of income sources (such as rent paid direct) in MCS. Poverty rates among couples are lower and closer to HBAI, where the rate for all couples with children is 18 per cent. The much lower rate of poverty among married couples probably reflects a number of differences, such as age and education, between them and cohabiting couples, rather than any income-enhancing properties of marriage itself.

The sample design of the MCS purposely over-represented poor families by selecting areas with high child poverty rates (that is, by sampling heavily in 'disadvantaged' wards, although these results are re-weighted to represent proportions in the population at large). To what extent did that strategy result in pinpointing families who would still be classified as poor when the child was aged 7 ? Table 12.12 shows that poor families made up 42 per cent of those originally sampled in disadvantaged wards. Nevertheless, the majority of families from disadvantaged wards had income above the poverty threshold.

| Table 12.12: Incidence of income below the 'poverty line' by type of ward <br> originally sampled at MCS4 [row per cent] Above 60\% median |  |  |  |
| :--- | :---: | :---: | :---: |
| Non-disadvantaged | 82.8 | Below 60\% median | Total |
|  | $(4929)$ | 17.2 | 100.0 |
|  | 58.3 | $(841)$ | $(5770)$ |
| Disadvantaged | $(4063)$ | 41.7 | 100.0 |
|  | 36.0 | $(2338)$ | $(6401)$ |
| Ethnic | $(683)$ | 64.0 | 100.0 |
|  | 70.8 | $(983)$ | $(1666)$ |
| Total per cent | $(9675)$ | 29.2 | 100.0 |
| Unweighted sample | 9796 | $(4162)$ | $(13837)$ |
| Weighted sample | 4039 | 13835 |  |

Notes: $\quad$ Sample: MCS4 main respondents.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2) Unweighted observed sample in brackets.

Poor families were much more prevalent in the ethnic minority stratum (64\%) where child poverty had also been high originally. Table 12.13 shows that all minority groups except Indians experience higher rates of poverty than whites. The highest rates of poverty were reported by families in the Pakistani and Bangladeshi combined group - 73 per cent. Black families have the next highest rate, at around 51 per cent. For comparison, the HBAI estimate of poverty for all children in 2008-9 was 58 per cent for Pakistani and Bangladeshi groups combined, 34 per cent for black children and 20 per cent for whites. The estimates of poverty rates by ethnic group from the two most recent sweeps of the MCS have not changed significantly.

| Table 12.13: Incidence of income below the 'poverty line' at MCS4 by mothers' ethnicity <br> [row per cent]    <br> Main respondent's ethnic group Above 60\% median Below 60\% <br> median Total <br> White 74.4 25.6  <br> $(3002)$ $(11778)$   <br>  $(8776)$ 49.7 100.0 <br> Mixed 50.3 $(63)$ $(122)$ <br>  $(59)$ 25.4 100.0 <br> Indian 74.6 $(101)$ $(351)$ <br>  $(250)$ 72.9 100.0 <br> Pakistani and Bangladeshi 27.1 $(658)$ $(883)$ <br>  $(225)$ 51.3 100.0 <br> Black or black British 48.7 $(247)$ $(477)$ <br> Other ethnic group (inc. Chinese, $(230)$ 43.8 100.0 <br> other) 56.2 $(88)$ $(220)$ <br> Total per cent $(132)$ 29.2 100.0 <br> Unweighted sample 70.8 $(4159)$ $(13831)$ <br> Weighted sample $(9672)$ 4038 13830 |
| :--- |

Notes: Sample: MCS4 main respondents.
Percentage weighted by weight1 adjusted for attrition to Wave 4 (dovwt1). Unweighted observed sample in brackets.

Table 12.14 lists poverty rates by parents' labour-market and partnership status combined. (Further covariates are reported in the Appendix Table 12.A1.) As with the broader income distribution shown in Table 12.5, dual-earner couples are at low risk of poverty ( $6 \%$ ) and 'workless couples' at high risk ( $87 \%$ ). This compares with a poverty rate for workless couples in HBAI of 64 per cent. The other type of no-earner family is 'lone parents not in work'. In MCS4, their poverty rates reached 88 per cent, considerably above the 54 per cent for 'non-working lone parents' of children of all
ages in HBAI. Employed lone parents in MCS4 have a poverty rate of 35 per cent, also considerably above HBAI ( $12 \%$ for lone parents with full-time jobs and $19 \%$ with part-time employment). As noted above, the cash income of lone parents may be less completely covered by MCS questions. Despite the strong association of poverty with not earning, half of the families below the poverty line had at least one earner. This means that it is not just the absence of jobs but also the low pay of some parents which contributes to child poverty.

The right hand columns of Table 12.14 show a more fine-grained calibration of income level compared to that same poverty threshold. There are five gradations: the lowest, which might, taking the estimates at face value, be called 'deep poverty', shows the families whose income is less than 0.75 of their poverty threshold; the second, 'shallow poverty', shows those whose income is between 0.75 and the poverty threshold, thus just slightly below the poverty line; the third, which might loosely be labelled 'near poverty', shows those whose income is between 1.0 and 1.50 of the poverty threshold (i.e. in a band above the threshold going up to 90 per cent of the median); the fourth includes those with income between 1.50 and 4.0 of the poverty threshold; and the highest group includes those whose income is more than four times higher than the poverty threshold. (As that threshold is £236 net weekly income, this highest group includes the families who enjoy an equivalised family income in excess of $£ 944$ weekly or an annual income exceeding $£ 49,000$ ). By contrast the 'deep poverty' line is below equivalent income of $£ 177$ per week, or $£ 154$ for a single parent with one child or $£ 254$ for a couple with two children. This is close to the line which demarcates the bottom 20 per cent, as 18 per cent of families are below this, equally arbitrary, 'deep poverty' line. The uncertainties about the stability of income, and the accuracy of its measurement in MCS and other surveys, mean that these income thresholds should be treated with caution. Reported income does not always predict other indicators of living standards within low income groups, as shown by Brewer et al. (2009) using other datasets, and in our comparison of income and subjective indicators below.

Over 71 per cent of the children living with a lone parent who is not employed are in 'deep poverty'. The only other group where more than half are in this lowest income band are the two-parent families in which neither is employed ( 61 per cent).

Families with at least one earner who are nevertheless below the poverty line are more likely to be in the 'shallow' poverty income band, and one-earner couples are more likely to be in 'near poverty' range than are dual earners.

The top income group in Table 12.14 corresponds approximately to the top 5 per cent, and, as shown in the Appendix, is most markedly over-represented among parents with postgraduate degrees (19\% of fathers and $16 \%$ of mothers). Northern Ireland has a particularly low proportion (2\%) of families in this top bracket.

The education and age differences also shown in the Appendix confirm the gradients seen in Section 1 of this chapter for the wider income distribution. The young and the least educated parents, who tend to be the same people, have high poverty rates. For example, mothers under age 26 at the MCS4 interview (whose child is age 7)
have a poverty rate of 62 per cent, double the average rate. Housing tenure also shows the expected social polarisation, with tenants of social housing nearly six times as likely to be below the poverty line (64\%) as owner-occupiers with mortgages who have a poverty rate of only 11 per cent. HBAI shows a similar ranking of child poverty rates by housing tenure: 12 per cent for owner-occupiers with a mortgage, and 46 per cent for social tenants. This strengthens the notion that MCS understates the income of social tenants in some way, such as by not including direct payments of rent. Lone parents not in work have by far the worst circumstances of all the categories considered in the Appendix - neither the parent's education, nor mother's age, nor housing tenure nor geography so partitions these families into those in 'deep poverty'. For example, of those who rent from the housing authority the proportion in 'deep poverty' is about 44 per cent.

| Table 12.14: Incidence of income poverty at MCS4 by parent's labour-market and |
| :--- | :--- |
| partnership status |


|  | All Below | Ratio to 'poverty' threshold |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | threshold | $<\mathbf{0 . 7 5}$ | $\mathbf{0 . 7 5 - 1 . 0}$ | $\mathbf{1 - 1 . 5}$ | $\mathbf{1 . 5 - 4}$ | 4 and <br> above |
| Both in work |  |  |  |  |  |  |
|  | 5.7 | 2.3 | 3.4 | 20.5 | 67.7 | 6.1 |
|  | $(380)$ | $(153)$ | $(227)$ | $(1259)$ | $(3937)$ | $(332)$ |
| Main in work, partner not | 46.0 | 25.2 | 20.8 | 31.6 | 20.7 | 1.7 |
|  | $(161)$ | $(85)$ | $(76)$ | $(98)$ | $(61)$ | $(3)$ |
| Partner in work, main not | 24.7 | 12.1 | 12.7 | 29.9 | 38.4 | 6.9 |
|  | $(673)$ | $(331)$ | $(342)$ | $(727)$ | $(827)$ | $(134)$ |
| Both not in work | 86.6 | 61.3 | 25.3 | 9.9 | 3.5 | 0.0 |
|  | $(516)$ | $(379)$ | $(137)$ | $(47)$ | $(16)$ | $(0)$ |
| Lone parent in work | 35.3 | 16.5 | 18.7 | 37.6 | 26.3 | 0.9 |
|  | $(511)$ | $(251)$ | $(260)$ | $(536)$ | $(362)$ | $(12)$ |
| Lone parent not in work | 88.3 | 71.2 | 17.1 | 9.1 | 2.3 | 0.3 |
|  | $1333)$ | $(1084)$ | $(249$ | $(122)$ | $(32)$ | $(3)$ |
| Partner non-response | 31.5 | 17.3 | 14.2 | 24.2 | 39.9 | 4.4 |
|  | $(588)$ | $(326)$ | $(262)$ | $(447)$ | $(654)$ | $(66)$ |
| Total per cent | 29.2 | 18.3 | 10.9 | 22.9 | 43.5 | 4.4 |
| Unweighted sample | $(4162)$ | $(2609)$ | $(1553)$ | $(3236)$ | $(5889)$ | $(550)$ |
| Weighted sample | 4039 | 2536 | $(1503)$ | 3164 | 6020 | 611 |

Notes: 'Poverty' threshold is MCS approximation to $60 \%$ of national median equivalised net income.
Sample: MCS4 main respondents.
Percentage weighted by weight1 adjusted for attrition to Wave 4 (dovwt1).
Unweighted observed sample in brackets.
Table 12.15 shows that families in which either parent has a longstanding illness are over-represented in the poverty income group, particularly if the condition limits their activity. This also applies where the child has a longstanding illness. The nearest we can get to identifying children who would be officially classified as 'disabled' is to look at families where the child has a longstanding condition which limits his or her activity. In these cases, 39.5 per cent of families are below the poverty threshold. Any additional needs occasioned by disability are not allowed for in this broad-brush approach.

| Table 12.15 Poverty rates for families with health problems [column percentages] |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Whether main or partner respondent or cohort child has longstanding illness and whether illness limits activity |  | $\begin{aligned} & \text { Above } \\ & \text { 60\% } \\ & \text { median } \end{aligned}$ | $\begin{aligned} & \text { Below } \\ & \text { 60\% } \\ & \text { median } \end{aligned}$ | Total |
|  | Has longstanding illness | $\begin{gathered} 23.5 \\ (2213) \end{gathered}$ | $\begin{gathered} 28.7 \\ (1195) \end{gathered}$ | $\begin{gathered} 25.0 \\ (3408) \end{gathered}$ |
|  | Total per cent | 100.0 | 100.0 | 100.0 |
|  | Unweighted sample | (9623) | (4140) | (13763) |
|  | Weighted sample | 9751 | 4018 | 13769 |
|  | Illness limits activity* | $\begin{gathered} 54.0 \\ (1205) \end{gathered}$ | $\begin{gathered} 68.3 \\ (816) \end{gathered}$ | $\begin{gathered} 58.8 \\ (2021) \end{gathered}$ |
|  | Total per cent | 100.0 | 100.0 | 100.0 |
|  | Unweighted sample | (2211) | (1195) | (3406) |
|  | Weighted sample | 2285 | 1152 | 3438 |
|  | Has longstanding illness | $\begin{gathered} 22.7 \\ (1650) \end{gathered}$ | $\begin{gathered} 35.9 \\ (574) \end{gathered}$ | $\begin{gathered} 24.9 \\ (2224) \end{gathered}$ |
|  | Total per cent | 100.0 | 100.0 | 100.0 |
|  | Unweighted sample | (7432) | (1730) | (9162) |
|  | Weighted sample | 7462 | 1545 | 9007 |
|  | Illness limits activity* | $\begin{array}{r} 45.8 \\ (762) \\ \hline \end{array}$ | $\begin{gathered} 71.7 \\ (406) \\ \hline \end{gathered}$ | $\begin{gathered} 52.2 \\ (1168) \end{gathered}$ |
|  | Total per cent | 100.0 | 100.0 | 100.0 |
|  | Unweighted sample | (1648) | (574) | (2222) |
|  | Weighted sample | 1692 | 554 | 2246 |
|  | Has longstanding illness | $\begin{gathered} 17.6 \\ (1676) \\ \hline \end{gathered}$ | $\begin{gathered} 23.0 \\ (905) \\ \hline \end{gathered}$ | $\begin{gathered} 19.1 \\ (2581) \end{gathered}$ |
|  | Total per cent | 100.0 | 100.0 | 100.0 |
|  | Unweighted sample | (9625) | (4142) | (13767) |
|  | Weighted sample | 9753 | 4019 | 13772 |
|  | Illness limits activity* | $\begin{aligned} & 33.2 \\ & (537) \end{aligned}$ | $\begin{gathered} 40.3 \\ (372) \end{gathered}$ | $\begin{gathered} 35.7 \\ (909) \\ \hline \end{gathered}$ |
|  | Total per cent | 100.0 | 100.0 | 100.0 |
|  | Unweighted sample | (1675) | (904) | (2579) |
|  | Weighted sample | 1713 | 923 | 2636 |

Notes: *Among those with longstanding illness. **First cohort child in a family with multiple cohort children. Column weighted percentages. Unweighted observed samples in brackets.

## Subjective and qualitative indicators of poverty

In this section we show the relationship of family income, measured objectively, to the answers given by the mother to questions that are more subjective. One is about the experience of financial stress, and the other asks about a small list of items with which the family may be doing without because they cannot afford them.

Regarding stress, the mother was asked about how 'you (and your partner) are managing financially these days?'. The choices were: 'living comfortably', 'doing all right', 'just about getting by', 'finding it quite difficult' or 'finding it very difficult'. A family at any location in the income distribution might assess its circumstances to be any one of these five choices.
There is, however, much internal consistency in these MCS4 data as nearly all the families in the top income quintile said they were either living comfortably (52\%) or 'doing all right' (34\%). The proportion claiming to be living comfortably falls to 6 per
cent of those in the bottom quintile, where the most common response is 'just about getting by' ( $42 \%$ ), though 18 per cent of this group were 'finding it quite difficult' and 10 per cent 'very difficult'. Looking at the families giving some indication of income inadequacy (i.e. those who are 'just about getting by' or 'finding it quite/very difficult'), the row percentages show that well over half of such families are in the bottom two income groups. So although these subjective and objective measures do not completely coincide, there is a strong association between the two.

Looking at Panel A, Table 12.16, 57 per cent of the respondents in MCS4 said they were either doing all right or living comfortably. This same question was asked in MCS2 and in MCS3 and the comparable percentages in those sweeps were 66 and 62 respectively. Thus the percentage reporting these highest levels has declined somewhat, despite the modest rise in overall average real incomes and the drop in the proportion claiming income-tested benefits. We caution, however, that the subsamples are not identical across these sweeps because of attrition, and of course the respondents are a few years older in MCS4. But another explanation for this downward trend is that the children are older. It could be that our approach to adjusting for family size and the number of children - using those OECD scales may not adequately allow for the needs of children of different ages in overall average real income. Their lack of sensitivity to the ages of children under 14 was also noted by Brewer el al. (2010).

Table 12.16: Quintile of equivalised net family income at MCS4 by main respondent's reports on $A$, managing financially and $B$, by life satisfaction [Row percentages with (Column percentages) in parentheses]


Notes: Sample: MCS4 main respondents.
Percentage weighted by weight1 adjusted for attrition to Wave 4 (dovwt1)
Weighted column percentages in brackets.
In Panel B of Table 12.16 the question is even broader, asking the respondent to reflect on the level of satisfaction with his or her own life. (The specific wording of this question is: 'Here is a scale from $1-10$, where 1 means you are completely
dissatisfied and 10 means you are completely satisfied. Please enter the number which corresponds with how satisfied or dissatisfied you are about the way your life has turned out so far.') In Panel B one sees that income is certainly positively associated with one's sense of life satisfaction, but not overwhelmingly so. The gradients are not, however, as marked as seen in Panel A which more directly references income and emphasises the tails of the distributions. The relationship seen in Panel B is very similar to that reported for the MCS3 sweep.

The association of life satisfaction and family income, as strong or weak as it is, does not tell us anything about the causal direction between the two. Perhaps income brings satisfaction but just as plausibly, a sense of satisfaction and the associated personal attributes and behaviours may be a key reason for that person's level of income.

The official monitoring of child poverty also looks at indicators of living standards in terms of 'deprivation' of certain indicator items on the grounds that, combined with low income, they cannot be afforded. This conception of poverty reflects the judgement of Adam Smith (1776) who spoke of poverty as lacking 'not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without'. Five of those indicator items are reflected in the MCS although not asked in exactly the same questions as the Family Resources Survey. These questions are, however, asked similarly in both MCS4 and MCS3 so they can be tracked across time. As shown in Table 12.17, the five items are whether the child has a weatherproof coat, and has two pairs of all-weather shoes, and whether the child's parent has 'a small amount of money to spend on her/himself weekly', can afford a yearly holiday (not staying with relatives), and can afford to hold celebrations on birthdays or religious festivals. From MCS3 we know that at age 5, some 38 per cent of families were lacking at least one of these five items (Bradshaw and Holmes, 2010). When the child was 7 (i.e. MCS4) Table 12.17 shows that, similarly, some 41 per cent of families reported at least one of these five 'deprivations'. The form of deprivation that affected the most families was not having enough money to take an annual holiday (other than visits to relatives). Thirty-two per cent of families were in that position ( $29 \%$ at the age 5 survey). Significantly, 26 per cent of mothers said they did not have even 'a small amount of money to spend on themselves' ( $23 \%$ in MCS3). Very few at either survey said they could not afford a weatherproof coat or shoes for their child, or that they could not afford birthday or festival celebrations.

The degree of overlap between this item-based indicator of poverty with the more common measure of income relative to a poverty threshold, has increased since MCS3. In MCS3, Bradshaw and Holmes (2010) report that 54 per cent of the 'income poor' reported deprivation in terms of lacking at least one of these five items. Table 12.17 tells us that in MCS4, the comparable figure for these children is much higher: 73 per cent ( $=32.9+39.8$ of those below the $60 \%$ median threshold). Comparing families that are deprived of one or another of these five rather basic items by poverty status (columns 1 and 2 of Table 12.17), gives meaning to the notion of impoverishment. The likelihood of the deprivation for those in poverty is over nine times as high for lacking a weatherproof coat (= 2.8/0.3), nearly seven
times as high for lacking two pairs of all-weather shoes (=6.9/1.0), over four times as high for being unable to afford to hold celebrations on birthdays or religious festivals.

Table 12.17: Weighted percentages of families with deprivation items lacking at MCS4

|  |  | $\begin{gathered} \text { Above } \\ \text { 60\% } \\ \text { median } \end{gathered}$ | $\begin{gathered} \text { Below } \\ 60 \% \\ \text { median } \end{gathered}$ | Total |
| :---: | :---: | :---: | :---: | :---: |
| Number of items lacking | 0 | $\begin{gathered} 72.4 \\ (6795) \end{gathered}$ | $\begin{gathered} 27.2 \\ (1086) \end{gathered}$ | $\begin{gathered} 59.4 \\ (7881) \end{gathered}$ |
|  | 1 item | $\begin{gathered} 18.3 \\ (1613) \\ \hline \end{gathered}$ | $\begin{gathered} 32.9 \\ (1280) \\ \hline \end{gathered}$ | $\begin{gathered} 22.5 \\ (2893) \\ \hline \end{gathered}$ |
|  | 2-5 items | $\begin{gathered} 9.4 \\ (798) \end{gathered}$ | $\begin{gathered} 39.8 \\ (1454) \end{gathered}$ | $\begin{gathered} 18.1 \\ (2252) \end{gathered}$ |
| Total per cent |  | 100.0 | 100.0 | 100.0 |
| Unweighted sample |  | (9206) | (3820) | (13026) |
| Weighted sample |  | 9345 | 3749 | 13094 |
| Child lacks a weatherproof coat |  | $\begin{aligned} & 0.3 \\ & (25) \end{aligned}$ | $\begin{array}{r} 2.8 \\ (97) \\ \hline \end{array}$ | $\begin{gathered} 1.0 \\ (122) \\ \hline \end{gathered}$ |
| Total per cent |  | 100.0 | 100.0 | 100.0 |
| Unweighted sample |  | (9170) | (3777) | (12947) |
| Weighted sample |  | 9308 | 3709 | 13018 |
| Child does not have 2 pairs of all-weather shoes |  | $\begin{gathered} 1.0 \\ (83) \end{gathered}$ | $\begin{gathered} 6.9 \\ (232) \end{gathered}$ | $\begin{gathered} 2.7 \\ (315) \end{gathered}$ |
| Total per cent |  | $\begin{gathered} 100.0 \\ (9109) \end{gathered}$ | $\begin{array}{r} 100.0 \\ (3775) \end{array}$ | $\begin{gathered} 100.0 \\ (12884) \end{gathered}$ |
| Unweighted sample |  | 9241 | 3699 | 12940 |
| Main respondent lacks a small amount of money to spend on self weekly |  | $\begin{gathered} 16.7 \\ (1390) \end{gathered}$ | $\begin{gathered} 49.2 \\ (1715) \end{gathered}$ | $\begin{gathered} 25.9 \\ (3105) \end{gathered}$ |
| Total per cent |  | 100.0 | 100.0 | 100.0 |
| Unweighted sample |  | (8939) | (3646) | (12585) |
| Weighted sample |  | 9056 | 3568 | 12624 |
| Can't afford yearly holiday not staying with relatives |  | $\begin{gathered} 20.1 \\ (1757) \end{gathered}$ | $\begin{gathered} 62.5 \\ (2347) \end{gathered}$ | $\begin{gathered} 32.2 \\ (4104) \end{gathered}$ |
| Total per cent |  | 100.0 | 100.0 | 100.0 |
| Unweighted sample |  | (9206) | (3820) | (13026) |
| Weighted sample |  | 9345 | 3749 | 13094 |
| Can't afford to hold celebrations on birthdays/religious festivals |  | $\begin{gathered} 0.9 \\ (68) \\ \hline \end{gathered}$ | $\begin{gathered} 4.1 \\ (159) \\ \hline \end{gathered}$ | $\begin{gathered} 1.8 \\ (227) \\ \hline \end{gathered}$ |
| Total per cent |  | 100.0 | 100.0 | 100.0 |
| Unweighted sample |  | (9197) | (3799) | (12996) |
| Weighted sample |  | 9335 | 3725 | 13061 |

Notes: $\quad$ Sample: MCS4 main respondents with valid data on deprivation items.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2)

## Dynamics of poverty: MCS3 to MCS4

In this brief section we begin the investigation of the transition in poverty status between the two surveys, MCS3 and MCS4. We first document the direction of those transitions in Table 12.18, and then we probe the circumstances in which transitions took place by considering two specific family circumstances depicted in the charts below. Table 12.18 shows the dynamics of movements across the 'poverty line' between MCS3 and MCS4 for those 13,192 families where data are available from both surveys (because the sample size here is slightly restricted, the total poverty rates in this table are not exactly those quoted above). In this table, the small drop (of $2.8 \%$ ) in poverty between MCS3 and MCS4 resulted from a movement of about 32 per cent of families below the poverty line in MCS3 moving out of poverty while a different 10 per cent of families who were above the poverty line in MCS3 fell into poverty in MCS4. Expressed as percentages of the total sample, 9.9 per cent escaped poverty, while 7.1 per cent fell into poverty.

Table 12.18: Estimates of families below 'poverty line' in Sweeps 3 and 4. Weighted cell percentages [column percentages] (unweighted sample)

|  | MCS4 |  | Total |
| :---: | :---: | :---: | :---: |
| MCS3 | Above 60\% median | Below 60\% median |  |
| Above 60\% median | 61.5 | 7.1 | 68.6 |
|  | [86.1] | [24.8] | [68.6]) |
|  | (8026) | 975) | (9001) |
| Below 60\% median | 9.9 | 21.5 | 31.4 |
|  | (13.9) | (75.2) | (31.4) |
|  | (1281) | (2910) | (4191) |
| Total | 71.4 | 28.6 | 100.0 |
|  | [100.0] | [100.0] | [100.0 |
|  | (9307) | (3885) | (13192) |
| Weighted sample | 9421 | 3774 | 13195 |

Notes: Sample: MCS4 main respondents with valid data on MCS3 and MCS4 poverty class.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2).
Figures 12.1 and 12.2 each show one of two reasons for a transition into or out of poverty between MCS3 and MCS4 - a change in the number of earners and a change in the number of parents living with the cohort child. We do not attempt to allow for other things that may be different in the family such as the arrival of a new child or a change of address, nor at this stage do we consider whether a change in earners or in parents was simultaneously a change in both. Both charts show weighted sample numbers. The important indicators of change in these graphs are the proportions shown in near black - indicating the number of families in that column that fell into poverty between the two survey sweeps - and the proportions shown in white indicating the number of families that moved out of poverty between the two sweeps.

Figure 12.1 considers the number of earners in the family. The chart shows that those who gained an earner were disproportionately likely to have escaped poverty (i.e. column 3 in the figure shows that $22 \%$ of all who gained an earner escaped poverty status). Conversely, losing an earner was an important source of entry into poverty (about $24 \%$ of those who lost at least one earner dropped below the poverty
line). In the families with the same number of earners in the two surveys, 782 families escaped poverty (white) while 483 fell into poverty (black).

Some of these changes would have involved changes in the number of partners too. If we look at changes in partnership in isolation from earning, Figure 12.2 shows that in the families that lost a parent some 30 per cent fell into poverty while only about 8 per cent escaped poverty. Among the families that acquired an additional adult, by contrast, some 30 per cent escaped poverty while only about 5 per cent fell under the poverty line.

Figure 12.1: Transition across poverty line by earner change MCS3 and MCS4 (showing per cent in each base category and weighted sample numbers)


These two charts suggest that poverty transitions were more strongly associated with employment than family status transitions. In terms of absolute numbers, there were 363 weighted sample cases entering poverty in association with losing an earner, compared with 223 losing a parent. In the opposite direction, 446 families that gained an earner escaped poverty, compared with 157 that escaped poverty among the families that gained a parent. Note also that poverty transitions are by no means only found among families that experienced one of these two socioeconomic transitions.

The phenomenon of rotation in and out of poverty has also been seen across previous surveys (Bradshaw and Holmes, 2010). Further analysis will be needed to see how far these transitions between MCS3 and MCS4 have brought 'entrants' in from never having been in poverty at any previous survey, and how far they have lifted out of poverty those whose previous experience of poverty was as at just one or more previous surveys. Information about persistent and transient poverty among the population at large is also reported, on the basis of the British Household Panel

Survey by the DWP as part of the HBAI statistics (DWP 2009). This suggests that poverty persisting over four years was less common for families with children after 2000 than it had been in the 1990s.

Figure 12.2: Transition across poverty line by change in number of parents between MCS3 and MCS4 (showing percentages in each base category and weighted sample numbers)


## Conclusion

This chapter has focused, like previous descriptive reports, on estimates of net income derived from the grouped income questions in MCS which are known to be less reliable than the data collected for official poverty statistics in a specialised survey. Neither this chapter nor the report on MCS3 made use of the answers to supplementary questions included in the questionnaire on the separate components of incomes. ${ }^{42}$ Nevertheless, these results can be compared with income data in previous MCS sweeps and provide a useful account of income differentials within MCS families.

[^44]We have attempted to measure family income relative to needs in a way that is as close as possible to other data sources used to gauge poverty, and to describe the characteristics of families that fall toward both ends of this spectrum. Those whose family income falls below the poverty line account for about 30 per cent of this cohort. Those who fall in the bottom 20 per cent have incomes no more than 48 per cent of the national median. They have similar demographic characteristics to those classified in the broader band of poverty below 60 per cent of the national median: lone parents and couples without work, or where only the mother has a job; Pakistani, Bangladeshi, and black families; residents in areas of minority ethnic concentration, social tenants, young mothers and those with poor education and poor health. Many of these characteristics overlap, but that has not been explored here. Gaining or losing employment is a frequent, but not exclusive, feature of movements in and out of poverty. Despite their lower risk of poverty, working families are not immune from low income, and those where at least one parent is earning constitute half of those classified below the level of 60 per cent line here. The level of income in the bottom fifth is one sixth of the average level in the top fifth, which has an opposite demographic profile, characterised by dual earners, tertiary qualifications and home ownership, older mothers, and residence in the less disadvantaged areas of England and Scotland.

## References

Bradshaw, J. and Holmes, J. (2010) Child poverty in the first five years of life. In K. Hansen, H. Joshi and S. Dex (eds) Children of the 21st Century; the first five years. Bristol: Policy Press, pp. 13-31.

Brewer, M., O' Dea, C., Paull, G. and Sibieta, L. (2009) The living standards of families with children reporting low incomes. Department for Work and Pensions Research Report No 577. http://research.dwp.gov.uk/asd/asd5/rports2009-2010/rrep577.pdf10

DWP (2009) Low Income Dynamics. Department for Work and Pensions. http://research.dwp.gov.uk/asd/index.php?page=lid

DWP (2010) Households Below Average Income. Department for Work and Pensions. http://research.dwp.gov.uk/asd/index.php?page=hbai

Ketende, S. and Joshi, H. (2008) Income and Poverty. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Third Survey: User's Guide to Initial Findings. London: Centre for Longitudinal Studies, Institute of Education, University of London.

OECD (2010) Documentation on equivalence scales. www.oecd.org/dataoecd/61/52/35411111.pdf

Smith, A. (1776) The Wealth of Nations. Book 5, Chapter 2.

## Appendix

Table 12.A1: Per cent distribution of families by the ratio of their income to their poverty threshold, by selected demographic variables and UK country [row percentages]

|  |  | Ratio to 'poverty' threshold |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | <0.75 | 0.75-1.0 | 1-1.5 | 1.5-4 | 4 and above |
|  | NVQ level 5 | $\begin{aligned} & \hline 2.1 \\ & (24) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 3.1 \\ (36) \\ \hline \end{gathered}$ | $\begin{gathered} 9.6 \\ (115) \end{gathered}$ | $\begin{aligned} & \hline 66.7 \\ & (709) \end{aligned}$ | $\begin{gathered} 18.6 \\ (176) \end{gathered}$ |
|  | NVQ level 4 | $\begin{gathered} 3.5 \\ (121) \end{gathered}$ | $\begin{gathered} 4.1 \\ (126) \\ \hline \end{gathered}$ | $\begin{aligned} & 16.5 \\ & (504) \end{aligned}$ | $\begin{gathered} 66.3 \\ (1954) \end{gathered}$ | $\begin{gathered} 9.6 \\ (250) \\ \hline \end{gathered}$ |
|  | NVQ level 3 | $\begin{gathered} 8.0 \\ (131) \end{gathered}$ | $\begin{gathered} 7.0 \\ (115) \end{gathered}$ | $\begin{aligned} & 24.5 \\ & (401) \\ & \hline \end{aligned}$ | $\begin{gathered} 56.9 \\ (825) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 3.5 \\ & (45) \end{aligned}$ |
|  | NVQ level 2 | $\begin{gathered} 9.2 \\ (253) \end{gathered}$ | $\begin{gathered} 9.1 \\ (253) \\ \hline \end{gathered}$ | $\begin{aligned} & 29.5 \\ & (780) \end{aligned}$ | $\begin{gathered} 50.6 \\ (1215) \end{gathered}$ | $\begin{gathered} \hline 1.6 \\ (33) \end{gathered}$ |
|  | NVQ level 1 | $\begin{aligned} & 15.5 \\ & (95) \end{aligned}$ | $\begin{gathered} 13.6 \\ (87 \end{gathered}$ | $\begin{aligned} & 34.9 \\ & (216) \end{aligned}$ | $\begin{aligned} & \hline 35.3 \\ & (199) \end{aligned}$ | $\begin{aligned} & 0.7 \\ & \text { (3) } \\ & \hline \end{aligned}$ |
|  | Overseas and other quals only | $\begin{aligned} & 21.1 \\ & (99) \end{aligned}$ | $\begin{aligned} & 15.1 \\ & (68) \end{aligned}$ | $\begin{aligned} & 25.8 \\ & (100) \end{aligned}$ | $\begin{aligned} & 36.7 \\ & (120) \end{aligned}$ | $\begin{aligned} & 1.2 \\ & (5) \end{aligned}$ |
|  | None of these | $\begin{gathered} 29.4 \\ (347) \end{gathered}$ | $\begin{gathered} 19.4 \\ (226) \\ \hline \end{gathered}$ | $\begin{aligned} & 27.4 \\ & (285) \end{aligned}$ | $\begin{aligned} & 23.1 \\ & (243) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.7 \\ & (7) \\ & \hline \end{aligned}$ |
|  | Total per cent | 9.5 | 8.3 | 22.9 | 53.5 | 5.8 |
|  | Unweighted sample | (1070) | (911) | (2401) | (5265) | (519) |
|  | Weighted sample | 1070 | 820 | 2273 | 5308 | 574 |
|  | NVQ level 5 | $\begin{aligned} & \hline 4.5 \\ & (33) \end{aligned}$ | $\begin{aligned} & \hline 2.5 \\ & (27) \end{aligned}$ | $\begin{aligned} & \hline 7.6 \\ & (92) \end{aligned}$ | $\begin{gathered} 69.0 \\ (631) \end{gathered}$ | $\begin{gathered} 16.4 \\ (122) \end{gathered}$ |
|  | NVQ level 4 | $\begin{gathered} 5.4 \\ (246) \end{gathered}$ | $\begin{gathered} 4.9 \\ (220) \end{gathered}$ | $\begin{aligned} & 17.7 \\ & (779) \end{aligned}$ | $\begin{gathered} 63.9 \\ (2576) \\ \hline \end{gathered}$ | $\begin{gathered} 8.1 \\ (295) \end{gathered}$ |
|  | NVQ level 3 | $\begin{aligned} & 12.3 \\ & (279) \end{aligned}$ | $\begin{gathered} 9.3 \\ (205) \end{gathered}$ | $\begin{aligned} & 29.1 \\ & (618) \end{aligned}$ | $\begin{aligned} & 46.7 \\ & (916) \end{aligned}$ | $\begin{aligned} & \hline 2.5 \\ & (40) \end{aligned}$ |
| 등 | NVQ level 2 | $\begin{gathered} 19.4 \\ (731) \end{gathered}$ | $\begin{gathered} 12.8 \\ (476) \end{gathered}$ | $\begin{gathered} 28.6 \\ (1045) \end{gathered}$ | $\begin{gathered} 37.2 \\ (1235) \end{gathered}$ | $\begin{aligned} & 2.1 \\ & (70) \\ & \hline \end{aligned}$ |
| 高 | NVQ level 1 | $\begin{aligned} & 31.8 \\ & (302) \\ & \hline \end{aligned}$ | $\begin{gathered} 17.8 \\ (167) \end{gathered}$ | $\begin{aligned} & 26.5 \\ & (246) \end{aligned}$ | $\begin{gathered} 22.9 \\ (209) \\ \hline \end{gathered}$ | $\begin{aligned} & 1.0 \\ & \text { (5) } \\ & \hline \end{aligned}$ |
|  | Overseas and other quals only | $\begin{gathered} 32.4 \\ (128) \\ \hline \end{gathered}$ | $\begin{aligned} & 18.9 \\ & (90) \\ & \hline \end{aligned}$ | $\begin{aligned} & 27.0 \\ & (92) \\ & \hline \end{aligned}$ | $\begin{aligned} & 20.5 \\ & (60) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.3 \\ & (2) \\ & \hline \end{aligned}$ |
|  | None of these | $\begin{aligned} & \hline 49.5 \\ & (761) \end{aligned}$ | $\begin{aligned} & 21.0 \\ & (309) \end{aligned}$ | $\begin{aligned} & \hline 18.3 \\ & (277) \end{aligned}$ | $\begin{aligned} & 11.1 \\ & (147) \end{aligned}$ | $\begin{aligned} & \hline 0.2 \\ & (4) \end{aligned}$ |
|  | Total per cent | 18.0 | 10.8 | 22.8 | 43.9 | 4.5 |
|  | Unweighted sample | (2480) | (1494) | (3149) | (5774) | (538) |
|  | Weighted sample | 2420 | 1449 | 3065 | 5894 | 598 |
|  | <26 | $\begin{aligned} & 43.8 \\ & (228) \end{aligned}$ | $\begin{aligned} & 18.3 \\ & (97) \end{aligned}$ | $\begin{aligned} & \hline 23.1 \\ & (113) \end{aligned}$ | $\begin{aligned} & 14.8 \\ & (69) \end{aligned}$ | $\begin{aligned} & 0.0 \\ & (0) \end{aligned}$ |
|  | 26-30 | $\begin{gathered} 31.8 \\ (705) \\ \hline \end{gathered}$ | $\begin{aligned} & 17.5 \\ & (380) \end{aligned}$ | $\begin{aligned} & 26.9 \\ & (629) \end{aligned}$ | $\begin{aligned} & 23.1 \\ & (489) \end{aligned}$ | $\begin{aligned} & 0.6 \\ & (10) \end{aligned}$ |
| $\begin{aligned} & \text { 0/ } \\ & \text { O } \end{aligned}$ | 31-35 | $\begin{aligned} & 18.2 \\ & (622) \end{aligned}$ | $\begin{gathered} 12.4 \\ (420) \\ \hline \end{gathered}$ | $\begin{gathered} 26.8 \\ (859) \\ \hline \end{gathered}$ | $\begin{gathered} 40.5 \\ (1225) \end{gathered}$ | $\begin{array}{r} 2.1 \\ (63) \\ \hline \end{array}$ |
| $\begin{aligned} & \text { 흐 } \\ & \text { む } \end{aligned}$ | 36-40 | $\begin{gathered} 12.3 \\ (576) \\ \hline \end{gathered}$ | $\begin{gathered} 7.4 \\ (346) \\ \hline \end{gathered}$ | $\begin{aligned} & 20.7 \\ & (950) \end{aligned}$ | $\begin{gathered} 53.7 \\ (2266) \\ \hline \end{gathered}$ | $\begin{gathered} 5.9 \\ (221) \\ \hline \end{gathered}$ |
|  | 41 and above | $\begin{aligned} & 10.0 \\ & (349) \end{aligned}$ | $\begin{gathered} 7.0 \\ (251) \end{gathered}$ | $\begin{gathered} 18.3 \\ (598) \end{gathered}$ | $\begin{gathered} 55.8 \\ (1727) \end{gathered}$ | $\begin{gathered} 8.8 \\ (244) \end{gathered}$ |
|  | Total per cent | 18.0 | 10.8 | 22.8 | 43.9 | 4.5 |
|  | Unweighted sample | (2480) | (1494) | (3149) | (5776) | (538) |

Table 12.A1: Per cent distribution of families by the ratio of their income to their poverty threshold, by selected demographic variables and UK country [row percentages]

|  |  | Ratio to 'poverty' threshold |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Continued |  |  |  |  |  |  |
|  | Weighted sample | 2422 | 1449 | 3065 | 5896 | 598 |
|  | Own outright | $\begin{gathered} \hline 12.6 \\ (111) \end{gathered}$ | $\begin{aligned} & \hline 9.5 \\ & \text { (92) } \end{aligned}$ | $\begin{gathered} 20.0 \\ (198) \end{gathered}$ | $\begin{aligned} & \hline 47.6 \\ & (374) \end{aligned}$ | $\begin{aligned} & 10.6 \\ & (67) \end{aligned}$ |
|  | Own - mortgage/loan | $\begin{gathered} \hline 4.9 \\ (491) \end{gathered}$ | $\begin{gathered} \hline 5.8 \\ (547) \end{gathered}$ | $\begin{gathered} 21.3 \\ (1832) \end{gathered}$ | $\begin{gathered} 61.6 \\ (4750) \end{gathered}$ | $\begin{gathered} \hline 6.4 \\ (452) \end{gathered}$ |
|  | Rent from LA or HA* | $\begin{gathered} 43.9 \\ (1379) \end{gathered}$ | $\begin{gathered} 19.6 \\ (628) \end{gathered}$ | $\begin{gathered} 24.5 \\ (709) \end{gathered}$ | $\begin{gathered} 11.7 \\ (322) \end{gathered}$ | $\begin{aligned} & 0.2 \\ & (7) \end{aligned}$ |
|  | Rent privately | $\begin{gathered} 29.6 \\ (385) \end{gathered}$ | $\begin{gathered} 19.2 \\ (239) \end{gathered}$ | $\begin{gathered} 27.3 \\ (305) \end{gathered}$ | $\begin{gathered} 22.8 \\ (221) \end{gathered}$ | $\begin{gathered} 1.0 \\ (10) \end{gathered}$ |
|  | Other | $\begin{aligned} & \hline 33.3 \\ & (102) \end{aligned}$ | $\begin{gathered} \hline 8.6 \\ (35) \end{gathered}$ | $\begin{aligned} & 28.1 \\ & (79) \end{aligned}$ | $\begin{aligned} & 29.0 \\ & (81) \end{aligned}$ | $\begin{aligned} & \hline 0.8 \\ & (2) \\ & \hline \end{aligned}$ |
|  | Total per cent | 18.1 | 10.8 | 22.8 | 44.0 | 4.5 |
|  | Unweighted sample | (2468) | (1541) | (3123) | (5748) | (538) |
|  | Weighted sample | 2412 | 1489 | 3041 | 5872 | 598 |
|  | England | $\begin{gathered} 18.3 \\ (1738) \end{gathered}$ | $\begin{gathered} 10.7 \\ (1001) \end{gathered}$ | $\begin{gathered} 22.2 \\ (1968) \end{gathered}$ | $\begin{gathered} 44.0 \\ (3766) \end{gathered}$ | $\begin{gathered} \hline 4.8 \\ (400) \end{gathered}$ |
|  | Wales | $\begin{gathered} 21.0 \\ (410) \end{gathered}$ | $\begin{aligned} & 12.1 \\ & (232) \end{aligned}$ | $\begin{gathered} 25.3 \\ (506) \end{gathered}$ | $\begin{gathered} 38.9 \\ (771) \end{gathered}$ | $\begin{gathered} 2.8 \\ (52) \end{gathered}$ |
|  | Scotland | $\begin{aligned} & 16.3 \\ & (218) \end{aligned}$ | $\begin{gathered} 9.9 \\ (133) \end{gathered}$ | $\begin{gathered} 23.0 \\ (359) \end{gathered}$ | $\begin{aligned} & 46.6 \\ & (837) \end{aligned}$ | $\begin{aligned} & \hline 4.2 \\ & \text { (71) } \end{aligned}$ |
|  | Northern Ireland | $\begin{aligned} & 18.6 \\ & (243) \end{aligned}$ | $\begin{gathered} 13.8 \\ (187) \end{gathered}$ | $\begin{gathered} 30.3 \\ (403) \end{gathered}$ | $\begin{gathered} 35.7 \\ (515) \end{gathered}$ | $\begin{gathered} \hline 1.7 \\ (27) \end{gathered}$ |
|  | Unweighted sample | (2609) | (1553) | (3236) | (5889) | (550) |

Notes: 'Poverty' threshold is MCS approximation to 60\% on national median net equivalised
LA = Local Authority, HA = Housing Association. Sample: MCS4 main respondents.
Percentage weighted by weight2 adjusted for attrition to Wave 4 (dovwt2), except for last row panel which uses
weight 1 adjusted for attrition to Wave 4 (dovwt1). Unweighted observed sample numbers in brackets.

## Chapter 13

## HOUSING, NEIGHBOURHOOD AND RESIDENTIAL MOBILITY

Sosthenes C. Ketende and John W. McDonald

## Chapter overview

This chapter focuses on residential mobility between MCS3 and MCS4, looking in particular at:

- Reasons for residential mobility
- Correlates of residential mobility
- Perceptions of area at sweep 3 and residential mobility at sweep 4
- Housing, neighbourhood and income poverty at sweep 4


## Introduction

Families move home for many reasons. Some moves are involuntary and can be due to eviction, a relationship breakdown or a job change (Boheim and Taylor, 2002). Most moves are voluntary and are prompted by the desire for a larger house or a better home area. This chapter focuses on residential mobility between MCS3 and MCS4. We look at reasons for moving residence and some socioeconomic and socio-demographic correlates of mobility such as type of housing and families' perception of their area at MCS3 in terms of whether it is a good one for raising children and how safe they feel it is.

Families with infants and young children have relatively high rates of residential mobility in the UK (Plewis et al., 2008). Residential mobility may occur in anticipation of family changes such as during a pregnancy or just after a birth when many families move to larger accommodation. The presence of school-aged children can be associated with less residential mobility (Michielin and Mulder, 2008). This may be because families relocate themselves close to 'good' or popular schools before the child is of school age (Gibbons and Machin, 2006). Does moving disrupt children's lives? Moving residence, as well as possibly simultaneously moving school and/or neighbourhood, may force children (and parents) to adapt to changes in friends, school and neighbourhood. This may have positive, negative or both positive and negative consequences for their health and wellbeing, with frequent movement early in the life course being potentially most stressful and disruptive. Tucker et al. (1998) investigated the impact of mobility on the school lives of elementary-aged schoolchildren in the USA. They found that 'children who have moved an average or above average number of times are not significantly harmed if they reside in families in which both biological parents are present; however, for children in other family structures, any move is associated with an adverse school life'. A systematic review by Jelleyman and Spencer (2008) concluded: 'Residential mobility interacts at neighbourhood, family and individual levels in cumulative and compounding ways with significance for the wellbeing of children'. Outcomes they identified in association with residential mobility included higher levels of behavioural and emotional problems. Verropoulou et al. (2002) examined the relationship between moving home, family
structure and children's wellbeing using the second generation of the National Child Development Study, where in 1991 information was collected on the children of one-third of the 1958 cohort members. Child wellbeing was measured using attainment in mathematics and reading, and on two behavioural assessments of aggression and anxiety. They found little to no association between moving home and children's wellbeing. So the effects of moving on behaviour are mixed and the effects of moving might be positive, negative or neutral depending on the outcome measures used.

Residential mobility poses a major challenge for the conduct of longitudinal studies, especially for birth cohort studies such as the MCS. The residentially mobile are more likely to be non-respondents, even after controlling for a range of background variables (Plewis et al., 2008). This mobility poses a major challenge for fieldwork and analysis. Analysts are concerned that those who are lost from the study, either temporarily or permanently, are systematically different from those that remain and any inferences made on the observed sample will differ from those that would have been made if there had been no non-response or sample loss.

## Residential mobility between MCS3 and MCS4

Plewis et al. (2008) compared main respondents' self-report of mobility with the survey administration data on residential mobility and found that 9 per cent of all MCS2 productive families had moved home according to the survey administration tracing records, but did not mention it at the interview. Based on address records, residential mobility between sweeps 3 and 4 was lower than between sweeps 2 and 3 ( $20 \%$ versus $24 \%$ ), see Table 13.2 in this chapter and the same numbered table in Ketende and McDonald (2008). Note that 15 per cent of movers mentioned children's schooling as a reason for moving.

## Reasons for residential mobility

The most popular reason for moving given by interviewed movers at sweep 4 was wanting a larger home (37\%), followed by wanting a better home (21\%) and wanting to move to a better area (20\%). See Table 13.1 for other reasons and percentages. The ordering of the reasons given and the percentage distribution are very similar to the ordering and percentage distribution at MCS3; see Table 13.1 in Ketende and McDonald (2008). This similarity partially explains the reduction in the percentage of movers between sweeps 2 and 4. If families had moved between sweeps 2 and 3 to seek more spacious accommodation, a better area or a better home, having found it they are less likely to move again in the near future.

Table 13.1: Reason for moving between MCS3 and MCS4 for self-reported movers

| Variable | Weighted per cent (Unweighted n) | (Unweighted base) Weighted Base |
| :---: | :---: | :---: |
| Wanted larger home | $\begin{array}{r} 36.5 \\ (502) \\ \hline \end{array}$ | $\begin{gathered} (1362) \\ 1583 \end{gathered}$ |
| Wanted better home | $\begin{aligned} & 20.8 \\ & (283) \\ & \hline \end{aligned}$ |  |
| Wanted to move to better area | $\begin{aligned} & 20.1 \\ & (276) \\ & \hline \end{aligned}$ |  |
| To be nearer relative(s) | $\begin{array}{r} 10.4 \\ (140) \\ \hline \end{array}$ |  |
| Relationship breakdown | $\begin{array}{r} 10.3 \\ (143) \\ \hline \end{array}$ |  |
| Wanted to buy | $\begin{aligned} & \hline 5.8 \\ & (86) \\ & \hline \end{aligned}$ |  |
| For children's education | $\begin{gathered} 9.9 \\ (133) \end{gathered}$ |  |
| Wanted place of my own | $\begin{aligned} & \hline 5.8 \\ & (78) \\ & \hline \end{aligned}$ |  |
| School catchment area | $\begin{aligned} & 5.5 \\ & (72) \\ & \hline \end{aligned}$ |  |
| Moving away from crime | $\begin{aligned} & 5.3 \\ & (80) \end{aligned}$ |  |
| Job change/nearer work | $\begin{aligned} & \hline 4.8 \\ & (57) \\ & \hline \end{aligned}$ |  |
| Could no longer afford last home | $\begin{array}{r} 4.7 \\ (60) \\ \hline \end{array}$ |  |
| Just wanted a change | $\begin{aligned} & 4.7 \\ & (59) \\ & \hline \end{aligned}$ |  |
| Problem with neighbours | $\begin{aligned} & 4.7 \\ & (63) \\ & \hline \end{aligned}$ |  |
| New relationship | $\begin{aligned} & 4.5 \\ & (57) \\ & \hline \end{aligned}$ |  |
| Spouse or partner job change | $\begin{aligned} & 2.8 \\ & (39) \\ & \hline \end{aligned}$ |  |
| Evicted/repossessed from last home | $\begin{aligned} & 1.9 \\ & (28) \\ & \hline \end{aligned}$ |  |

Notes: Sample - self-reported movers, weighted percentages. Weighting allows for longitudinal unit non-response and attrition up to sweep 4. Percentages do not add to 100 per cent since more than one reason could be given by each respondent.

If we categorise the reasons given for moving into dwelling, area or household related, the most common reasons for moving were dwelling related (70\%), followed by area related ( $46 \%$ ) and household related ( $44 \%$ ). Note that the percentages given in Table 14.1 do not add to 100 per cent since more than one reason for moving could be given by each respondent.

## Correlates of residential mobility

Residential mobility is related to many factors and, in this section, we describe some socioeconomic and socio-demographic correlates of mobility. The base number for Tables 13.1 to 13.11 is the 13,857 families productive at sweep 4, regardless of their participation status at previous sweeps. There were 101 families across all UK countries at interview, 70 in England, 10 in Wales, 13 in Scotland and 3 in Northern Ireland, whose change of residential address status could not be established. These families are therefore excluded from the denominator in all estimates using the residential mobility variable.

Table 13.2 shows residential mobility rates by UK country. The rates were lower in all UK countries except Wales at sweep 4 than at sweep 3 . In Wales, the mobility rate at both sweeps was 19 per cent. The biggest drop in residential mobility among productive families was in Northern Ireland where it fell from 27 per cent at sweep 3 to 18 per cent at sweep 4.

| Table 13.2: Residential mobility between MCS3 and MCS4 by UK country of interview <br> at MCS4 (row percentages) |  |  |  |
| :--- | :---: | :---: | :---: |
|  | Mover | Non-mover | Total |
| England | 20.4 | 79.6 | 100.0 |
|  | $(1577)$ | $(7235)$ | $(8812)$ |
| Wales | 19.3 | 80.7 | 100.0 |
|  | $(345)$ | $(1617)$ | $(1962)$ |
| Scotland | 20.7 | 79.3 | 100.0 |
|  | $(277)$ | $(1332)$ | $(1609)$ |
| Northern Ireland | 18.0 | 82.0 | 100.0 |
|  | $(215)$ | $(1158)$ | $(1373)$ |
| Total percentage | 20.0 | 80.0 | 100.0 |
| Unweighted N | $(2414)$ | $(11342)$ | $(13756)$ |
| Weighted N | 2751 | 10989 | 13740 |
| P-value | 0.289 |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 101 families were excluded because it could not be ascertained whether they moved or not. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

Residential mobility between MCS3 and MCS4 varied according to the ethnicity of the main respondent. Table 13.3 presents residential mobility by main respondent's ethnicity, using the six-category UK Census classification of ethnicity with the 'Mixed' group combined with the 'Other' category. The rates of change in residential address were lower at sweep 4 than at sweep 3 across all ethnic groups. Residential mobility rate ranges from 12 per cent among Indian families to 21 per cent among white families.

Table 13.3: Residential mobility between MCS3 and MCS4 by main respondent's ethnicity (six category UK Census classification) (row percentages)

|  | Mover | Non-mover | Total |
| :--- | :---: | :---: | :---: |
| White | 20.7 | 79.3 | 100.0 |
|  | $(2119)$ | $(9609)$ | $(11728)$ |
|  | 12.4 | 87.6 | 100.0 |
| Indian | $(40)$ | $(307)$ | $(347)$ |
|  | 16.6 | 83.4 | 100.0 |
| Pakistani and Bangladeshi | $(127)$ | $(743)$ | $(870)$ |
|  | 18.9 | 81.1 | 100.0 |
| Black or Black British | $(77)$ | $(390)$ | $(467)$ |
| Other ethnic group (inc. Chinese, mixed, other) | 15.9 | 84.1 | 100.0 |
|  | $(48)$ | $(288)$ | $(336)$ |
|  | 20.2 | 79.8 | 100.0 |
| Weighted N | $(2411)$ | $(11337)$ | $(13748)$ |
| P-value | 2769 | 10956 | 13725 |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 101 families were excluded because it could not be ascertained whether they moved or not. Eight more families were excluded because the ethnic group of the main respondent could not be established. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.
Homeowners were less likely to move (15\%) between sweeps 3 and 4 than tenants; see Table 13.4. Just over half of those renting privately (53\%) moved, with those in
social housing, i.e. renting from a local authority or housing association, much less likely to move ( $20 \%$ ). Figure 13.1 shows results of Table 13.4 where weighted cell percentages are shown instead of row percentages.

Table 13.4: Residential mobility between MCS3 and MCS4 by family tenure at MCS4 (row percentages)

|  | Mover | Non-mover | Total |
| :--- | :---: | :---: | :---: |
|  | 14.8 | 85.2 | 100.0 |
| Own outright, mortgage or loan | $(1193)$ | $(7898)$ | $(9091)$ |
|  | 19.7 | 80.3 | 100.0 |
| Rent from LA or HA | $(532)$ | $(2556)$ | $(3088)$ |
|  | 52.9 | 47.1 | 100.0 |
| Rent privately | $(580)$ | $(584)$ | $(1164)$ |
|  | 31.4 | 68.6 | 100.0 |
| Living with parents or rent free | $(68)$ | $(206)$ | $(274)$ |
| Total percentage | 20.0 | 80.0 | 100.0 |
| Unweighted N | $(2373)$ | $(11244)$ | $(13617)$ |
| Weighted N | 2724 | 10874 | 13598 |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 101 families were excluded because it could not be ascertained whether they moved or not. An additional 139 families were excluded because of missing data in their housing tenure. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

Table 13.5 presents residential mobility between sweeps 3 and 4 by combined labour-market status of the main respondent and partner at sweep 4. Families where both the main respondent and their partner were in work or where one or other parent was in work were less likely to move home than families with no earner or where the main respondent (usually the mother) was a lone parent (either in work or not). When both parents were in work only 15 per cent moved compared with 29 per cent moving when both were not in work; see Table 13.5. When one member of the couple was in work, but the other not, the percentage mobile was about 20 per cent. Approximately one-quarter of lone parents moved between sweeps 3 and 4, with a two percentage point difference in the proportion mobile by whether the lone parent was in work ( $26 \%$ ) or not ( $28 \%$ ).

Table 13.5: Residential mobility between MCS3 and MCS4 by combined labour-market status of main respondent and partner at MCS4 (row percentages)

|  | Mover | Non-mover | Total |  |
| :--- | :---: | :---: | :---: | :---: |
| Both in work | 15.4 | 84.6 | 100.0 |  |
|  | $(795)$ | $(5110)$ | $(5905)$ |  |
| Main in work, partner not | 20.1 | 79.9 | 100.0 |  |
|  | $(53)$ | $(267)$ | $(320)$ |  |
| Partner in work, main not | 20.9 | 79.1 | 100.0 |  |
|  | $(420)$ | $(1923)$ | $(2343)$ |  |
| Both not in work | 28.7 | 71.3 | 100.0 |  |
|  | $(130)$ | $(448)$ | $(578)$ |  |
| Lone parent in work | 25.5 | 74.5 | 100.0 |  |
|  | $(332)$ | $(1079)$ | $(1411)$ |  |
| Lone parent not in work | 28.2 | 71.8 | 100.0 |  |
|  | $(372)$ | $(1090)$ | $(1462)$ |  |
| Continued |  |  |  |  |
| Partner non-response | 20.4 | 79.6 | 100.0 |  |
|  | $(312)$ | $(1425)$ | $(1737)$ |  |

Table 13.5: Residential mobility between MCS3 and MCS4 by combined labour-market status of main respondent and partner at MCS4 (row percentages)

|  | Mover | Non-mover | Total |
| :--- | :---: | :---: | :---: |
| Total percentage | 20.2 | 79.8 | 100.0 |
| Unweighted N | $(2414)$ | $(11342)$ | $(13756)$ |
| Weighted N | 2771 | 10959 | $(13731$ |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 101 families were excluded because it could not be ascertained whether they moved or not. Eight more families were excluded because the ethnic group of the main respondent could not be established. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

## Area at sweep 3 and residential mobility at sweep 4

In this section, the main respondent's perceptions of their area of residence at sweep 3 , in terms of whether it was a good area for raising children and how safe they felt it was, are related to residential mobility at sweep 4 . The main respondent's perception of their residential area at sweep 4 in terms of how safe they feel it is and whether it is a good area for raising children is unknown because these questions were not asked at this sweep.

Nearly a fifth of main respondents who considered their residential area good or excellent at sweep 3 changed their addresses between MCS3 and MCS4. Residential mobility is much higher among families who considered their area at sweep 3 as poor or as very poor. About 30 per cent of such families moved home between sweeps 3 and 4, see Table 13.6. Figure 13.2 shows results of Table 13.6 where weighted cell percentages are given instead of row percentages.

Table 13.6: Residential mobility between MCS3 and MCS4 by ‘Good area for raising children?' at MCS3 (row percentages)

|  | Mover | Non-mover | Total |
| :--- | :---: | :---: | :---: |
| Excellent | 18.3 | 81.7 | 100.0 |
|  | $(642)$ | $(3444)$ | $(4086)$ |
| Good | 18.1 | 81.9 | 100.0 |
|  | $(849)$ | $(4477)$ | $(5326)$ |
| Average | 21.6 | 78.4 | 100.0 |
|  | $(529)$ | $(2288)$ | $(2817)$ |
| Poor | 28.2 | 71.8 | 100.0 |
|  | $(156)$ | $(510)$ | $(666)$ |
| Very poor | 31.4 | 68.6 | $(260.0$ |
|  | $(75)$ | $(186)$ | 100.0 |
| Total percentage | 19.7 | 80.3 | $(13156)$ |
| Unweighted N | $(2251)$ | $(10905)$ | 13161 |
| Weighted N | 2591 | 10570 |  |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 101 families were excluded because it could not be ascertained whether they moved or not. An additional 600 families were excluded because of missing data on main respondent's view of whether area was good to raise children (including missing data due to unit non-response) at sweep 3. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

Figure 13.2: Moving home between MCS3 and MCS4 by 'Good area for raising children?' at MCS3


Table 13.7 shows that nearly a fifth of main respondents who considered their residential area fairly or very safe at sweep 3 had changed address by sweep 4. A quarter of those who considered their area to be neither safe nor unsafe or fairly unsafe changed residential address between these sweeps, while 30 per cent of respondents who thought their residential area was very unsafe moved between MCS3 and MCS4. Figure 13.3 shows results of Table 13.7 where weighted cell percentages are presented instead of row percentages.

Table 13.7: Residential mobility between MCS3 and MCS4 by 'How safe you feel this area is' at MCS3 (row percentages)

|  | Mover | Non-mover | Total |  |
| :--- | :---: | :---: | :---: | :---: |
| Very safe | 18.7 | 81.3 | 100.0 |  |
|  | $(740)$ | $(3848)$ | $(4588)$ |  |
| Fairly safe | 18.8 | 81.2 | 100.0 |  |
|  | $(1122)$ | $(5651)$ | $(6773)$ |  |
| Neither safe nor unsafe | 24.8 | 75.2 | 100.0 |  |
|  | $(220)$ | $(851)$ | $(1071)$ |  |
| Fairly unsafe | 24.7 | 75.3 | 100.0 |  |
|  | $(126)$ | $(440)$ | $(566)$ |  |
| Very unsafe | 29.9 | 70.1 | 100.0 |  |
|  | $(44)$ | $(118)$ | $(162)$ |  |
| Total percentage | 19.7 | 80.3 | 100.0 |  |
| Continued |  |  |  |  |
| Unweighted N | $(2252)$ | $(10908)$ | $(13160)$ |  |
| Weighted N |  |  |  |  |

Table 13.7: Residential mobility between MCS3 and MCS4 by 'How safe you feel this area is' at MCS3 (row percentages)

|  | Mover | Non-mover | Total |
| :--- | :---: | :---: | :---: |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 101 families were excluded because it could not be ascertained whether they moved or not. An additional 596 families were excluded because missing of data on main respondent's view of how safe they feel in the area (including missing data due to unit nonresponse) at sweep 3. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

Figure 13.3: Moving home between MCS3 and MCS4, by rating of area as safe/unsafe at MCS3


## Housing, neighbourhood and income poverty at sweep 4

Tables 13.8 to 13.11 show the relationship between income poverty by housing and neighbourhood characteristics at sweep 4. A family is income poor when its OECD equivalised weekly net income is less than 60 per cent of the UK median.

Table 13.8 shows family income poverty and whether the family home is disorganised. Families whose equivalised income was below the 60 per cent level were more likely to agree or strongly agree that they had a disorganised home (20\%) than those above the poverty line (14\%).

Table 13.8: Whether disorganised at home at MCS4 by family net income below 60\% median at MCS4

|  | Above 60\% <br> median | Below 60\% median | Total |
| :--- | :---: | :---: | :---: |
| Strongly agree | 4.4 | 6.2 | 4.9 |
|  | $(367)$ | $(240)$ | $(607)$ |
| Agree | 9.6 | 14.2 | 11.0 |
|  | $(910)$ | $(532)$ | $(1442)$ |
| Neither agree nor disagree | 15.3 | 18.7 | 16.3 |
|  | $(1443)$ | $(763)$ | $(2206)$ |
| Disagree | 46.1 | 44.0 | 45.5 |
|  | $(4520)$ | $(1852)$ | $(6372)$ |
| Strongly disagree | 24.6 | 16.9 | 22.4 |
|  | $(2379)$ | $(737)$ | $(3116)$ |
| Total percentage | 100.0 | 100.0 | 100.0 |
| Unweighted N | $(9619)$ | $(4124)$ | $(13743)$ |
| Weighted N | 9748 | 3998 | 13747 |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 114 families were excluded because of missing data on main respondents response on whether family home was disorganised. Weighting allows for longitudinal unit non-response and atrition up to sweep 4.

Nearly 15 per cent of families whose family income was below the poverty line reported some problems or a great problem with dampness in their homes compared to only 6 per cent of families with family income above the line (see Table 13.9).

Table 13.9: Whether has damp problem in family accommodation at MCS4 by family net income below 60\% median at MCS4

|  | Above 60\% median | Below 60\% median | Total |
| :--- | :---: | :---: | :---: |
| No damp | 88.3 | 77.3 | 85.1 |
|  | $(8531)$ | $(3222)$ | $(11753)$ |
| Not much of a problem | 5.5 | 7.9 | 6.2 |
|  | $(525)$ | $(324)$ | $(849)$ |
| Some problems | 4.8 | 9.6 | 6.2 |
|  | $(453)$ | $(413)$ | $(866)$ |
| Great problem | 1.3 | 5.2 | 2.5 |
|  | $(110)$ | $(176)$ | $(286)$ |
| Total percentage | 100.0 | 100.0 | 100.0 |
| Unweighted N | $(9619)$ | $(4135)$ | $(13754)$ |
| Weighted N | 9748 | 4010 | 13758 |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 132 families were excluded because of missing data on main respondents response on whether there is dampness problem in the family home. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

Seven per cent of main respondents, whose family income was below the poverty line, reported that they had no friends or family in their neighbourhood. For those with family income above this line, the rate was 4 per cent. Distinguishing friends from family shows that 4 per cent of those above the poverty line and 8 per cent of those below it had only family in the area (see Table 13.10).

Table 13.10: Whether have friends or family in the area at MCS4 by family net income below 60\% of median at MCS4

|  | Above 60\% median | Below 60\% median | Total |
| :--- | :---: | :---: | :---: |
| Yes, friends | 23.9 | 19.0 | 22.5 |
|  | $(2265)$ | $(754)$ | $(3019)$ |
| Yes, family | 3.9 | 8.2 | 5.2 |
|  | $(410)$ | $(366)$ | $(776)$ |
| Yes, both | 67.8 | 65.5 | 67.1 |
|  | $(6524)$ | $(2706)$ | $(9230)$ |
| No | 4.4 | 7.3 | 5.3 |
|  | $(422)$ | $(313)$ | $(735)$ |
| Total percentage | 100.0 | 100.0 | 100.0 |
| Unweighted N | $(9621)$ | $(4139)$ | $(13760)$ |
| Weighted N | 9749 | 4017 | 13767 |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 97 families were excluded because of missing data on main respondent's response on whether they have friends or family in the family home area. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

Families with income below 60 per cent of the national median income were more likely to live in an area without parks or playground areas ( $13 \%$ versus $8 \%$ for families above the poverty line), see Table 13.11.

Table 13.11: 'Are there any parks, playground areas where the cohort member can play?" at MCS4 by family net income below 60\% median at MCS4

|  | Above 60\% median | Below 60\% median | Total |
| :--- | :---: | :---: | :---: |
| Yes | 92.0 | 86.9 | 90.5 |
|  | $(8689)$ | $(3553)$ | $(12242)$ |
| No | 8.0 | 13.1 | 9.5 |
|  | $(931)$ | $(580)$ | $(1511)$ |
| Total percentage | 100.0 | 100.0 | 100.0 |
| Unweighted N | $(9620)$ | $(4133)$ | $(13753)$ |
| Weighted N | 9749 | 4010 | 13759 |
| P-value | $<0.001$ |  |  |

Notes: Weighted percentages, (unweighted sample numbers), weighted base numbers, 104 families were excluded because of missing data on main respondent's response on whether there are any parks or playgrounds where the cohort child could play. Weighting allows for longitudinal unit non-response and attrition up to sweep 4.

## Conclusion

While residential mobility between sweeps 3 and 4 was lower than mobility between sweeps 2 and 3 , it is still an important feature of the lives of families with young children. One-fifth of families who participated in MCS4 had changed address since the previous sweep two years or so earlier. The mobility rates were lower in all UK countries of interview, except Wales where the rate remained constant. The biggest drop in mobility among productive families was in Northern Ireland. The mobility rates by UK country of interview have now converged with only three percentage points difference between Northern Ireland with the lowest mobility and Scotland with the highest. If we categorise the reasons given for moving residence, seven out of ten reasons given were dwelling related, while less than half of the movers gave area related or household related reasons for moving. Residential mobility between sweeps 3 and 4 varied according to the ethnicity of the main respondent. Indian,

Pakistani, Bangladeshi and Other/Mixed families were less mobile than the other ethnic groups. Homeowners were less likely to move than those in other types of accommodation. Lone parents and couples where both partners were not in work were much more likely to move between sweeps than couples where one or both partners were in work. Mobility is much higher for respondents who considered their neighbourhood at sweep 3 a poor or very poor area for raising children than for those who considered their area good or excellent in this respect. It is also higher for respondents who considered their area at sweep 3 as very unsafe for raising children. Housing is poorer for families below the poverty line and they were much more likely to report some problems or a great problem with damp. Those with this level of income were also more likely to live in an area without parks or playground areas and were more likely to have no friends or family in their neighbourhood or only family.

## References

Boheim, R. and Taylor, M. (2002) Tied Down or Room to Move? Investigating the Relationships Between Housing Tenure, Employment Status and Residential Mobility in Britain, Scottish Journal of Political Economy, 49: 369-392.

Gibbons, S. and Machin, S. (2006) Paying for primary schools: Supply constraints, school popularity or congestion, Economic Journal, 116 (510): C77-C92.

Jelleyman, T. and Spencer, N. (2008) Residential Mobility in Childhood and Health Outcomes: a Systematic Review, Journal of Epidemiology and Community Health, 62, 584-592.

Ketende, S.C. and McDonald, J.W. (2008) Housing, Neighbourhood and Residential Mobility. In K. Hansen and H. Joshi (eds) Millennium Cohort Study Third Survey:- A User's Guide to Initial Findings.
http://www.cls.ioe.ac.uk/core/documents/download.asp?id=1083\&log stat=1
Michielin, F. and Mulder, C. H. (2008) Family Events and the Residential Mobility of Couples, Environment and Planning, A 40, 2770-2790.

Plewis, I., Ketende, S.C., Joshi, H. and Hughes, G. (2008) The Contribution of Household Mobility to Sample Loss in a Birth Cohort Study: Evidence from the First Two Waves of the UK Millennium Cohort Study, Journal of Official Statistics, 24, 365-385.

Tucker, C. J., Marx, J. and Long, L. (1998) 'Moving On': Residential Mobility and Children's School Lives, Sociology of Education, 71, 111-129.

Verropoulou, G., Joshi, H. and Wiggins, R. D. (2002) Migration, Family Structure and Children's Wellbeing: a Multi-level Analysis of the Second Generation of the 1958 Birth Cohort Study, Children \& Society, 16, 219-231.

## Chapter 14

## CONCLUSIONS


#### Abstract

Heather Joshi

This report has presented a mass of detailed threads from which many patterns are yet to be woven, but we can begin to draw a few of them together. What does the fourth survey tell us about the topics on which the Study was particularly designed to throw light? These are the differences between the countries of the UK, and between ethnic groups, and the emergence or closing of gaps in the development of children growing up in advantaged and disadvantaged homes.


## The four countries of the UK

The study has confirmed that in many ways families in the four UK countries are rather similar. It is nevertheless interesting to point to the relatively few ways in which the countries differ. At the age 7 survey Scotland had the lowest child poverty rate of the four countries in the MCS estimate, as well as the official Households Below Average Income statistics around 2008. Northern Ireland stood out, at the age 5 survey, as having the highest poverty rate and the lowest incomes. However, Northern Ireland was also the country with the highest proportion of mothers expressing satisfaction with their life so far. It had the most confident parents, its children were most likely to have a regular bedtime, and its mothers and fathers were most satisfied with the amount of time they spent with their child. The MCS4 questionnaire that the children themselves completed also showed that 7-year-olds in Northern Ireland were more likely than their contemporaries in other countries to feel happy, laugh a lot, have lots of friends, feel safe in the playground and enjoy physical activity. These leads were not overwhelming, and though statistically significant, do not mean that child wellbeing is unambiguously higher in Northern Ireland. For example, children in England were the most likely to say they enjoyed school. Children in Wales were the most likely to be reported in excellent health. On cognitive tests, England and Scotland had higher average scores on a verbal assessment and a lower one on the non-verbal pattern construction. There were no significant inter-country differences in maths. Analysis of the data highlighted other small but significant differences between countries: children in Scotland were the most likely to walk to school and mothers in Wales were most likely to engage in musical activities with the cohort child. Less positively, children in Wales were most likely to have a lone mother or an obese father. Regional differences within England may be starker than those between countries, for example the poverty rate in England's North East and London was higher than in Northern Ireland and Wales.

The major finding of this study is that the variation of family circumstances and children's outcomes is far greater within countries, than between them. The socioeconomic gap in each outcome is likely to be of similar magnitude right across the UK. It will require more detailed analysis than is carried in this report to establish
whether the impact of the devolved governments' own health and education policies can be discerned behind the broad similarities between countries. There is also scope for much more geographical analysis within countries than has been included in this report, for example comparing different types of urban and rural settings.

## Ethnic diversity

Ethnic minorities were of interest in the context of cultural diversity, but also in that of economic disadvantage. It was not intended that the minority ethnic wards originally sampled should all be areas of high child poverty, but not a great surprise to find that they were. A high proportion (86\%) of cohort members in these particular wards was from minority ethnic groups, but members of ethnic minorities were also sampled elsewhere, particularly in urban England. By the time of the fourth sweep the 'ethnic wards' still had the lowest incomes and the least outward movement. Regardless of where they lived, however, families in broad minority ethnic groups, apart from Indians, had considerably higher poverty rates than whites. Pakistanis and Bangladeshis taken together had a poverty rate of 73 per cent, and black groups 51 per cent, compared with 26 per cent for white families. This is a similar pattern to previous sweeps, with the exception of the Indian families drawing closer to whites.

Relative gains by Indian families are more dramatic when it comes to children's verbal cognitive assessments. At age 3 all the minority groups were behind white children on English vocabulary. By age 5 the gap had narrowed, and by age 7, when verbal skills were measured by Word Reading, Indian children had surpassed white children by a clear margin and the other minority children had also caught up with white children. On maths and non-verbal skills, there also seemed to be little ethnic differential, despite the economic disadvantages of all the groups except Indians.

In contrast, the measure of behavioural adjustment used in this survey (the mother's report on behaviour problems) still shows poorer adjustment in all minority groups except one. This time it is not the Indian children, but black Africans. All groups had fewer behaviour problems, on average, than at the age 3 survey, but Pakistani and Bangladeshi children still have the most reported difficulties.

There is plenty of other evidence in these pages of diversity between ethnic groups in areas from child and parental health, parenting practice, employment, family structure, and the children's own accounts of their lives. These should caution against crude white/non-white comparisons, and also encourage investigation of as fine a classification as possible when ethnic differences are under consideration.

## Social gradients

For many, the major issue on which the Millennium Cohort Study can be brought to bear is how far children's life chances are determined by the advantages and disadvantages facing the families into which they are born. To what extent can children flourish from inauspicious beginnings, to what extent can advantaged parents protect their offspring from failure? Now that the MCS children have been exposed to the school system for at least two years, are the schools redressing initial differences, offering compensation for early disadvantage, reinforcing them, or at least providing a 'level playing field'?

There is abundant evidence of the transmission of social and economic advantage in all the follow-up sweeps of the survey. A key question for this report is whether the differentials widen or narrow between age 5 and age 7. Although the following estimates will be refined by taking a consistent longitudinal sample, a preliminary overview is possible on the basis of this and previous cross-sectional reports. Note that these reports are not perfectly comparable in, among others, the treatment of attrition. The comparisons which follow are therefore indicative rather than definitive. Note also that they do not reveal the trajectories of individual families, for example by identifying families who have been in persistent poverty from those whose disadvantages have been more transient. While around 30 per cent of families had incomes below the poverty threshold at any one of the four surveys, they were not always the same families. There was considerable movement in and out of the poverty category, such that well under half of those currently below the line would have been there at all four surveys - around 1 in 8 .

On the key criterion of the child's cognitive ability, the indicators are that the social gap, already evident in the pre-school years, remained roughly constant between ages 5 and 7, when verbal and non-verbal skills are considered together, whether the comparison is between the least and the highest educated parents or between families below and above the poverty line. The greater sensitivity of verbal skills to social background may reflect differences in parents' use of language and in the home learning environment in particular. If some least educated parents are less supportive (or effective) in practices such as reading to the child, they may themselves need support. However, the less educated parents were in general offering the child more help with homework.

Behavioural adjustment is another important indicator of the child's social and emotional development, and of capacity to benefit from schooling. Non-cognitive skills are also important for the prospects of a healthy and productive adult life. Findings at 7 suggest a fairly strong continuity of problems reported at age 3 and 5. The social gap seems to have held more or less constant between ages 5 and 7. This applies to the contrast between children with well-educated parents and those with no qualifications and to the advantage for children living with both their natural parents over lone parents and step families. However, comparing the cross-sectional tables, the social gap in problem behaviour was smaller at age 3.

As for socioeconomic inequalities in health, the picture is of little variation at age 7, and, if anything, gaps for children are narrowing, except for indicators such as overweight where the small social gap appears to have remained about the same. One might want to put any improvements down to the success of the National Health and Early Years Services, or, more pessimistically, conclude that age 7 is too young for the cumulative impact of health disadvantages to emerge. The contrast in mothers' and fathers' general health by parental education level was much starker than the children's. The higher smoking rates of poorer parents and lower levels of family exercise may be reasons to fear that health disadvantages for children may accumulate as they get older. The gap on mothers' mental health and life satisfaction, which may also feed back into child wellbeing, widened slightly at sweep 4 compared to sweep 3.

Apart from the few attending fee-paying schools, there is little evidence from parents' reports that schools are reinforcing inequalities in the home background. The overarching impression from the parental interviews is of all families, right across the social spectrum, taking an interest in the Millennium Children's schooling and having high aspirations for them. Further evidence on this will become available from linkage to administrative records and from the teacher survey, but meanwhile, the picture from the children's own self-completed report is that the experience of school is generally positive. Children from poorer homes have more polarised views of school. They are both more likely to be enthusiastic but also to be in the minority reporting unhappiness, exclusion or bullying.

## Envoi

The evidence from the fourth survey is building a picture of the continuing interdependence of parents' and children's lives, even as school provides another arena. The age 7 survey has offered the opportunity to listen to the children's own view of the world, and to assess their enjoyment of childhood. While their wellbeing is clearly an end in itself, it may also assist with their engagement in school and family life, and the future development which this Study seeks to follow. Whether or not trouble will cloud the cohort members' future, the conclusion from the age 7 survey must be that the children of the New Century are, on the whole, thriving, healthy and doing their best to learn. The report on the 'playing field' is that it still offers more of an obstacle race to the economically disadvantaged than for those with easier starting positions, though the hurdles seem to be getting lower for ethnic minorities.


[^0]:    ${ }^{1}$ Past British national birth cohort studies, such as those of 1946, 1958 and 1970 (NSHD, NCDS and BCS70), have used a sample of all children born in a single week whereas MCS cohort members have a larger spread of ages. This makes it possible to differentiate by season of birth, but also implies that the complex sample design must be accounted for in analysis.

[^1]:    ${ }^{2}$ Stata ${ }^{\circledR}$ : Data analysis and statistical software - see www.stata.com.

[^2]:    Key: Eng=England,, Adv=Advantaged, Dis=Disadvantaged, Eth=Etnic Wal=Wales, Scot=Scotland, NI=Nothern Ireland

[^3]:    ${ }^{3}$ The Childcare Strategy for Scotland 1998; Childcare Strategy for Wales: Childcare is for Children 1999; Children First - The Northern Ireland Childcare Strategy, 2000.

[^4]:    ${ }^{4}$ There were 35 families with a stepmother and natural father and 98 lone (natural) fathers.

[^5]:    ${ }^{5}$ All tables in this section include proportions for family type both with and without the natural parents split by their marital status. In order to do this, separate cross-tabulations were run for each table and the results of significance tests for both cross-tabulations are included in the tables. ${ }^{6} 13,392$ out of 13,857 ( $97 \%$ ) of main respondents were natural mothers (see Table 2.9 in Chapter 2).

[^6]:    ${ }^{7}$ In the sample analysed in this section, all main respondents were natural mothers.

[^7]:    Continued

[^8]:    ${ }^{8}$ Note that these comparisons of cross-sections are not tracing out the experience of individuals longitudinally, which is beyond the scope of this report, but would be an avenue ripe for research.

[^9]:    ${ }^{9}$ In Wales, the new Foundation Phase will be extended to cover 3 to 4 -year-olds in 2008. 5 to 6 -yearolds from 1st August 2010. The roll-out will have been completed by September 2011 for all children up to the age of 7. This will replace the National Curriculum. Although Key Stage 1 is being phased out, it still applied in 2008 to the children in the MCS cohort. There is no statutory requirement to teach English at Key Stage 1 in Welsh-medium schools.

[^10]:    ${ }^{10}$ If paid within 28 days - $£ 100$ if paid within 42 days.
    ${ }^{11}$ Scotland and Wales do not impose such penalties.

[^11]:    ${ }^{12}$ Department for Children, Schools and Families (2008) Trends in Education and Skills. http://www.dcsf.gov.uk/trends/index.cfm. (Last accessed 12 April 2010); DfE: Special Educational Needs in England (January 2010) http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000939/index.shtml
    ${ }^{13}$ Pupils with Statements of Special Educational Needs (January 2010) http://wales.gov.uk/topics/statistics/headlines/schools2010/100616/?lang=en
    ${ }^{14}$ Pupils in Scotland (2009) http://www.scotland.gov.uk/Publications/2009/11/05112711/9
    ${ }^{15}$ Enrolments at schools and in funded pre-school education in Northern Ireland 2009/10 http://www.deni.gov.uk/february press release 2-4.pdf

[^12]:    Note. Unweighted obs in regular font, weighted percentages in parentheses, weighted count in italics. Percentages

[^13]:    ${ }^{16}$ In Scotland and Northern Ireland, homework policy is left to the discretion of schools.

[^14]:    ${ }^{17}$ Now the Department for Education

[^15]:    ${ }^{18}$ For detailed results from MCS3, see Jones and Schoon (2009).

[^16]:    ${ }^{19}$ We do not present analyses for tuberculosis, where just six children were reported as ever suffering from the disease, though there were 16 such reports at age 5 (Sullivan and Joshi, 2008). We also do not present statistics on chicken pox due to the high levels of missing data.

[^17]:    Notes: As Table 9.1.

[^18]:    ${ }^{20}$ We find little difference here between the UK90 and Obesity Task Force definitions. Differences between MCS data and from the Health Survey for England (such as used by Nessa and Gallagher

[^19]:    (2004) and Scholes and Heeks (2008)) may arise from various differences between sources as well as different cut-off points.
    ${ }^{21}$ Assuming anything under the $5^{\text {th }}$ percentile of BMI can be considered as being underweight. We used the $5^{\text {th }}$ percentile from the Health Survey for England for children aged 7 and apply this cut point to MCS data (Scholes and Heeks, 2008).

[^20]:    Notes: As Table 9.1. Weight dovwt1 was used for country analyses .
    The BMI cutoffs in Tables 9.24 to 9.29, and Figures 9.6 and 9.7 have been corrected in this edition.

[^21]:    Notes: As Table 9.8.

[^22]:    ${ }^{22}$ This campaign was launched in England. Other countries launched similar initiatives including Healthy Challenge Wales (Wales), Take-Life-On and Healthy Weight Communities (Scotland) and Get a Life, Get Active (Northern Ireland).

[^23]:    ${ }^{23}$ Taking no more than one mother and one father per family.

[^24]:    ${ }^{24}$ Throughout this chapter, country refers to the country at the child's birth. Chapter 2 in this volume contains information on changes between country of residence when the child was aged 7 and the country at birth of the child.

[^25]:    ${ }^{25}$ Includes overseas or unclassifiable qualifications.

[^26]:    ${ }^{26}$ Refers to current occupational class

[^27]:    ${ }^{27}$ Includes overseas qualifications or unclassifiable qualifications.

[^28]:    ${ }^{28}$ Refers to current occupational class

[^29]:    Notes: See Tables 10.1 and 10.2.

[^30]:    29. 'Longstanding was defined as ' anything that has troubled you over a period of time or that is likely to affect you over a period of time'
[^31]:    ${ }^{30}$ Includes overseas qualifications or unclassifiable qualifications.

[^32]:    ${ }^{31}$ Includes overseas qualifications or unclassifiable qualifications.

[^33]:    ${ }^{32}$ Includes overseas qualifications or unclassifiable qualifications.

[^34]:    ${ }^{33}$ Includes overseas qualifications or unclassifiable qualifications.

[^35]:    ${ }^{34}$ Includes overseas qualifications or unclassifiable qualifications.

[^36]:    ${ }^{35}$ Includes overseas qualifications or unclassifiable qualifications.

[^37]:    ${ }^{36}$ Includes overseas qualifications or unclassifiable qualifications.

[^38]:    ${ }^{37}$ Includes overseas qualifications or unclassifiable qualifications.

[^39]:    Notes See Table 10.1 and 10.2. Sample includes natural/step/adoptive/foster mothers and fathers in couples only

[^40]:    ${ }^{38}$ The Body Mass Index adjusts weight for a person's height. It is defined as weight in kilograms divided by the square of height in metres. For adults a BMI above 25 is 'overweight'; the threshold for obesity is 30 , for severe obesity, 35 , morbidly obese 40 , and super obese, 45 .

[^41]:    ${ }^{39}$ Includes overseas qualifications or unclassifiable qualifications.

[^42]:    ${ }^{40}$ Includes overseas qualifications or unclassifiable qualifications.

[^43]:    ${ }^{41}$ Before housing costs and adjusted for household composition.

[^44]:    ${ }^{42}$ These questions include 'unfolding brackets' to help respondents estimate amounts within narrowing ranges. These data are available to users, but need to be treated with caution pending further work to evaluate them.

