Evaluation of Children's Centres in England (ECCE)

Strand 2: Baseline Survey of Families Using Children's Centres in the Most Disadvantaged Areas

Research Report

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Contents

Table of figures

Evaluation of Children's Centres in England

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Executive summary

This report provides findings from a survey of families who were using children's centres (officially called Sure Start Children's Centres) when their child was 9-18 months of age. It is part of a larger evaluation of children's centres in England.

Background (Chapter 1)

The Department for Education describes children's centres' core purpose as:

Improving outcomes for young children and their families, with a particular focus on the most disadvantaged families, in order to reduce inequalities in:

- child development and school readiness;

supported by improved:

- parenting aspirations, self esteem and parenting skills;
- child and family health and life chances (DfE 2012).

The Evaluation of Children's Centres in England is a large scale, six year study that looks at Sure Start Children's Centres (SSCCs) in the most disadvantaged areas of England. These are centres that were set up in the first two phases of the programme.

The evaluation will provide a very detailed picture of children's centre services. This includes how effective they are when they use different approaches in their management and when delivering services and activities for parents and children. It also looks at the cost of delivering different types of services.

The evaluation is made up of four parts:

1. A **survey of children's centre leaders.** This collects information on children's centre management, staffing, service delivery and finance (see Tanner et al. 2012).
2. A **longitudinal survey of families using children's centres.** This will follow families who use the centres from when their child is 9 to18 months old until they are 3 to 3.5 years old. It looks at children's development and parents' use of services and activities provided by the centre.
3. A more **detailed investigation** of the children's centres including:
   a. the range of activities and services they offer
   b. leadership in centres
   c. evidence-based practice
   d. parenting support services
   e. partnership working
   f. children's centre reach
4. **A cost-benefit analysis** to assess the effectiveness and benefits of children's centres and linking this to how much they cost to provide.

The findings presented here are from the first survey of families using children's centres. These families had to be registered with a children's centre. We call this centre where they were registered the 'named children's centre'.

The key aims of the longitudinal survey of parents are to:

- provide estimates of the level of take-up of various children and family services among families with different socio-economic characteristics;

- monitor changes in patterns of use over time; and

- collect data on different aspects of child development and family functioning in order to enable an analysis of impact on child outcomes from using different types services.

Parents' Use and Views of Children's Centres (Chapter 2)

Who uses children's centres?

- Mothers were far more likely to use family services than fathers. The services fathers were particularly likely to attend were:

    - ante-natal classes with mothers

    - basic IT or jobs skills courses

    - employment support

    - peer support groups (such as a Dads' club)

- In 7% of families someone other than the parents took the 9-18 month old child to the named children's centre (often this was another family member such as a grandparent or a childminder).

What services do parents use?

- The activities and services that families most often used at their named children's centre were:

    - 'stay and play' or 'play and learn' groups (47%)

    - midwife or health visitor drop in sessions or clinics (47%)

    - organised sport or exercise for babies or children (19%)

- This high level of take-up reflects the high proportion of centres who offer these services.

- Some services were only taken up by a very small proportion of families (for example, English as a second language classes, speech and language therapy). But this can largely be explained by the low number of families in the survey that needed these.

- 36% of families reported that they had at some point received a home visit from someone at the children's centre.

Childcare

- 41% of families used some kind of formal childcare for their 0-5 year old children, but only 4% used formal childcare that was provided by their named children's centre. This figure is likely to rise when the selected children are older: a large proportion of parents prefer not to

use nursery provision at 9-18 months and free part-time childcare does not begin in most areas until children are three.

Patterns of use

- Typically families started using their named children's centre at some point in the two years before they were interviewed.

- 46% of families only used one or two services from the named children's centre. However, 24% used three to five of the named children's centre services and 5% used six or more.

- The way in which families used their children's centre varied enormously in terms of:

    - the number of services they used and the activities they attended

    - the number of months over which they used different services and activities

    - the frequency with which they used them

- In total, 15% of families said that they had not used any activities or services at the named children's centre recently. This was usually because:

    - Preference: they preferred to use another children's centre

    - Distance: it was too far away or hard to get to

    - Time constraints: they had no time or were too busy

    - Awareness: they had not been aware that the children's centre existed

    - Lack of need: they did not need to use any family services or activities

- Exploratory analysis[1] identified two broad groups based on the types of services parents were using and how much they were using them:

    - '*limited*' users of family services (19%) – these families tended to only use health related services.

    - '*heavy*' users (38%) – these families used lots of the centre's services and activities, especially activities for parents and toddlers.

    - The remaining 43% of respondents showed no clear pattern in how they used the centres

Services used by parents elsewhere

- The types of services that families often used but were run by organisations that were not linked to children's centres were:

    - ante-natal classes (21%)

    - midwife/health visitor drop in sessions or clinics (25%)

    - benefits and tax credit advice (11%)

    - organised sport or exercise for babies or children (10%).

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[1] The exploratory analysis summarised here was based on unweighted data.

- Most children's centres offer these services and therefore using these services elsewhere seems to be down to parents' preference or not realising it was offered by the children's centre, rather than the children's centre not providing it.

Satisfaction with children's centres

- Generally satisfaction with the services and activities from the named children's centre was very high. Just under half of parents (49%) said that they were 'very satisfied' and a further 29% said that they were 'fairly satisfied'.

- Families who used activities or services at the named children's centre typically found them very helpful. For each of the 22 service categories the majority of users considered them to be 'very helpful' and the proportion of users who rated them as 'very' or 'fairly helpful' ranged from 88% to 100%.

Parent Physical and Mental Health (Chapter 3)

We know that parents' physical and mental health can have an effect on their children and their long term life outcomes.[2] The key findings were:

Mental Health

- Some parents were notably more likely to have poor mental health than others. Those more likely to have poor mental health included:
    - parents whose household income was under £10,000 (28% compared with 13% of those whose income was £40,000 or more);
    - parents from households where no one was in work (28% compared with 16% of parents from working households); and
    - lone parents (27% compared with 16% of those in two-parent households)

Physical health

- 11% of mothers and 8% of fathers had a long-standing illness or disability.

Drinking, smoking and substance abuse

- Parents' responses show that on the whole their drinking was moderate.
    - 33% said that they never drank alcohol
    - 24% said that they drank alcohol less than once a month
    - 25% said that they drank once a week or more often
- The majority of parents were non-smokers (80%) and only 16% smoked every day.
- A notable proportion of mothers had smoked during pregnancy (15%).
- The majority of mothers and fathers (81% and 77% respectively) had never tried drugs.

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[2] Questions about parents' health (mental and physical) and their smoking, drinking and drug use were asked in a self-completion part of the questionnaire (on a laptop) due to their sensitivity.

- Just 1% of parents said that they currently use drugs. Three per cent said that they had used them quite often in the past but do not use them now.

Food preparation and diet

Diet is an important aspect of physical health and so parents were asked about the food they ate and how often they prepared it from scratch or ate ready made/convenience foods.

- Parents generally had positive attitudes toward the time and expense of preparing meals from fresh ingredients. However, 11% felt that preparing meals from fresh ingredients took too long and 15% felt that it was too expensive.

- Families with the lowest household income (less than £10,000) were most likely to express the view that it takes too long (16%) or that it is too expensive (23%) to prepare meals from fresh ingredients.

- 79% of parents said they ate fresh meals every day or most days. Ready meals were consumed every day or most days by just 3% of respondents. Over two-thirds of respondents (70%) said that they ate ready meals less often than once a week or never.

Child Health (Chapter 4)

Child health is a very important area for children's centres. Seventy five per cent of children's centres in deprived areas offer health services themselves and the 25% of those who do not, 'signpost' families to health services that are available elsewhere (Tanner et al. 2012). In our survey:

Birth weight, breastfeeding, early immunisations

- Only 9% of children had a low birth weight (less than 2.5kg) but 35% were born before full term (before 37 weeks gestation).

- 77% of respondents said that they had tried to breastfeed their 9-18 month old child.

- 45% of children were breastfed beyond three months old, and 32% were breastfed beyond six months.

- Almost all children (96%) had had their recommended immunisations at 2, 3 and 4 months old.

Long-standing health problems

- Two-thirds of children had no long-standing health problems (67%).

- Where children did have long-standing health problems, the most common were skin problems and breathing problems. For 66% of children with long-standing health problems their issues were severe enough to have involved visits to the hospital or regular visits to the GP.

Accidents and injuries

- The majority of children had not had an accident or injury that was serious enough to require a trip to Accident and Emergency at a hospital (72%). However, 19% of children had been to A&E once and 9% had been twice or more.

Development

- In terms of children's development (for example, learning new skills such as crawling, walking and talking), 9% of parents felt that their child was developing less quickly than other children their own age, and 9% had some concerns regarding their child's development.

Diet

- The majority of children ate fresh fruit, or vegetables and salad every day (71% and 68% respectively).

Parenting and Family Functioning (Chapter 5)

In the same way that parents' and children's health affects their long term outcomes, parenting style and how the family functions also play an important role.

Activities and Home Learning Environment (HLE)

- Half of parents (50%) said that they took their 9-18 month old child out of the house at least once a day.

Home learning environment is what happens at home to encourage children's learning. We found that:

- The most frequent home learning activity was parents drawing their child's attention to the names of things (90% did this with their 9-18 month old at least once a day)
- 82% sang songs or nursery rhymes with their child at least once a day
- 65% of parents read to their child at least once a day
- 62% used blocks or shape sorting toys with their child at least once a day
- 58% talked about or tried to teach their child the names of colours and shapes at least once a day
- The least common activity for parents to do was to engage in messy play. Only 8% of parents did this at least once a day and 40% had not yet given their child a chance to play in a messy way.
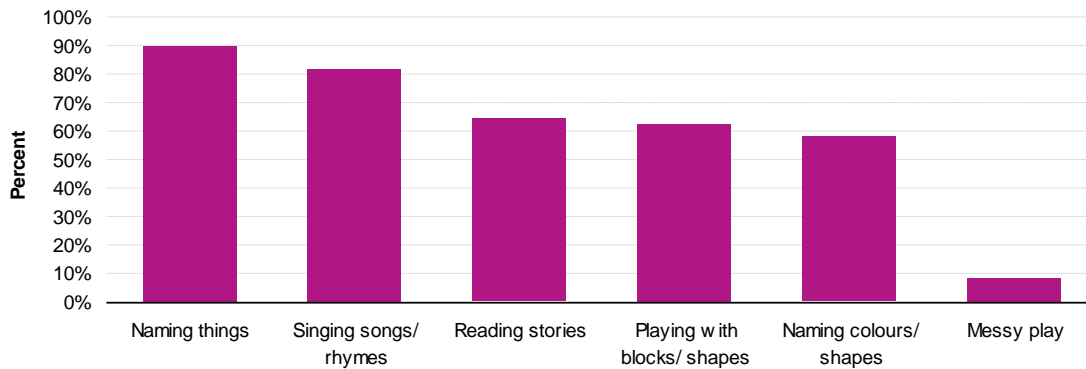
- Families with higher incomes and where mothers had higher levels of education had higher HLE scores than lone parent families.

- Families where at least one parent was in paid employment had higher HLE scores than those where parents did not work.

- Watching a lot of TV can affect child development. Fifty two per cent of 9-18 month old children in the study watched fewer than 30 minutes of TV a day with their parents and 76% watched fewer than 30 minutes of TV on their own. Only 5% watched more than three hours of TV a day with their parents and only 2% watched more than three hours of TV on their own.
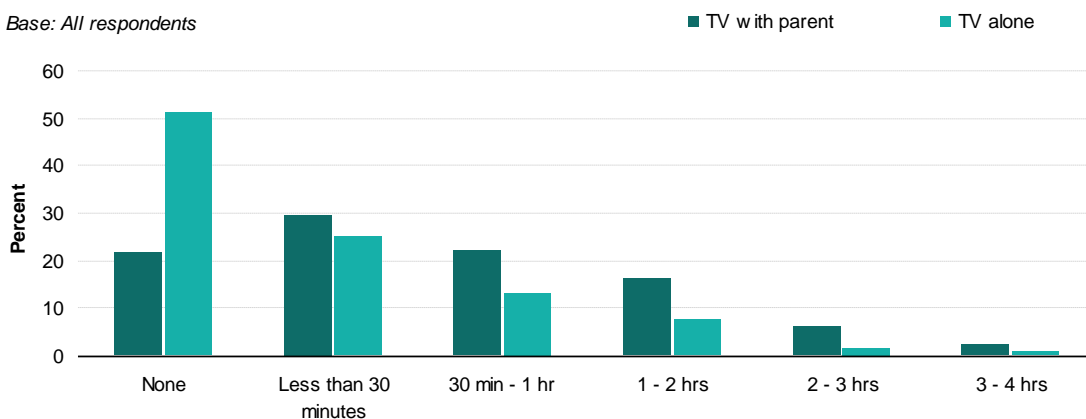
Calm versus chaotic homes

- A relatively small proportion of parents believed their home environment was chaotic:

  - 11% thought their home was really disorganised
  - 12% agreed that 'one could not hear themselves think' in their home
  - 8% could not describe their home atmosphere as calm
  - 3% said that they did not have a regular routine at home

- Families with higher incomes, those where mothers had higher educational attainment, those with two parents and where at least one parent worked tended to have slightly less chaotic and more organised homes than those in more disadvantaged circumstances.

Major life changes

- 29% of parents said that major life changes had happened in their family since the selected child was born. A death of a family member was mentioned most frequently (17%), with other life events (such as unemployment, divorce or imprisonment of a family member) being mentioned by fewer families (2-9%).

Relationships

- 19% of households were lone parent households. In 77% of these households respondents said that their child had contact with their other natural parent. However, only a quarter (25%) of children in lone parent households saw their non-resident parent every day.

- For couples, most were satisfied with their relationship with their partner (94%), and levels of criticism of the other partner appeared to be relatively low.[3]

- Only 2% of respondents reported that their partner was ever violent towards them.

Involved Dads

- Fathers who lived with their children were very involved with *playing* with their child – 77% did so every day. However, they were far less likely to be involved in *caring* activities. Only 17 - 22% of fathers looked after their child on their own, dressed their child, or got them ready for bed every day.

- There were no statistically significant associations between family socio-demographic characteristics and the degree of father's involvement in child rearing.

Stress

- More disadvantaged families experienced higher levels of stress than those with more advantages. These included parental distress, parent-child dysfunctional interaction, and difficult child – parent relationships.

Parenting style, family functioning and family characteristics

- Exploratory analysis[4] focussing on two-parent families showed that there were two broad groups of households based on different patterns of parenting and family functioning:
    - *More favourable* parenting and family functioning (39%)
    - *Less favourable* parenting and family functioning (61%).
- These two groups of households differed significantly from one another on several measures of parenting and family functioning including:
    - Home Learning Environment
    - Parenting Stress Index

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[3] Questions about marital relationships, father involvement in child rearing and parenting stress were asked in a self-completion section of the questionnaire (on a laptop) due to their sensitivity.

[4] The exploratory analysis summarised here was based on unweighted data.

- the quality of a respondent's relationship with their partner
- the extent of the father's involvement in child rearing
- the level of organisation within the home

- Households with lower household income were slightly more likely to be characterised by less favourable parenting and family functioning. There were no statistically significant differences between these two groups with regard to households' working status, mother's educational qualifications and mother's martial status.

1. Introduction

1.1 Background to the evaluation

This report presents findings from the baseline survey of parents, and is part of the Evaluation of Children's Centres in England (ECCE). This is a six year study commissioned by the Department for Education and carried out by NatCen Social Research, the University of Oxford and Frontier Economics.

The Department for Education describes children's centres' core purpose as:

> Improving outcomes for young children and their families, with a particular focus on the most disadvantaged families, in order to reduce inequalities in:
>
> - child development and school readiness;
>
> supported by improved:
>
> - parenting aspirations, self esteem and parenting skills;
>
> - child and family health and life chances (DfE 2012).

The aim of the evaluation is to provide an in-depth understanding of children's centres services, including their effectiveness in relation to different management and delivery approaches and the cost of delivering different types of services. The key elements of the evaluation are outlined below.

- **Strand 1: Survey of children's centre leaders**. The aim of this strand is to collect information on centre provision in the most disadvantaged areas. Information was gathered on the children's centre management, staff, services, finance and users of the centre. Close to 500 children's centres, which were representative of all Phase 1 and 2 centres[5] in the most disadvantaged areas, took part in the first wave of the survey (Tanner et al. 2012). The follow-up survey, due to be carried out in 2013, will monitor any changes in provision.

- **Strand 2: Survey of families using children's centres**. Families from 128 of the centres interviewed for Strand 1 were interviewed for the first time when their child was 9-18 months old. They were asked about the services they used and their family's circumstances, health and well-being. Families will be interviewed again when their children are 2-2.5 and 3-3.5 years old to produce a profile of children's development and how the services they use change over time.

- **Strand 3: Investigation of children's centres' service delivery, multi-agency working and reach**. The research team will visit 120 children's centres for three full days to find out more about the services on offer. These visits will assess:

  - the range of activities and services centres deliver

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[5] The Department for Children, Schools and Families set up children's centres in three phases: phase 1 (2004-06) targeted areas of greatest social need – the 20 per cent most deprived wards in England; phase 2 (2006-08) completed the coverage of the most deprived communities the definition of which was widened to include the 30 per cent most deprived – and expanded into some of the 70 per cent less deprived communities; and phase 3 (2008-10) extended to all remaining 70 per cent less deprived areas of England.

- leadership
- evidence-based practice
- parenting support services
- partnership working

The research team will also carry out a profiling exercise in these 120 children's centre areas to assess their reach. This will be done by comparing information about the centres and the families that use them to existing data on the demographic composition of the centres' catchment area.

- **Strand 4: Impact analysis.** The evaluation aims to answer the question: 'Which types of children's services affect different outcomes when children are three years old and later when they are five years old?' This question will initially be explored by examining the information generated on provision and use of services. An additional stage of the impact research will use children's Early Years Foundation Stage Profile results to assess the effect of children's centres on school readiness at age five.

- **Strand 5: Cost benefit analysis.** Lastly, the research team will carry out case studies in 24 children's centres to explore the costs of delivering different services. This information will be combined with data from other elements of the evaluation to assess the cost-effectiveness and cost- benefits of children's centres.

The evaluation will study the impact of children's centres by comparing families who are 'lighter' users with those who are 'heavier' users (in terms of e.g. the number of services they have used and how much they have been using them). The analysis will use multilevel models featuring key aspects of children's centres and the services that they offer.

1.2 Aims of the survey of parents

The key aims of the longitudinal survey of parents (Strand 2) are to:

- provide estimates of the level of take-up of various children and family services among families with different socio-economic characteristics;

- monitor changes in patterns of use over time; and

- collect data on different aspects of child development and family functioning in order to enable an analysis of impact on child outcomes from using different types services (Strand 4).

This report focuses on the baseline survey, carried out with parents when one of their children (the 'selected child') was aged 9-18 months old. The survey collected information about parents (including non-resident parents) and children in the household, with most child-related questions focusing on the 'selected child'. In most families, there was just one child aged 9-18 months old, who automatically became the selected child. Where there was more than one child of that age in the household, one of them was chosen at random.

The areas covered in the questionnaire included:

- use of formal and informal childcare;

- use of children and family services at the local children's centre and elsewhere;

- parent physical and mental health;

- child health;

- family and child eating habits;

- parenting and family functioning; and

- socio-demographic characteristics.

1.3 Methodology

This chapter describes the methodology of the baseline survey.

1.3.1 Sampling

The evaluation of children's centres is based upon a longitudinal survey of parents. These parents were users of children's centres that responded to an initial survey of centre managers. The stages in the process of sampling parents were as follows:

- A sample of 850 centres was selected for the centre managers' survey from the list of those eligible.

- A sub-sample of 300 centres was then selected from the responding sample and invited to recruit their users for the evaluation.

- A core sub-sample of 120 centres, plus an extra sub-sample of eight centres were then selected from the centres that successfully recruited users for the evaluation.

- A total of 10,187 parents were selected from these 128 centres and invited to take part in the longitudinal survey of users. This resulted in 5,717 interviews.

The different stages in the process of sampling parents for the users' survey are shown in Figure 1.1 and described in detail in Appendix D.

Figure 1.1 ECCE sample design

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                           ┌─────────────────────────┐     ┌──────────────────────────────────────┐
                           │ 1,721 eligible children's│     │ To be eligible: Phase 1 or 2 centre; │
                           │ centres nationally      │     │ in a 30% most deprived area;         │
                           └─────────────────────────┘     │ designated for min. 2 years before   │
┌─────────────────────────┐           │                    │ fieldwork; running Full Core Offer   │
│ 73 children's centres   │           │                    │ for 3+ months before fieldwork       │
│ used for piloting       │           │                    └──────────────────────────────────────┘
└─────────────────────────┘           ▼
                           ┌─────────────────────────┐
                           │ 1,648 eligible children's│
                           │ centres post piloting   │
                           └─────────────────────────┘
                                       │  Sub-sample
                                       ▼
                           ┌─────────────────────────┐     ┌──────────────────────────────────────┐
                           │ 850 issued for children's│     │ Stratified by: Lead Organisation;    │
                           │ centre manager survey   │     │ Catchment size quintile; Urban/rural;│
                           └─────────────────────────┘     │ Catchment number                     │
┌─────────────────────────┐           │  59% eligibility rate └─────────────────────────────────────┘
│ 21 achieved but quite   │           │
│ incomplete              │           ▼
│ 5 achieved too late*    │  ┌─────────────────────────┐
└─────────────────────────┘  │ 504 achieved & eligible │
                           │ from children's centre  │
                           │ manager survey          │
                           └─────────────────────────┘
                                       │  Sub-sample
                                       ▼
                           ┌─────────────────────────┐     ┌──────────────────────────────────────┐
                           │ 300 issued for user     │     │ Stratified by: Lead Organisation;    │
                           │ sampling                │     │ 2010/11 cuts to children's services; │
                           └─────────────────────────┘     │ Runs 1+ EBP                          │
┌─────────────────────────┐           │  56% eligibility rate └─────────────────────────────────────┘
│ 14 achieved but too     │           │                     ┌──────────────────────────────────────┐
│ small                   │           ▼                     │ + selected all 28 NHS led centres    │
│ 8 achieved too late     │  ┌─────────────────────────┐    │ (either solely or in combination)    │
└─────────────────────────┘  │ 167 achieved & eligible │    └──────────────────────────────────────┘
                           │ from user sampling      │
                           └─────────────────────────┘
┌─────────────────────────┐           │  Sub-sample
│ 8 extras for strands    │           ▼
│ 2, 3, 4 & 5             │  ┌─────────────────────────┐
│ 22 extras for strands   │  │ A core 120 that form the│
│ 3 & 5                   │  │ basis of strands 2, 3 & 4│
└─────────────────────────┘  └─────────────────────────┘
          │                            │
          ▼                            ▼
┌─────────────────────────┐  ╱──────────────────────────╲
│ 12 form basis of        │  │ 10,187 users issued      │
│ strand 5                │  │ for user survey          │
└─────────────────────────┘  ╲──────────────────────────╱
                                       │
                                       ▼
                             ╱──────────────────────────╲
                             │ 5,717 users              │
                             │ achieved from user       │
                             ╲──────────────────────────╱
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*These 5 were included in the Strand 1 analysis. As such the response rate for the Strand 1 analysis was 60%.

1.3.2 Data collection

The survey was carried out with parents (or guardians) of children aged 9-18 months old at the time of the baseline survey. In 96% of families, the respondent was the child's mother[6] (see 0). The interview was conducted face-to-face in respondents' homes using Computer Assisted Personal Interviewing (CAPI) and show cards with answer options where appropriate[7]. Some sections of the questionnaire – those containing more sensitive questions – were completed by respondents on their own using Computer Assisted Self Interviewing (CASI). The average length of the interview was 45 minutes.

The questionnaire was piloted with users of children's centres from the pilot sample before being finalised for the main stage of fieldwork. The fieldwork for the main stage took place between February and May 2012. The initial contact with selected parents was made by letter. These were sent by children's centre managers on behalf of the Department for Education and the research team. The letter told parents that the research team would like to invite them to take part in the evaluation but that they could opt out of the study by contacting their children's centre. Those parents who did not opt out were then contacted directly by NatCen Social Research, first by letter, and then through a home visit from one of NatCen's interviewers.

Consent to take part in the study was obtained by interviewers before the baseline interview. At the end of the interview, respondents were asked whether they would be wiling to take part in a follow-up study in a year's time. Ninety-seven per cent of parents agreed, and these will be invited to take part in the follow-up surveys.

Once the data had been collated and cleaned, a weighting scheme was designed for the study to account for different selection probabilities and non-response bias. The details of the weighting scheme are provided in 0. All the descriptive analysis presented in chapters 2 to 5 of this report has been carried out on weighted data; however, exploratory analysis presented in 0 and 0 is based on unweighted data.

1.3.3 Interviewer training and quality assurance

A total of 315 interviewers worked on the evaluation. Before starting work interviewers received either:

- a face-to-face briefing on the project background, procedures, and protocols from a member of the research team; or

- completed a home briefing which covered the same topics through written instructions, a project-specific training DVD, and associated homework that was checked by staff in NatCen's Operations Department.

NatCen Social Research routinely applies very high standards of field management and quality control, and we have a strong and comprehensive system for providing interviewers with feedback about their performance and for addressing any shortfalls, whether in terms of response rates or data quality. Ten per cent of productive addresses are subject to a telephone recall check. Households without a telephone number are sent a postal recall check. Every interviewer is accompanied on a live project in the field twice a year. This includes discussion of the

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[6] Or female guardian.

[7] The instruments and documentation supporting the survey can be provided upon request (see contact details at the foot of the report).

interviewer's response rates, outcomes of recall checks, feedback from respondents, comments about return of work and the standard of work.

1.3.4 Response rates

In total, 5,717 parents took part in the baseline survey - 63% of those who were invited to take part and were eligible. Table 1.1 shows details of how many families were in the issued sample and the outcomes for all issued cases.[8]

Table1.1 Survey response figures			
	N	% of total	% of eligible
Issued	**10187**	**100**	-
Ineligible	**1041**	**10**	-
- No child aged 9-18 months	*830*	*8*	-
- Moved out of local area	*159*	*2*	-
- Other	*52*	*1*	-
Eligible	**9146**	**90**	**100**
Fully productive	**5717**	**56**	**63**
Partially productive	2	+	+
Non-contact	**1697**	**17**	**19**
- Moved (new address unknown)	*1339*	*13*	*15*
- Inadequate address details	*78*	*1*	*1*
- Other	*280*	*3*	*3*
Refusal	**1509**	**15**	**16**
- Office refusal	*220*	*2*	*2*
- Refusal in person	*930*	*9*	*10*
- Other	*359*	*4*	*4*
Other unproductive	**153**	**2**	**2**
Unknown eligibility	**68**	**1**	**1**

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8 The original response target was to achieve a productive interview from 80% of the issued sample. This was not met because it incorrectly assumed that the quality of the issued sample would be higher e.g. that the whole issued sample would be eligible for the survey and that the contact details would be correct. In practice ten per cent of the issued sample were ineligible and the contact details were incorrect for 14% of families.

1.4 Socio-demographic profile of families using Sure Start Children's Centres

0 shows distributions of socio-demographic characteristics of respondents and their families. Ninety six per cent of respondents were female (in most cases, mothers). Eighty one per cent of families were two parent households, and 19% were lone parent households. Just under a half of families in the study (47%) had one child only (aged 9-18 months old), 33% had two children, and 20% had three or more children. Seventy per cent of children were white British and 30% belonged to black or minority ethnic groups. Forty eight per cent of families were renting their accommodation. In 78% of families, one or both parents were in paid work.

1.5 Table conventions

- Throughout the report, percentages based on fewer than 50 cases are enclosed in square brackets, and should be interpreted with caution.

- All percentages and means are weighted, and the unweighted base population is shown in each table.[9]

- Percentages are rounded up or down to whole numbers and therefore may not always sum to 100.

- Where more than one answer could apply, this is indicated under the table.

- Percentages less than 0.5 (but greater than 0) are shown as '+'.

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[9] Analyses included in 0 and 0 are based on unweighted data.

2   Parents' Use and Views of Children's Centres

This chapter explores families' use of children's centres and their views of the services available. It looks at the take-up of different types of service and also how often families used different services and activities at the centre.

As discussed in Chapter 1, the sample for this survey was made up of families with a child aged 9-18 months who were registered with one of 128 children's centres that took part in an earlier survey of children's centre managers (Tanner et al. 2012). This means that, in theory, every family should have had some contact with the centre that they were registered with. The baseline survey collected data on the extent of their involvement with their named children's centre as well as their involvement with other children's centres and take-up of family services elsewhere. This data is necessary for providing estimates of the level of take-up of various children's and family services and for monitoring changes in patterns of use over time. It will also be used in the impact analysis in Strand 4.

Although each family should have had some contact with the named children's centre, we can see from Table2.1 that 11% of families said that they had never used the named children's centre. These are likely to be families whose involvement with the named children's centre was restricted to having received information by post from the centre or a one-off visit from an outreach worker.

Table 2.1 When families started using the named SSCC	
Base: All families	
	%
More than 5 years ago	4
More than 4 years ago but less than 5	3
More than 3 years ago but less than 4	6
More than 2 years ago but less than 3	8
More than 1 years ago but less than 2	40
Less than 1 year ago	28
Have never used the named SSCC	11
Unweighted base	*5508*
Weighted base	*5507*

However, most families started using the named children's centre within the last two years (40% had started using the centre between one and two years ago and 28% had started using the centre within the last year).

2.1 Childcare

There is a large body of research that shows the relationship between children's early education and care experience, and their social and cognitive outcomes (e.g. Belsky 2001; Melhuish et al. 2008; Mathers and Sylva 2007; Sammons et al. 2004; Smith et al. 2009a). This section explores families' take-up of childcare for their children who were aged 0-5 at the time of the interview.

In total, 41% of families said that in a typical week they used some kind of formal childcare for their children (see Table 2.1). The most common type of childcare used was a day nursery. Other types of formal childcare were used by far fewer families. This is not surprising because all the families

in the sample had a 9-18 month old, and day nurseries are the most common type of childcare attended by children of this age (Smith et al. 2010). Types of childcare which would be suitable for older children (such as nursery schools, nursery classes, breakfast and after school clubs) could only be taken up by families with older children as well as a 9-18 month old. (Only 51% of 'selected children' had older siblings in the family; see 0.)

In 42% of families children were looked after by informal carers in a typical week – most commonly the children's grandparents (36%). Thirty-five per cent of families said that no one other than the respondent and their partner looked after their children in a typical week.

Table 2.2 Take-up of childcare	
Base: All families	
	%
Formal childcare	**41**
Nursery school	5
Nursery class attached to a primary of infants school	4
Day nursery	21
Play group or pre-school	5
Crèche	1
Breakfast club or before school activity	1
After school club or after school activity	1
Childminder	8
Nanny or au-pair	1
Informal childcare	**42**
Grandparents	36
Ex-partner	3
Older siblings	1
Another relative	8
Friend or neighbour	3
Other	**1**
None	**35**
Unweighted base	*5716*
Weighted base	*5716*

Table 2.3 explores whether families' formal childcare was provided by the named children's centres or whether the family had been signposted to their formal childcare provider by the named centre. In total 4% of families used formal childcare that was provided by the named children's centre and only 3% used formal childcare that they were signposted to by the named children's centre.

This low take-up of childcare at children's centres is perhaps surprising given that Tanner et al. (2012) found that early learning and childcare services were offered by 82% of children's centres (in the summer of 2011). However, the proportion of families taking up childcare will depend on the number of places that are available in the childcare facilities offered by the children's centre and also on the age range that the facilities cover. Take-up will of course also depend on the family's choices.

At the time of interview all the families in the sample had a child aged 9-18 months and 49% had no older children (see 0). Other research has shown that families with children aged 0-2 are less

likely to take-up formal childcare than families with children aged 3-4 (Smith et al. 2010; Smith et al. 2012). This is largely because free entitlement to early education is available to all three and four year olds. As such we might expect take-up of formal childcare at the children's centre to increase once children reach the age of eligibility.

Table 2.3 Take-up of formal childcare at the children's centre	
Base: All families	
	%
Named SSCC	**4**
Other	**37**
Signposted by named SSCC	3
Not signposted by named SSCC	34
None	**59**
Unweighted base	*5715*
Weighted base	*5715*

2.2 Family services

2.2.1 Take-up of family services

Here we look at the families' take-up and use of other types of family services available at children's centres. During the interview families were given a show card that listed each type of family service with appropriate examples and the activity calendar of the named children's centre they were registered with. They were asked in turn whether they or their partner had used each type of family service since three months before the birth of the selected child. For any services that they had used they were then asked whether the service they had used was run by:

- the named children's centre;
- another children's centre; or
- another organisation.

If the service was run by another organisation, they were asked whether they had first heard about this service through staff at the named children's centre or whether they had found out about the service through leaflets or posters at the children's centre. If families had found out about the service through either of these means then they were considered to have been 'signposted' to the service by the named children's centre.

We can see from Table 2.1 that the types of service that families most commonly used from the named children's centre were:

- 'stay and play' or 'play and learn' groups (47%);
- midwife/ health visitor drop in sessions or clinics (47%); and
- organised sport or exercise for babies or children (19%).

These were also the services that families most commonly used at another children's centre. This high level of take-up reflects the high proportion of centres that offer these services. For instance,

Tanner et al. (2012) found that 100% of centres in disadvantaged areas offered 'stay and play' or 'play and learn' groups; 82% had a health visitor clinic and 77% had a midwife clinic; while 77% also offered sport or exercise for babies or children.

The types of services run by other organisations that families typically used were:

- ante-natal classes (21%);

- midwife/ health visitor drop in sessions or clinics (25%);

- benefits and tax credit advice (11%); and

- organised sport or exercise for babies or children (10%).

Occasionally families had been signposted to these services by the children's centre (between 2% and 6%) but it was more common for families to say that they had found out about these services independently (between 8% and 19%). Findings from Tanner et al. (2012) suggest that this take-up of services elsewhere is because of parental preference or lack of awareness rather than a lack of availability – 66% of children's centres in disadvantaged areas offer ante-natal classes and 74% offer benefits and tax credits advice.

Finally, there were a large number of services that were only used by a very small proportion of families. This low take-up can largely be attributed to low demand. For instance, the low take-up of speech and language therapy (94% of families had not taken up this service) is likely to reflect the fact that only a small proportion of children typically need this service. Also, at the time of interview the selected children were aged 9-18 months making most pre-verbal. It is likely that the 6% of families who had used this service had gone with older children in the household. Similarly, only 11% of families mainly spoke another language at home (see 0) and so it is not surprising that 97% of families had never used English classes for speakers of other languages. The demand for these services is unlikely to change over time. However, other services such as parenting classes and evidence based parenting programmes are likely to become increasing relevant to families as their children get older.

In other instances, the low-take up could possibly be attributable to both low demand and low availability. For example, 91% of families had not taken up employment support services. This may be because only 22% of the sample were non-working families (see 0) or it could reflect low availability (30% of centres offered Next Steps and 59% of centres offered Jobcentre Plus services, Tanner et al. 2012).[10]

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[10] Combined JobCentre Plus percentage is unpublished.

Table 2.1 Take-up of family services

Base: All families

	Take-up						
	Named SSCC	*Another SSCC*	*Non-SSCC*		*None*	*Unweighted base*	*Weighted base*
			Signposted	Not signposted			
	%	%	%	%	%		
Health							
Antenatal classes	11	6	4	17	61	*5715*	*5712*
Breastfeeding groups	12	6	2	5	75	*5717*	*5717*
Midwife/ health visitor drop in session or clinic	47	14	6	19	15	*5717*	*5717*
Speech and language therapy (SALT)	2	1	1	2	94	*5716*	*5716*
Psychologist or counsellor	1	1	1	4	94	*5717*	*5717*
Activities that parents and children do together							
Stay and play, or play and learn groups	47	14	2	5	31	*5717*	*5717*
Organised sport or exercise for babies or children	19	8	2	8	63	*5717*	*5717*
Toy library	8	3	1	2	86	*5716*	*5716*
Family and parenting support							
Peer support groups	5	2	+	1	92	*5717*	*5717*
Parenting classes	6	3	+	1	90	*5714*	*5715*
Organised activities, hobbies or sport for parents	5	2	1	2	91	*5717*	*5717*
Relationship support	1	+	+	1	99	*5717*	*5717*
Other specialist family or parenting support	2	1	+	+	97	*5717*	*5717*
Employment and benefits advice							

Table 2.1 Take-up of family services							
Benefits and tax credits advice	6	2	3	8	82	*5717*	*5717*
Housing or debt advice	2	1	1	4	92	*5716*	*5716*
Employment support	2	+	1	5	91	*5715*	*5715*
Adult education							
Basic IT or jobs skills course	1	+	+	2	96	*5717*	*5717*
Further education or adult learning courses	2	1	1	5	91	*5717*	*5717*
English classes for speakers of other languages	1	+	+	1	97	*5717*	*5717*
Other services							
Home safety advice or course	8	3	1	3	85	*5716*	*5716*
First aid	2	1	+	1	95	*5716*	*5716*
Other family services	1	+	0	+	99	*5716*	*5716*

NB Row Percentages

22

Number of family services used

Families could have used a number of the different types of service listed in Table 2.1, while others might only have used one or two. Table 2.2 therefore explores families' use by looking at the number of family services they used from the named children's centre and also looks at the number of family services they used in total (irrespective of whether they were run by the named children's centre or another organisation).

Forty-six per cent of families only used one or two services from the named children's centre. However, 24% used three to five of the named children's centre services and 5% used six or more.

Twenty-five per cent of families had not used any of the services listed in Table 2.1 from the named children's centre between the birth of the selected child and the date of interview. However, most of these families had used services elsewhere, with only 3% of families having used none of these services at all during the reference period. It is also the case that these families may have: used the named children's centre longer ago; used childcare from the named children's centre; been signposted to services by the centre; or engaged with the children's centre in other ways. A more detailed discussion of families who did not use the named children's centre can be found in Section 2.4.

Table 2.2 Number of other family services used		
Base: All families		
	Named SSCC	*All providers of services*
	%	%
0	25	3
1	27	12
2	19	16
3	13	19
4	7	16
5	4	12
6	2	9
7	1	6
8+	2	7
Unweighted base	*5717*	*5717*
Weighted base	*5717*	*5717*

The average number of services that families used at the named children's centre was two and the average number that they used in total (irrespective of which organisation ran the service) was four. There was no difference in the number of services that couples and lone parents used at the named children's centre or the number of services that they used in total. However, there was no difference in the number of services used at the named children's centre by families with different levels of income, more affluent families took up a greater number of services provided by any organisation compared with families with lower levels of income.

Other engagement with the children's centre

So far in this section we have looked at whether respondents or their partners used any family services that were run by the named children's centre at a site. It should be noted that these are not the only ways of engaging with the children's centre. For instance, 99% of children's centre offered home based services (Tanner et al. 2012) and 36% of families reported that they had at some point received a home visit from someone at the children's centre.

In addition, in some families, someone other than the selected child's parents took the child to the children's centre (7%). This might be another member of the family or a childminder.

2.2.2 Patterns of using family services[11]

We have seen how many families took up different kinds of family service in section 2.2.1. Here we focus on the families who took up each kind of service to explore how much they used these services and to see which members of the family typically used each service.

Time spent using services

Table 2.3 shows the number of months over which families used each type of family service. There is substantial variation between different kinds of service, with families using some kinds of service for a period of about a year. These include: a midwife or health visitor, psychologist or counsellor, and English classes for speakers of other languages.

In contrast to the services that were used over long periods of time, other types of services were only used over a period of two or three months, for example antenatal classes, and home safety advice or courses.

It is also clear that there is variation in the extent to which different families use particular types of service. For instance, the mean length of time that families used benefits and tax credit advice or housing and debt advice was six months, while the median length of time that families used this service was zero months. This shows that while some families used these services for relatively long periods of time, the majority of families only used this service for a short period of time.

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[11] When families used more than five family services, they were asked which five they used the most. Then they were only asked follow-up questions about those five services. For that reason, we do not have information on patterns of using family services for all the services that these families used.

Table 2.3 Number of months family has used different services				
Base: Families who used each kind of service				
	Number of Months		*Unweighted base*	*Weighted base*
	Mean	Median		
Health				
Antenatal classes	3	1	*1847*	*1884*
Breastfeeding groups	5	2	*1166*	*1228*
Midwife/ health visitor drop in session or clinic	13	10	*4585*	*4638*
Speech and language therapy (SALT)	9	3	*251*	*230*
Psychologist or counsellor	13	4	*258*	*254*
Activities that parents and children do together				
Stay and play, or play and learn groups	10	7	*3696*	*3774*
Organised sport or exercise for babies or children	6	2	*1854*	*1859*
Toy library	9	5	*585*	*633*
Family and parenting support				
Peer support groups	9	6	*300*	*308*
Parenting classes	4	2	*428*	*437*
Organised activities, hobbies or sport for parents	9	4	*316*	*345*
Relationship support	[6]	[3]	*46*	*49*
Other specialist family or parenting support	9	5	*109*	*107*
Employment and benefits advice				
Benefits and tax credits advice	6	0	*673*	*668*
Housing or debt advice	6	0	*293*	*281*
Employment support	7	2	*345*	*329*
Adult education				
Basic IT or jobs skills course	6	2	*128*	*136*
Further education or adult learning courses	10	5	*371*	*356*
English classes for speakers of other languages	13	6	*157*	*144*
Other services				
Home safety advice or course	2	0	*545*	*521*
First aid	4	0	*149*	*136*
Other family services	[8]	[4]	*38*	*35*

Table 2.4 looks at intensity of service use through considering the frequency with which families used each kind of service. Some services were used extremely frequently by some. Families who used adult education services often did so more than once a week (31%-43% of users depending on the service attended within this category) and a relatively high proportion of families who used a 'stay and play' group attended more than once a week (18%).

Table 2.4 Frequency of using different services

Base: Families who used each kind of service

	Frequency					*Unweighted base*	*Weighted base*
	More than once a week	Once a week	Once every 2-3 weeks	Once a month	Less often/ one off		
	%	%	%	%	%		
Health							
Antenatal Classes	4	46	12	8	28	*1891*	*1930*
Breastfeeding groups	4	42	12	6	34	*1185*	*1251*
Midwife/ health Visitor drop in session or clinic	1	13	22	31	17	*4661*	*4707*
Speech and language therapy (SALT)	2	33	7	11	35	*265*	*242*
Psychologist or counsellor	1	38	15	14	24	*259*	*255*
Activities that parents and children do together							
Stay and play, or play and learn groups	18	49	13	7	10	*3762*	*3840*
Organised sport or exercise for babies or children	7	69	7	4	12	*1875*	*1876*
Toy library	4	28	20	17	22	*610*	*660*
Family and parenting support							
Peer support groups	5	55	9	13	16	*302*	*310*
Parenting classes	7	67	3	3	19	*438*	*449*
Organised activities, hobbies or sport for parents	10	57	8	6	17	*322*	*353*
Relationship support	4	53	13	18	9	*47*	*50*
Other specialist family or parenting support	6	45	11	13	20	*116*	*113*
Employment and benefits advice							
Benefits and tax credits advice	1	5	3	4	82	*708*	*706*

Table 2.4 Frequency of using different services							
Housing or debt advice	1	7	3	6	77	*304*	*290*
Employment support	2	11	24	5	54	*357*	*338*
Adult education							
Basic IT or jobs skills course	31	39	4	5	18	*134*	*142*
Further education or adult learning courses	31	47	3	3	15	*381*	*366*
English classes for speakers of other languages	43	44	4	4	4	*170*	*153*
Other services							
Home safety advice or course	2	9	1	3	84	*556*	*529*
First aid	3	16	2	2	74	*152*	*138*
Other family services	[17]	[29]	[10]	[8]	[27]	*41*	*37*

NB Row Percentages

Most other types of services were typically used about once a week. However this was not the case for employment and benefits advice or other family services, which were more commonly used less than once a month or as a one off.

To capture additional information about intensity of use, families who used a service once a week or more were asked how many hours a week they typically used the service or activity. Table 2.5 shows that most service and activities were used for an average of one or two hours per week. The main exceptions were adult education services:

- Basic IT or jobs skills courses (mean- seven hours per week);

- Further education or adult learning courses (mean- six hours per week);

- English classes for speakers of other languages (mean - four hours per week).

Table 2.5	Hours per week spent at different services				

Base: Families who used each kind of service once a week or more				
	Hours per week		*Unweighted base*	*Weighted base*
	Mean	Median		
Health				
Antenatal classes	2	2	*994*	*968*
Breastfeeding groups	2	2	*548*	*580*
Midwife/ health visitor drop in session or clinic	1	1	*632*	*669*
Speech and language therapy (SALT)	3	1	*98*	*85*
Psychologist or counsellor	2	1	*108*	*100*
Activities that parents and children do together				
Stay and play, or play and learn groups	3	2	*2547*	*2593*
Organised sport or exercise for babies or children	2	1	*1440*	*1412*
Toy library	2	1	*203*	*217*
Family and parenting support				
Peer support groups	2	2	*178*	*184*
Parenting classes	2	2	*333*	*334*
Organised activities, hobbies or sport for parents	2	2	*216*	*236*
Relationship support	[1]	[1]	*25*	*29*
Other specialist family or parenting support	2	2	*63*	*58*
Employment and benefits advice				
Benefits and tax credits advice	[2]	[1]	*36*	*42*
Housing or debt advice	[1]	[1]	*25*	*23*
Employment support	[2]	[1]	*50*	*46*
Adult education				
Basic IT or jobs skills course	7	4	*98*	*98*
Further education or adult learning courses	6	3	*295*	*279*
English classes for speakers of other languages	4	3	*149*	*133*
Other services				
Home safety advice or course	2	2	*65*	*56*
First aid	[3]	[2]	*30*	*27*
Other family services	[4]	[2]	*19*	*17*

Who uses services

In Table 2.6 we can see which parent (or other carer) went to each service that the family said they used (irrespective of whether they used the service at a children's centre or elsewhere). To illustrate with 'stay and play' as an example, where families went to a 'stay and play' group, in 2% of those families only the father went to any 'stay and play' sessions and in 89% only the mother went. In addition, in 7% of those families both parents went to 'stay and play' sessions, and 2% of families reported that neither the mother nor the father went to the 'stay and play' sessions.

Table 2.6 Who uses services						
Base: Families who used each kind of service						
	Person					
	Father	Mother	Both	Other	*Unweighted base*	*Weighted base*
	%	%	%	%		
Health						
Antenatal classes	2	35	61	1	*1901*	*1940*
Breastfeeding groups	1	89	9	1	*1190*	*1256*
Midwife/ health visitor drop in session or clinic	1	81	16	1	*4672*	*4717*
Speech and language therapy (SALT)	4	75	15	7	*266*	*242*
Psychologist or counsellor	3	84	11	2	*261*	*257*
Activities that parents and children do together						
Stay and play, or play and learn groups	2	89	7	2	*3770*	*3846*
Organised sport or exercise for babies or children	3	85	11	1	*1886*	*1885*
Toy library	3	86	9	3	*610*	*660*
Family and parenting support						

Table 2.6	Who uses services					
Peer support groups	17	74	8	+	305	313
Parenting classes	3	81	14	2	445	455
Organised activities, hobbies or sport for parents	9	80	10	1	324	354
Relationship support	[5]	[52]	[43]	[0]	47	50
Other specialist family or parenting support	4	79	17	0	116	113
Employment and benefits advice						
Benefits and tax credits advice	9	70	19	2	713	713
Housing or debt advice	7	71	22	+	304	290
Employment support	26	68	5	1	358	340
Adult education						
Basic IT or jobs skills course	29	69	1	1	135	143
Further education or adult learning courses	13	82	4	1	381	366
English classes for speakers of other languages	15	78	4	2	170	153
Other services						
Home safety advice or course	4	77	17	2	558	530
First aid	6	81	13	1	152	138
Other family services	[4]	[80]	[2]	[13]	43	40

NB Row Percentages

The findings show that mothers were far more likely to use family services than fathers. However, there were some services that fathers were particularly likely to attend. For instance:

- 61% of fathers accompanied mothers to ante-natal classes;

- 29% attended a basic IT or jobs skills course;

- 26% received employment support; and

- 17% went to a peer support group (such as a Dads' club).

2.3 Satisfaction with children's centre services

Satisfaction with the services and activities from the named children's centre was very high, with just under half of parents saying that they were 'very satisfied' and another 29% saying that they were 'fairly satisfied'. Only 4% of parents were 'fairly dissatisfied' or 'very dissatisfied' with the services and activities on offer (see Table 2.7). The level of satisfaction did not vary by family income (table not shown).

Table 2.7 Satisfaction with services and activities at the children's centre	
Base: All families	
	%
Very satisfied	49
Fairly satisfied	29
Neither satisfied nor dissatisfied	18
Fairly dissatisfied	2
Very dissatisfied	2
Unweighted base	*5522*
Weighted base	*5526*

However, despite parents' overwhelming satisfaction with children's centre services, 36% of families thought that there were some extra services that their children's centre should provide.

Although Tanner et al. (2012) found that 100% of children's centres in disadvantaged areas offered 'stay and play', 14% of families nevertheless said that they would like their children's centre to start offering 'stay and play' activities (Table 2.8). This apparent contradiction is partly explained by the fact that 'stay and play' includes a number of different types of session (e.g. messy play, baby sing-a-long, musical 'stay and play', 'stay and play' for speakers of particular languages). So parents' answers in Table 2.8 sometimes reflected a request for a greater variety of 'stay and play' sessions. In other instances parents thought that the 'stay and play' sessions were not at the right time, were full, or were not located in a convenient venue. So some answers also expressed a desire for changes to these aspects of the 'stay and play' sessions.

Table 2.8 Services that families would like the children's centre to offer	
Base: All families who thought the children's centre should provide extra services	
	%
Health	
Antenatal classes	2
Breastfeeding groups	2
Midwife/ health visitor drop in session or clinic	4
Speech and language therapy (SALT)	3
Psychologist or counsellor	1
Activities that parents and children do together	
Stay and play, or play and learn groups	14
Organised sport or exercise for babies or children	12
Toy library	1
Family and parenting support	
Peer support groups	7
Parenting classes	3
Organised activities, hobbies or sport for parents	6
Relationship support	+
Other specialist family or parenting support	+
Employment and benefits advice	
Benefits and tax credits advice	+
Housing or debt advice	1
Employment support	1
Adult education	
Basic IT or jobs skills course	1
Further education or adult learning courses	2
English classes for speakers of other languages	1
Services with particular features	
Cheaper or free childcare	4
Weekend activities	3
More sessions at a particular time of day	3
More age specific sessions	12
Other services	
Home safety advice or course	1
First aid	4
Other family services	30[12]
Unweighted base	*1910*
Weighted base	*1983*

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[12] The question about which services parents would like their named children's centre to offer was asked as an open question. A large proportion of parents provided answers which were vague (e.g. "other services") and thus it was not possible to code them.

Families who used children's centre services on the whole found them very helpful (between 90% and 98% of families found the types of services asked about very or fairly helpful;[13] see Table 2.9). Toy library services and first aid courses were found very or fairly helpful by the highest percentage of families (98% for both), and employment support services were found very or fairly helpful by the lowest percentage of families (90%).

Table 2.9 Helpfulness of services						
Base: Families who used each kind of service from the named children's centre						
	Helpfulness					
	Very helpful	Fairly helpful	Not very helpful	Not at all helpful	*Unweighted base*	*Weighted base*
	%	%	%	%		
Health						
Antenatal classes	64	31	3	2	*596*	*558*
Breastfeeding groups	70	25	3	2	*584*	*611*
Midwife/ health visitor drop in session or clinic	68	28	4	1	*2667*	*2596*
Speech and language therapy (SALT)	75	18	6	1	*96*	*82*
Psychologist or counsellor	77	16	2	5	*55*	*52*
Activities that parents and children do together						
Stay and play, or play and learn groups	72	23	4	1	*2617*	*2637*
Organised sport or exercise for babies or children	75	21	3	1	*994*	*944*
Toy library	66	32	1	+	*336*	*359*
Family and parenting support						
Peer support groups	73	17	8	1	*192*	*202*

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[13] Percentages based on fewer than 50 cases are presented in Table 2.9 in square brackets but are excluded from the discussion in the text, as they are not very reliable.

Table 2.9 Helpfulness of services						
Parenting classes	76	20	3	1	274	266
Organised activities, hobbies or sport for parents	73	23	2	2	167	179
Relationship support	[56]	[32]	[13]	[0]	21	19
Other specialist family or parenting support	70	22	8	0	65	60
Employment and benefits advice						
Benefits and tax credits advice	70	23	5	2	250	237
Housing or debt advice	60	31	8	0	85	75
Employment support	55	35	8	2	80	77
Adult education						
Basic IT or jobs skills course	[72]	[28]	[0]	[0]	31	30
Further education or adult learning courses	81	15	2	2	122	100
English classes for speakers of other languages	65	31	1	2	59	48
Other services						
Home safety advice or course	74	22	2	1	340	296
First aid	89	10	2	0	74	61
Other family services	[86]	[10]	[3]	[0]	30	26

NB Row Percentages

2.4 Reasons for not using the children's centre

In total, 15% of families in the study (all of whom were registered with a children's centre) said that they:[14]

- Had not used any family services from the named centre
- Had not used any childcare providers from the named centre
- Had not been signposted to any family services by the named centre
- Had not been signposted to any childcare providers by the named centre
- Had not received a home visit from anyone at the named centre
- That no-one else took their 9-18 month old child to the named centres' services

The reasons that they gave for not using the named centre are described in Table 2.10.

Seventeen per cent of these families preferred to use a different children's centre because it was closer or more convenient and another 16% preferred to use another centre for other reasons.

Table 2.10 Reasons for not using the named children's centre	
Base: Families who did not use the named children's centre	
	%
Prefers another centre - closer/ more convenient	17
Prefers another centre - other/ unspecified	16
Distance/ transport difficulties	14
No time / too busy	14
Was not aware of children's centre	13
Does not need any family services	12
Concerns that it is unsafe, scruffy, has a bad atmosphere, is too noisy etc.	3
Have not used it yet, but plan to in future	3
Personal preference e.g. prefers to stay at home, doesn't want to socialise	2
Other	1
No reason	12
Unweighted base	*788*
Weighted base	*848*

General difficulties with distance and/or transport were reported by 14% of families and a further 14% did not use the named children's centre because they had no time or were too busy. Thirteen per cent said that they had not been aware that the children's centre existed and 12% said that they did not need to use any family services.

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[14] This is slightly higher than the proportion of families who reported that they had never used the named children's centre in Table 2.1. This probably reflects the difference in reference period between the various questions in the questionnaire. Table 2.1. refers to a question about the first time that the respondent used the centre, which could be any time in the past. In contrast, the questions about use of childcare, family services and home visits were focused on the more recent past.

2.5 Exploratory analysis of how parents use children centre services

Building on the description of parents' use and views of children's centres, multivariate analysis was carried out to explore possible trends in how families used the family services that were provided by children's centres. Respondents who shared a pattern in their use of family services were grouped together and compared according to family demographics. The aim was to identify whether certain characteristics of parents and families were associated with the amounts and kinds of services that were used. The purpose of investigating these associations at this stage was to inform the model for analysing impact at later stages of the evaluation. Appendix B provides a full account of the statistical procedures that were carried out and the results that were obtained. The findings are summarised below.

Overall, there was considerable variation in the types and extent of service use among the users of children's centres. Within this variation, two broad groups were identified.

Fifty seven per cent of the respondents whose data were analysed fell into one of two groups which differed according to the type and extent of services used at their named children's centre. Two distinct groups were identified:

1. *Limited users* of family services, mainly accessing only health related services (19%)[15]
2. *Heavy users* of multiple family services with an emphasis on activities for parents and toddlers (38%)

The remaining 43% of respondents showed no clear pattern in how they used family services. They were neither limited nor heavy users of services and used different types of services and therefore did not fall into either of the two groups.

Once these limited and heavy user groups were identified, they were compared on the basis of five socio-demographic measures:

1. Household income
2. Highest qualification obtained by mother
3. Whether or not mothers were married and cohabiting
4. Household economic status – whether either the respondent or their partner was in employment
5. Age of selected child

The comparisons based on the subset of families who were either *heavy* or *limited* users of children's centre services (57% of families in the study) showed that only two of the socio-demographic measures distinguished which of the two patterns of service use a family was more likely to demonstrate. If a respondent or their partner were in employment or if the mother held higher qualifications, these families were more likely to be *heavy* rather than *limited* users of the family services provided by children's centres. Thus, within the heavy user group, 84% of families had a respondent or partner who was in paid employment, compared with 74% of families within the limited user group.[16] Likewise, within the heavy user group, the proportions of mothers who

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[15] All percentages from the exploratory analysis presented in 0 and summarised in this section are based on unweighted data because of the exploratory nature of these analyses.

[16] The overall association between household economic status – whether either the respondent or their partner was in employment – and membership of the *heavy* rather than *limited* group was indicated as statistically significant according to the Chi-Square test of statistical significance (χ^2 [1, n=3029]=40.04, p<0.001).

held Honours degrees (22%) and Masters degrees (12%) were higher than the respective figures for the limited user group (respectively, 12% and 7%).[17,18,19]

The marital status of mothers[20] and household income were not associated with how likely the families were to be *heavy* or *limited* users of children's centre services.

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[17] The overall association between mothers' qualifications and membership of the *heavy* rather than *limited* group was indicated as statistically significant according to both the Spearman's Rho and Chi-Square tests of statistical significance (respectively: $\rho=0.20$, $p<0.001$; χ^2 [8, n=2913]=120.00, $p<0.001$).

[18] Differences between individual qualification levels were determined via examination of adjusted residuals.

[19] There were significantly higher proportions of mothers with no academic or vocational qualifications (12%) and mothers who held only GCSES grades D-F (11%) and A*-C (31%) within the *limited* user group, compared with the *heavy* user group (where respective figures were: 6%, 6%, and 21%).

[20] Defined here as a combination of legal marital status and whether the mother was cohabiting.

3 Parent Physical and Mental Health

3.1 Introduction

This chapter examines parents' physical and mental health and health behaviours. In particular, the chapter covers the following areas:

- Diet

- Mental wellbeing

- Long-standing illness and disability

- Smoking, drinking and drug use.

These measures were included in the baseline survey as parents' health is very important for children's outcomes, and health services are among those offered by the great majority of children's centres (Tanner et al. 2012). Questions about parents' health (mental and physical) and their smoking, drinking and drug use were asked in a self-completion part of the questionnaire due to their sensitivity.

3.1.1 Food preparation

Links between diet and different aspects of child development are well documented. For example, Lambert et al. (2004) highlighted the importance of diet, not just in terms of child health and weight, but to avoid deficiencies in the nutrients that are essential for children's cognitive development.

The effect of a poor diet has also been linked with an increase in behavioural issues and poorer concentration levels in the short term (see Sorhaindo and Feinstein 2006). Most recently, the links between children's diets and IQ levels in later years have also been well publicised (see Northstone et al. 2011). This section looks at some of the key determinants of healthy eating in households. The first focuses on attitudes towards food preparation and the second on attitudes to convenience food.

Respondents were asked if they felt that preparing meals from fresh ingredients took too long and whether they felt it was too expensive. Table 3.1 shows that the majority of respondents disagreed with both statements with 80% disagreeing that it takes too long (47% disagreed and 33% disagreed strongly) and 75% disagreeing that it is too expensive (46% disagreed and 29% disagreed strongly). However, a notable minority agreed with the statements. Eleven per cent felt that preparing meals from fresh ingredients took too long (9% agreed and 2% agreed strongly) and 15% agreed that it was too expensive (13% agreed and 2% agreed strongly).

Table 3.1   Attitudes to preparing meals from fresh ingredients

Base: All respondents		
	It takes too long	It is too expensive
	%	%
Agree strongly	2	2
Agree	9	13
Neither agree or disagree	9	10
Disagree	47	46
Disagree strongly	33	29
Unweighted Bases	*5714*	*5712*
Weighted Bases	*5715*	*5713*

Figure 3.1 presents attitudes towards food preparation by household income. Families with the lowest household income (less than £10,000) were most likely to express the view that it takes too long (16%) or is too expensive (23%) to prepare meals from fresh ingredients.

For both statements, these percentages decreased as respondents' incomes rose. For those whose income was £40,000 or more, 8% believed it took too long to prepare meals from fresh ingredients and just 6% believed that it was too expensive. As might be expected, the attitude which varied most according to income was whether it was too expensive to prepare meals from fresh ingredients.

Figure3.1   Percentage of respondents, by household income, who believe that it takes too long or that it is too expensive to prepare meals from fresh ingredients

Base: All respondents

■ It takes too long ■ It is too expensive

Under £10,000: 16, 23
£10,000-£19,999: 12, 20
£20,000-£29,999: 12, 16
£30,000-£39,999: 9, 11
£40,000+: 8, 6
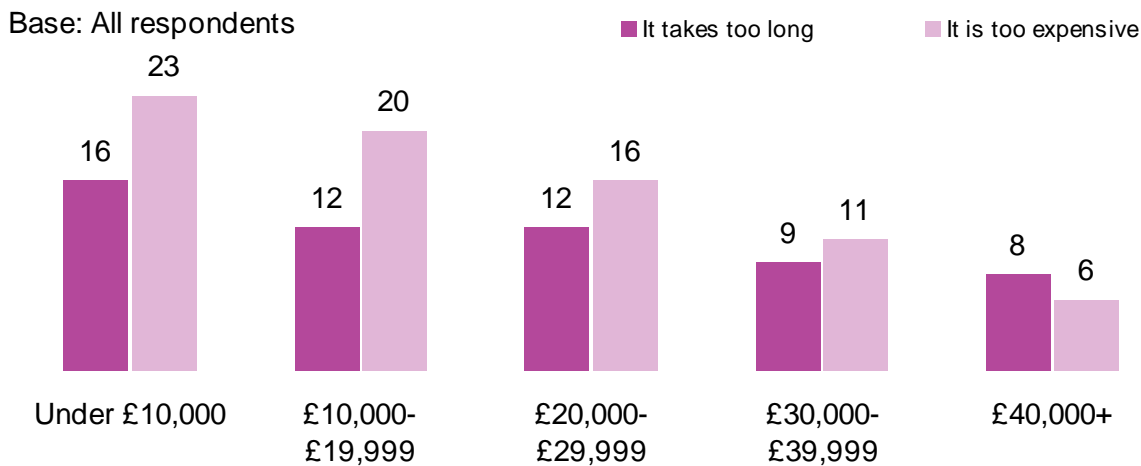
Source: Appendix E.

As a general indicator of healthy eating, Table 3.2 shows how often respondents added salt to food when cooking – 41% responded that they never did.

Table 3.2   How often salt is added to food whilst cooking

Base: All respondents	
	%
Always	19
Usually	12
Sometimes	14
Rarely	14
Never	41
Unweighted Bases	*5714*
Weighted Bases	*5715*

3.1.2   Eating convenience food

Looking at eating fresh food and convenience food, Table 3.3 shows how often meals were prepared from fresh ingredients and how often ready meals were eaten. Seventy nine per cent of respondents ate fresh meals every day or most days whereas ready meals were consumed every day or most days by just 3% of respondents. Over half of respondents (70%) said that they ate ready meals 'less often' or never.

Table 3.3   Consumption of fresh and convenience food

Base: All respondents		
	Meals from fresh ingredients	Ready meals
	%	%
Every day	46	1
Most days	33	2
A few times a week	15	7
Once or twice a week	5	21
Less often	1	35
Never	+	35
Unweighted Bases	*5716*	*5715*
Weighted Bases	*5716*	*5716*

Figure 3 shows the percentage of those who eat fresh meals every day by household income. It shows that those whose income was over £40,000 were most likely to eat fresh meals every day (53%) compared with 42% of those whose income was under £20,000.

Figure 3.2   Percentage of those who eat meals from fresh ingredients every day, by household income

Base: All respondents

Source: Appendix E.

In Table 3.4 we can see how often respondents usually ate junk food or fried food. Around a quarter (27%) of respondents said that they usually ate crisps, fizzy drinks or sweets either every day or on most days. Almost the same proportion (29%), however, said that they consumed these types of food less often than once a week or never.

The majority of parents consumed fried food less often than once a week (41%) or never (19%). A considerable proportion had fried food once or twice a week (27%) and 12% had fried food more often.

Table 3.4   Consumption of junk food or fried food

Base: All respondents		
	Crisps, fizzy drinks or sweets	Fried food
	%	%
Every day	16	1
Most days	11	2
A few times a week	21	9
Once or twice a week	23	27
Less often	22	41
Never	7	19
Unweighted Bases	*5715*	*5714*
Weighted Bases	*5714*	*5715*

Table 3.5 shows that people ate fast food or takeaways relatively infrequently, with 40% of respondents saying that they only ate them every now and then, 25% saying that they hardly ever ate fast food or takeaways, and 6% saying that they never ate this kind of food.

Table 3.5	Consumption of fast food or takeaways

Base: All respondents	
	%
Every day or nearly every day	+
A few times a week	3
About once a week	26
Every now and then	40
Hardly ever	25
Never	6
Unweighted Bases	*5715*
Weighted bases	*5715*

3.2   Parents' mental wellbeing

Research has shown that poor maternal mental health is associated with adverse child development outcomes such as increased behavioural issues or an increased risk of clinical depression (Cummings and Davies 1994; Marryat and Martin 2010). We assessed parental mental health as part of this baseline survey using the short form of the General Health Questionnaire (GHQ12).

The GHQ12 is an established measure of psychosocial wellbeing measuring participants' levels of happiness; depression and anxiety; sleep disturbance and ability to cope over the last few weeks. All twelve items are measured on a four-point response scale and include questions such as 'over the last four weeks have you lost much sleep over worry?'

In Table 3.6 the GHQ12 score was constructed as follows: where respondents felt that the symptom was present i.e. that over the last four weeks they had lost sleep 'rather more than usual' or 'much more than usual' they were given a score of 1 point. The points for each question were then summed, and grouped according to the recommended thresholds outlined with the questionnaire. A score of 0 represents good mental health, 1-3 represents moderate mental health and a score of 4 or more is high - indicating probable psychological disturbance or mental ill health.

Table 3.6	Average GHQ12 scores by demographics				
Base: All respondents					
	Average GHQ12 score				
	Score 0	Score 1-3	Score 4+	*Unweighted base*	*Weighted base*
	%	%	%		
Income					
Under £10,000	44	28	28	*922*	*872*
£10,000-£19,999	48	28	24	*1156*	*1110*
£20,000-£29,999	54	29	18	*945*	*964*
£30,000-£39,999	59	29	12	*753*	*762*

Table 3.6 Average GHQ12 scores by demographics					
£40,000+	57	31	13	*1334*	*1423*
Household economic status					
Working	55	29	16	*4305*	*4401*
Not working	43	29	28	*1267*	*1182*
Household type					
Couple households	55	29	16	*4463*	*4535*
Lone parents	43	30	27	*1109*	*1048*

NB: Row percentages

Table 3.6 shows the results of the GHQ12 score by different demographic characteristics. It shows that in terms of income, those in the lowest income bracket (under £10,000) were more likely to have psychological disturbance or mental ill health (28%) than those with higher incomes.

Poor mental health was also more likely in parents in households where no one was in work (28%) than in households where at least one person works (16%). Lastly, lone parents were more likely than parents in couple households to have poor mental health (16% to 27%).

3.3   Illness and disability

A parent having a long-standing illness or disability is also associated with poorer child outcomes – often this is because a higher proportion of disabled parents are out of work and therefore in low income households (HM Treasury 2004).

Figure 3 shows that 16% of those whose income was under £10,000 had a long-standing illness or disability. It also shows that the likelihood of having a long-standing illness or disability decreased as income rose.

Figure 3.3   Percentage of respondents who have a long-standing illness or disability, by household income

Base: All respondents

Source: Appendix E.

When broken down by gender, the figures showed that 11% of mothers and 8% of fathers had a long-standing illness or disability. These findings are in line with other samples of disadvantaged parents with young children. For example, the baseline survey of the government's early education pilot for disadvantaged two year olds found that among parents who were offered the pilot, 18% of mothers and 15% of fathers had a long-standing illness or disability (Smith et al. 2009).

3.4   Smoking, drinking and drugs

This section focuses on the extent to which parents smoked, drank alcohol and took drugs. These behaviours often identify women's general poor physical health and are important because smoking has been found to have strong associations with children's physical health and behaviour problems (e.g. Kahn et al. 2002).

Table 3.7 shows how often respondents drank alcohol. The most frequent response was 'never' (33%). Twenty-four per cent of respondents said that they drank alcohol less than once a month, and only 25% said that they drank once a week or more often.

Table 3.7 Alcohol consumption	
Base: All respondents	
	%
Every day	1
5-6 times per week	1
3-4 times per week	5
1-2 times per week	18
1-2 times per month	19
Less than once a month	24
Never	33
Unweighted Base	*5557*
Weighted Base	*5562*

It appears that the level of alcohol consumption among parents in the study was substantially lower than that in the general population. Among respondents to the General Lifestyle Survey 2010 published by the Office for National Statistics (ONS), 54% of women and 68% of men (aged 16 and over) reported drinking an alcoholic drink on at least one day in the week prior to interview (Health and Social Care Information Centre, 2012b: 15).

Figure 3 shows that household income was significantly associated with the likelihood of parents drinking alcohol once a week or more often, with those on higher incomes drinking most often. Just 11% of those whose income was under £10,000 drank alcohol once a week or more but this figure rose to 21% of those whose income was £20,000- £29,999 and 40% of those whose income was £40,000 or higher.

Figure 3.4   Percentage of respondents who drink alcohol once a week or more often, by household income

Base: All respondents
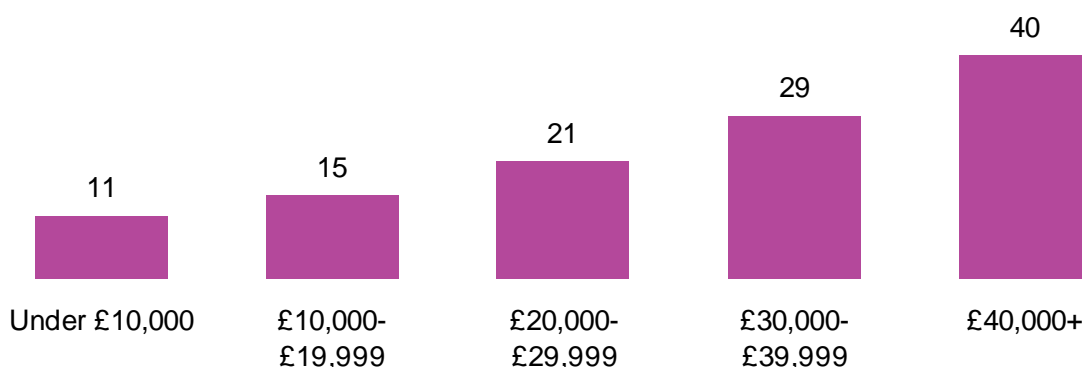
Source: Appendix E

To identify respondents' smoking patterns, they were asked which of the statements outlined in Table 3.8 best described them. While 47% had never smoked cigarettes or roll-ups, 16% currently smoked every day.

Table 3.8   Smoking

Base: All respondents	
	%
I have never smoked cigarettes or roll-ups	47
I have tried smoking, but I don't smoke now	15
I used to smoke regularly, but I don't smoke now	18
I do smoke, but less than once a week	2
I smoke at least once a week	2
I smoke every day	16
Unweighted Base	*5504*
Weighted Base	*5520*

For female respondents who were the child's natural mother and who had smoked previously, they were asked about how often they had smoked during pregnancy. If the respondent was the natural father, they were asked how often the mother smoked during pregnancy. Eighty six per cent of mothers did not smoke while pregnant but 9% smoked daily (see Table 3.9).

Table 3.9 Smoking while pregnant	
Base: All respondents	
	%
Every day	9
At least once a week	2
Less than once a week	3
Never	86
Unweighted Base	*5392*
Weighted Base	*5416*

NB: 88 respondents were not asked this question erroneously.

Income was negatively associated with smoking during pregnancy and was also negatively associated with smoking in general. The chart below shows that of those whose income was under £10,000 per year, 27% smoked cigarettes or roll-ups while pregnant. This percentage fell to 13% of those whose income was £20,000 to £29,999 and just 4% of those whose income was £40,000 or more.

Figure 3.5   Percentage of respondents who smoked while pregnant, by household income

Base: All respondents
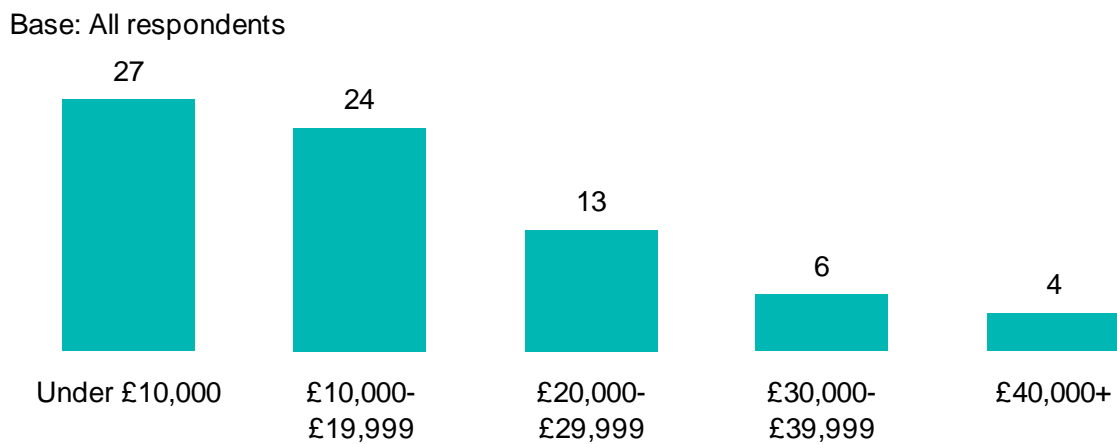
Source: Appendix E.

Table 3.10 shows parents' drug use. It shows that the majority of mothers and fathers (81% and 77% respectively) had never tried drugs. Just 1% of fathers and less than 0.5% of mothers reported that they currently used drugs, while 3% of fathers and 2% of mothers said that they had previously used drugs quite often but did not use them anymore.

Table 3.10 Drug use		
Base: All respondents and respondents' partners		
	Mothers	Fathers
	%	%
Has never tried drugs	81	77
Has tried drugs, but doesn't use them now	16	19
Used to use drugs quite often, but doesn't use them now	2	3
Uses drugs (any frequency)	+	1
Unweighted bases	*5510*	*4330*
Weighted bases	*5516*	*4407*

4   Child Health

4.1 Introduction

Seventy-five per cent of children's centres in deprived areas offered health services directly, and the 25% of those who did not, signposted families to health services that are available elsewhere (Tanner et al. 2012). Aspects of children's health such as their birth weight, gestational age or their diet are clearly important outcomes for children's centres as they have been consistently linked with children's development. This chapter focuses on a number of health related indicators.

4.2 Birth weight

Children who are born with a low birth weight (defined as babies weighing less than 2500g) are at higher risk of developing early growth retardation, infectious diseases, or experiencing a developmental delay. A low birth weight is also associated with death during infancy and childhood, although the risks of mortality are reduced with the increasingly efficient care available in developed countries (World Health Organization, 2011).

Table 4.1 shows that 9% of children in the study had a low birth weight (weighing between 1500g and 2499g when born) and 1% had a very low birth weight, weighing less than 1500g. (In total, 9% of children in the study weighed less than 2500g when born.) In the general population, according to the Infant Feeding Survey 2010, just 5% of babies weigh under 2500g when born (Health and Social Care Information Centre, 2012c).

Table 4.1 Low or very low birth weight of the 'selected child'	
Base: All respondents	
	%
Not low birth weight (2500g+)	91
Low birth weight (1500g-2499g)	9
Very low birth weight (<1500g)	1
Unweighted base	*5687*
Weighted base	*5681*

Figure 4 shows the combined percentages of low birth weight (under 2500 grams) in relation to income. It shows that for children from households with the lowest incomes (under £10,000), 14% were born with a low birth weight. This percentage decreased as income rose, and for those from households with incomes of £40,000 or more, just 7% were born with a low birth weight.

Figure 4.1   Percentage of children born with a low birth weight (under 2500g), by household income

Base: All respondents

Source Appendix E.

4.3 Gestational age

The premature birth of babies is closely associated with developing more health problems both in the short and long term. There is evidence that for children who are born very preterm, there is an increased risk of cognitive and neuromotor impairments and that these increase with decreasing gestational age (Larrogue et al, 2008) – i.e. the more premature they are born the greater the risk of impairment. Table 4.2 shows that while 65% of respondents reported that their child was born either at full term or late, 33% were born between 32-36 weeks, 2% were born at 29-31 weeks and 1% were born before 29 weeks.

Table 4.2   Premature birth

Base: All respondents	
	%
Full term/ late	65
Born near-term preterm (32-36 weeks)	33
Born very preterm (29-31 weeks)	2
Born extremely preterm (<29 weeks)	1
Unweighted base	*5712*
Weighted base	*5708*

4.4 Immunisations

At 2, 3, 4 and 12-13 months old there are a number of immunisations that children in the UK receive. These include tetanus, pertussis (whooping cough), polio, diphtheria, meningitis C and the combined measles, mumps and rubella (MMR) vaccine. Respondents were asked if their child had received their immunisations at each age range in turn. If they spontaneously replied that their child had received all immunisations that were age appropriate then this was recorded separately.

Table 4.3 shows that 3%of respondents replied spontaneously that their child had received all age appropriate immunisations. At 2, 3 and 4 months old, 96% of parents reported that their child had been immunised. However at 12-13 months old, a lower number (60%) of parents reported that

their child had received immunisations recommended for that age group. This may well reflect the fact that 27% of selected children were only aged 9-11 months at the time of the interview, so still fell short of the window for these immunisations to happen (see Appendix A).

The study findings on take-up of immunisations at age 2, 3 and 4 months old are consistent with those reported recently by the Health and Social Care Information Centre. In 2011-12, PCTs reported that 95% of children had completed primary immunisation courses against DTaP/IPV/Hib before they were one year old (Health and Social Care Information Centre, 2012a: 25).

Table 4.3 Child Immunisations					
Base: All respondents					
	Yes	No	Had everything age appropriate	*Unweighted base*	*Weighted base*
	%	%	%		
2 Months Old	96	1	3	*5706*	*5704*
3 Months Old	96	1	3	*5698*	*5696*
4 Months Old	96	1	3	*5701*	*5698*
12-13 months old	60	37	3	*5678*	*5676*

NB: Row percentages

4.5 Accidents and injuries

We saw in Chapter 2 that a number of families received home safety advice or attended home safety courses at a children's centre. Since this is an area that children's centres aim to influence, here we look at the types of accidents and injuries that children in the sample experienced.

4.5.1 Nature of accidents and injuries

Table 4.4 lists a number of accidents and injuries that children might have experienced. It shows that the most frequent accidents parents reported were minor cuts or grazes (37%), minor bruising of a part of the body (44%) and children banging their heads (45%).

Table 4.4 Accidents and Injuries	
Base: All respondents	
	%
Bang on head	45
Minor bruising of a part of the body	44
Minor cut or graze	37
Crushing of a part of the body (e.g. getting their fingers stuck in a door)	9
Animal or insect bite or sting	4
Burn or scald	3
Cut needing stitches, staples or steri-strips	1
Major bruising of a part of the body	1
Broken bone	1

Table 4.4	Accidents and Injuries	
Something stuck in their eye, throat, nose, ear or other part of the body		1
Dislocated joint		+
Loss of consciousness		+
Swallowed household cleaner/pills/something poisonous		+
Other		+
None		28
Unweighted base		*5714*
Weighted base		*5712*

N.B. Percentages do not add up to 100 as respondents could choose more than 1 answer

4.5.2   Visits to A&E

As an indication of the number of more serious accidents children have had, Table 4.5 shows the number of times that the respondent has taken their child to the Accident and Emergency (A&E) department at a hospital or to a Minor Injuries Unit (MIU) because they had had an accident or injury. Although the majority of respondents (72%) had never taken their child there, 19% had taken their child once and 9% had taken them to A&E/MIU twice or more.

Table 4.5 Visits to Accident and Emergency	
Base: All respondents	
	%
Never	72
Once	19
Twice or more	9
Unweighted base	*5713*
Weighted base	*5712*

4.6 Illness and disability

4.6.1   Nature of long-standing health problems

Some children are born with, or later develop more long-standing health problems (for example, allergies, eye-sight problems or breathing problems such as asthma). Table 4.6 shows the number of children in the study who had these common health problems. Skin problems (14%) and breathing problems (10%) were most frequently mentioned by respondents. However, the majority of children (67%) had no long-standing health problems.

Table 4.6 Nature of long-standing health problems	
Base: All respondents	
	%
Skin problems	14
Breathing problems (including wheezing or asthma)	10

Table 4.6 Nature of long-standing health problems	
Allergies	5
Stomach problems	4
Eye/ Sight problems	3
Heart problems	2
Ear, nose and throat or hearing problems	2
Bone problems	1
Epilepsy (including fits)	+
Other	3
None	67
Unweighted base	*5714*
Weighted base	*5712*

N.B. Percentages do not add up to 100 as respondents could choose more than one answer.

4.6.2   Visits to the hospital and GP

To determine the severity of children's long-standing health problems, respondents who reported that their child had a long-standing health issue were asked about whether these issues had required visits to the hospital or regular visits to the GP.

Table 4.7 shows that almost half (48%) of them had regularly been to their GP and a similar number (43%) had been to hospital concerning the issue.

Table 4.7 Visits to hospital and GP				
Base: Respondents whose child has had a longstanding health problem				
	Yes	No	*Unweighted base*	*Weighted base*
	%	%		
Visited the hospital	43	57	*1851*	*1878*
Regularly been to GP	48	52	*1851*	*1878*
Either	66	34	*1851*	*1878*

4.7 Parental assessment of their child's development

4.7.1   Learning new skills

To build up a picture of how well respondents believed their child was developing, respondents were asked if they felt their child was developing as quickly, more quickly or less quickly than other children their age. 'Developing' in this instance meant how quickly parents felt the child was learning new skills such as crawling, walking or talking.

Fifty-eight per cent of parents felt that their child was developing as quickly as others and 34% believed their child was developing more quickly but a notable number of parents (9%) believed that their child was developing less quickly than other children their own age.

Table 4.8 Child's development	
Base: All respondents	
	%
Developing as quickly as other children their age	58
Developing more quickly than other children their age	34
Developing less quickly than other children their age	9
Unweighted base	*5687*
Weighted base	*5678*

4.7.2   Concerns about development

Parents were also asked to think about how well their child was learning new skills and about any concerns they had about their child's development at this stage.

Table 4.9 shows that the majority (92%) had no concerns over their child's development, 8% had minor concerns and just 1% had major concerns regarding development.

Table 4.9 Concerns about child's development	
Base: All respondents	
	%
No concerns about child's development	92
Minor concerns about child's development	8
Major concerns about child's development	1
Unweighted base	*5714*
Weighted base	*5711*

When broken by income quintile, parents in the lowest income group were slightly more likely to have minor or major concerns about their child's development (11%) than those in higher income groups. Eight per cent of those whose income was £40,000 or more had minor or major concerns about their child's development.

Figure 4.2 Percentage of respondents who had minor or major concerns about their child's development, by household income

Base: All respondents

Source: Appendix E.

4.8 Breastfeeding and diet

It has been well documented that breastfeeding babies from birth has many health benefits for both the child and the mother. In 2007, the World Health Organisation found that those who were breastfed had lower average blood pressure and total cholesterol, as well as higher performance in intelligence tests. Furthermore, the prevalence of those overweight or obese and those with type-2 diabetes was lower among people who were breastfed (Horta et al, 2007).

Table 4.10 shows that 77% of mothers had tried to breastfeed their 9-18 month old child at some point in their life. Forty five per cent of children were breastfed beyond three months old, and 32% were breastfed beyond six months old. These figures are consistent with those from the Infant Feeding Survey 2010, which found that 83% of mothers in England had tried to initiate breastfeeding, 57% were still breastfeeding at six weeks and 36% at six months (Health and Social Care Information Centre, 2012c).

Table 4.10 Breastfeeding	
Base: Natural mothers or fathers	
	%
Never tried	23
Wouldn't take	2
1 week	8
2 weeks	4
2 weeks to 1 month	6
1 month to 3 months	12
3 months to 6 months	13
6 months to 1 year	15
Older than 1 year	3
Still breastfeeding	14
Unweighted base	*5674*
Weighted base	*5676*

There was a strong association between breastfeeding rates and household income, as Figure 4 demonstrates. Of those whose income was less than £10,000, 37% had never tried to breastfeed. This proportion decreased as income levels rose. For those whose income was £20,000 to £29,999, for example, 26% had never tried to breastfeed, whereas for those whose family income was £40,000 or more, just 9% had never tried to breastfeed their child.

Figure 4.3   Percentage of respondents who never tried to breastfeed the selected child, by household income

Base: All respondents
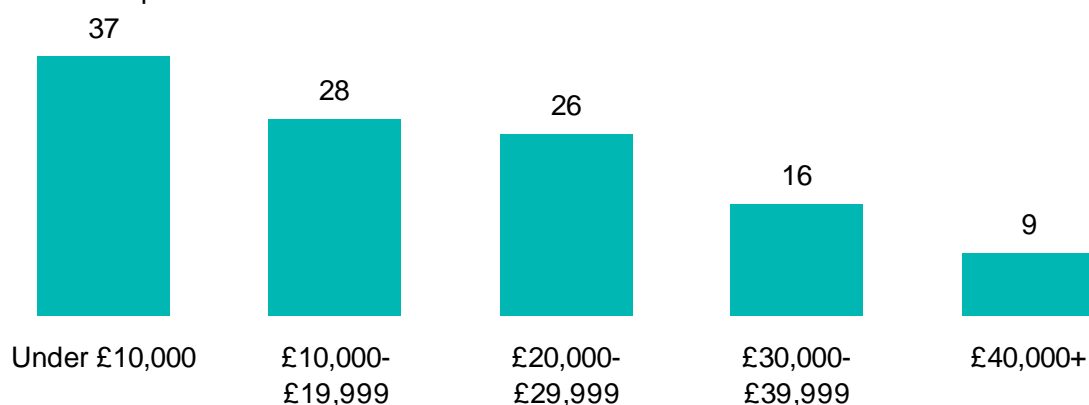
Source: Appendix E.

Table 4.11 shows how old the selected child was when they first had any solid food such as cereal or rusk. Children most commonly first ate solid food at five or six months old (29% and 33% respectively). Just 2% of children had eaten solid food before they were three months old.

Table 4.11 When first ate solid food	
Base: Natural mothers or fathers	
	%
Less than 3 months old	2
3 months	7
4 months	21
5 months	29
6 months	33
7 months or older	8
Never	+
Unweighted base	*5700*
Weighted base	*5698*

Chapter 3 showed parental attitudes towards food preparation and the sort of foods most commonly prepared and eaten by parents. Table 4.12 shows the frequency with which children

themselves ate fresh fruit and vegetables or salad. Seventy one per cent of children ate fresh fruit every day or more than once a day, and 68% ate vegetables or salad every day or more than once a day. A minority had less healthy diets. Six per cent of children ate fresh fruit and 4% of children ate vegetables or salad just once a week, less often or never.

Table 4.12 How often child eats fruit and vegetables		
Base: Respondents whose child has eaten solid food		
	Fresh fruit	Vegetables or salad
	%	%
Never	2	1
Once a week or less often	4	3
A few times a week	10	10
Most days	14	18
Every day	53	56
More than once a day	18	12
Unweighted base	*5686*	*5685*
Weighted base	*5686*	*5685*

The chart below shows how frequently children ate fruit and how frequently they ate vegetables or salad by household income. It demonstrates a noticeable difference between income groups, with those with higher incomes being more likely to have children eating fruit and vegetables or salad most days, every day or more than once a day.

Figure 4.4   Percentage of respondents whose children eat fruit and vegetables or salad most or every day, by household income

Base: Respondents whose child has eaten solid food

■ Fruit ■ Vegetables or salad

Household income	Fruit	Vegetables or salad
Under £10,000	77	80
£10,000-£19,999	78	81
£20,000-£29,999	83	86
£30,000-£39,999	90	93
£40,000+	94	94
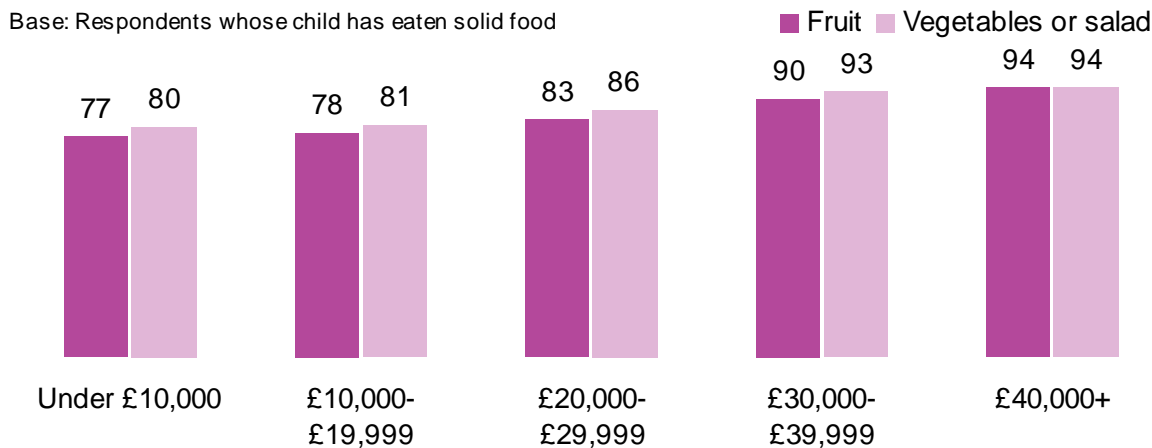
Source: Appendix E.

5 Parenting and Family Functioning

5.1 Introduction

This chapter examines parents' answers to questions about parenting and family functioning. The main areas covered in the baseline questionnaire focused on:

- Home learning environment (HLE)
- Confusion, hubbub and order at home (CHAOS scale)
- Major life changes in the family since the birth of the selected child
- Selected child's relationship with non-resident parent
- Quality of marital relationship
- Father's involvement in child rearing
- Parenting stress as measured by the Parenting Stress Index (PSI).

These measures were included in the baseline survey on the basis of evidence from other studies, which show that parenting and family functioning experienced by children affect their outcomes.

5.2 Home learning environment

This section describes home learning environment in respondents' families, focusing in particular on activities that parents were doing with the selected child (the child in the family who was aged 9-18 months at the time of the baseline survey). Various studies have shown that young children whose parents read books to them and engage them in other developmental activities achieve higher levels of cognitive development than children whose parents do these activities less often (CMPO 2006; Hansen 2010; Melhuish et al. 2008; Sammons et al. 2004; Sylva et al. 2004). For this reason, it was important to measure baseline levels of HLE activities in the families taking part in the evaluation.

5.2.1 Outings

Parents were asked about how often someone at home took the selected child out of the house, for example, visiting family or friends or going to the park. About half of parents said this happened every day (46% every day and 4% more than once a day), and only 6% said it happened once a week or more rarely than that (see Table 5.1).

Table 5.1	Frequency of outings
Base: All respondents	
	%
Very rarely	1
Once a week	5
Twice a week	9
Three times a week	12
Four times a week	11

Table 5.1 Frequency of outings	
Five or six times a week	13
Every day	46
More than once a day	4
Unweighted base	*5714*
Weighted base	*5711*

5.2.2 Activities with the child

Parents were asked about how often someone at home did the following activities with the selected child:

- Drawing the child's attention to the names of things during their day-to-day activities.

- Using blocks and shape sorting toys.

- Talking about, or trying to teach the child, the names of colours and shapes.

- Singing songs or nursery rhymes.

- Messy play, for example, using play dough, paints or sand.

Table 5.2 shows that drawing attention to the names of things and singing nursery rhymes were the most common activities for the children of this age: 90% of parents said that they were drawing the child's attention to the names of things every day, and 82% sang nursery rhymes to their child every day. Giving the child a chance to play in a messy way (e.g. with play dough, paints or sand) was the least common activity, with 40% of parents saying that their child never played in this way.

Table 5.2 Frequency of activities with the child					
Base: All respondents					
	Drawing attention to the name of things	Blocks and shape sorting	Naming colours and shapes	Songs and nursery rhymes	Messy play
	%	%	%	%	%
Never/Not yet	1	8	13	2	40
Done this once or twice	1	3	3	1	10
Less than once a week	+	2	2	1	7
Once a week	1	5	5	2	16
Several times a week	6	21	18	12	17
Once a day	11	23	18	23	5
More than once a day	79	39	40	59	3
Unweighted bases	*5712*	*5710*	*5711*	*5712*	*5710*
Weighted bases	*5710*	*5708*	*5710*	*5711*	*5709*

5.2.3 Watching television and DVDs

Parents were asked about their 9-18 month old watching television or DVDs, as this is important contextual information about the home environment, which will need to be taken into account when analysing children's centres' impact on children's outcomes. Two questions were asked: one about the child watching TV/DVDs together with a parent, and the other one about the child watching TV/DVDs on their own.

Table 5.3 shows that it was much less common for children to watch TV/DVDs on their own than together with the parent. While 51% of parents said that their children never watched TV/DVDs on their own, only 22% of parents said that their children did not watch any TV/DVDs at all. The proportion of children who spent a significant amount of time watching TV/DVDs on their own was relatively low (e.g. only 11% of children spent more than an hour per day on this activity; see Table 5.3).

Table 5.3 Time spent by the selected child watching television and DVDs		
Base: All respondents		
	Time spent watching TV/DVDs with parents	Time spent watching TV/DVDs on their own
	%	%
None	22	51
Fewer than 30 minutes a day	30	25
30 mins – 1 hour per day	22	13
1-2 hours per day	16	7
2-3 hours per day	6	2
3-4 hours per day	2	1
More than 4 hours per day	3	1
Unweighted bases	*5709*	*5708*
Weighted bases	*5708*	*5706*

5.2.4 Reading books

Parents were asked about how many books for babies/toddlers their 9-18 month old child had, and how often someone at home read to the child. Thirty-nine per cent of parents said they had 21 or more books for babies/toddlers at home, and 14% said they had fewer than five books (see Table 5.4).

Table 5.4 How many books for babies/toddlers child has	
Base: All respondents	
	%
No books	3
1-2 books	3
3-4 books	8
5-10 books	21

Table 5.4 How many books for babies/toddlers child has	
11-15 books	15
16-20 books	12
21 or more books	39
Unweighted base	*5712*
Weighted base	*5710*

Most parents read to their children regularly, with 65% doing this every day, and a further 19% doing it several times a week. However, in 12% of the families the child was read to less than once a week (see Table 5.5).[21]

Table 5.5 Frequency of reading to/with child	
Base: All respondents	
	%
Never/Not yet	6
Done this once or twice	3
Less than once a week	2
Once a week	5
Several times a week	19
Once a day	34
More than once a day	30
Unweighted base	*5713*
Weighted base	*5710*

5.2.5 Overall home learning environment

For the analysis below, we calculated a home learning environment (HLE) score. This was calculated from questions about outings, activities with the child (except TV/DVD watching) and books (both questions). Each question could contribute from one point (for 'very rarely'/'never'/'no books') to seven or eight points[22] (for 'more than once a day'/'21 or more books') to the HLE score. In total eight questions were taken into account when calculating the HLE score, and the values could range from eight to 57 points. Higher values indicate more favourable home learning environment.

The mean HLE score was 43.0 points and the median score was 44 points (see Table 5.6). The scores varied by family's socio-demographic characteristics. Families with higher income and where mothers had higher levels of educational attainment had more favourable home learning environment. Two parent families had higher HLE scores than lone parent families, and families where at least one parent was in paid employment had higher HLE scores than those where

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[21] The figure of 65% is a sum of 34% and 30% in Table 5.5, and the figure of 12% is a sum of 6%, 3% and 2%. The discrepancies are due to rounding of the numbers.

[22] All but one questions had seven options for the answer; the question about outings had eight options.

parents did not work (see Table 5.6). These findings are consistent with those from other studies (Smith et al. 2009b).

Table 5.6	Home learning environment score, by family socio-demographic characteristics				
Base: All respondents					
	Mean	Standard deviation	Median	*Weighted base*	*Unweighted base*
All	43.0	7.6	44.0	*5692*	*5696*
Household income					
Under £10,000	40.6	8.0	42.0	*893*	*944*
£10,000-£19,999	41.3	8.2	42.7	*1142*	*1195*
£20,000-£29,999	42.8	7.5	44.0	*975*	*956*
£30,000-£39,999	44.7	6.4	46.0	*769*	*759*
£40,000+	46.1	5.9	47.0	*1420*	*1332*
Mother's highest qualification					
Lower or no qualifications	38.9	8.2	40.0	*861*	*920*
GCSE Grades A*-C or equivalent	42.4	7.0	43.0	*1333*	*1362*
A-Level / CHE / Foundation degree	44.0	7.1	45.0	*1541*	*1543*
Honours degree and higher	45.3	6.9	46.0	*1727*	*1631*
Household type					
Two parents	43.4	7.6	45.0	*4624*	*4566*
Lone parent	41.6	7.5	43.0	*1069*	*1130*
Household economic status					
Not working	40.5	8.0	42.0	*1225*	*1313*
Working (at least one parent works)	43.7	7.3	45.0	*4467*	*4383*

Note: statistics for those with unknown income or for mothers with 'other' qualifications only are not shown.

5.3　Confusion, hubbub and order

The questions about order and chaos at home (the Confusions, Hubbub and Order Scale – CHAOS) aim to measure home environment and were developed by Matheny et al. (1995). Respondents were asked to agree or disagree with four statements about their home environment on a five-point scale from 'strongly agree' to 'strongly disagree'. Two of the questions described home environment as disorganised or chaotic, and the other two, focused on a calm atmosphere and routine.

Table 5.7	Description of home environment			

Base: All respondents				
	"It is really disorganised in our home"	"You can't hear yourself think in our home"	"The atmosphere in our home is calm"	"First thing in the day, we have a regular routine at home"
	%	%	%	%
Strongly agree	2	2	16	46
Agree	9	10	58	47
Neither agree nor disagree	14	13	18	3
Disagree	53	54	7	3
Strongly disagree	21	21	1	1
Unweighted bases	5703	5710	5710	5712
Weighted bases	5699	5708	5708	5709

A relatively small proportion of parents believed their home environment to be chaotic. Eleven per cent thought it was really disorganised in their home and 12% agreed that 'you can't hear yourself think'. Eight per cent would not describe their home atmosphere as calm, and 3%[23] would not say that they had a regular routine at home (see Table 5.7).

A composite score was calculated from these four questions (two of the questions had their scores reversed before they were added to the total CHAOS score). Respondents were awarded from one to five points for each of the questions. The range of valid values for the CHAOS scale was from 4 to 20 points, with higher values indicating less chaotic and more organised homes.

The mean value for the CHAOS score was 15.8 points and the median was 16.0 points (see Table 5.8). Families with higher income, those where mothers had higher educational attainment, those with two parents (rather than one) and where at least one parent worked, tended to have less chaotic and more organised homes than those in more disadvantaged circumstances. The differences between mean values of the CHAOS score between socio-demographic subgroups were small but all statistically significant, although the median values were about the same, around 15-16 points (see Table 5.8).

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[23] The figure of 3% is the sum of 3% and 1% in the table. The discrepancy is due to rounding.

Table 5.8   Confusion, Hubbub and Order Scale, by family socio-demographic characteristics

Base: All respondents

	Mean	Standard deviation	Median	*Weighted base*	*Unweighted base*
All	15.8	2.3	16.0	*5692*	*5696*
Household income					
Under £10,000	15.4	2.4	16.0	*890*	*942*
£10,000-£19,999	15.4	2.5	16.0	*1142*	*1194*
£20,000-£29,000	15.6	2.3	16.0	*972*	*955*
£30,000-£39,999	16.1	2.1	16.0	*771*	*760*
£40,000+	16.4	2.1	16.0	*1423*	*1335*
Mother's highest qualification					
Lower or no qualifications	14.9	2.6	15.0	*857*	*919*
GCSE Grades A*-C or equivalent	15.6	2.4	16.0	*1335*	*1364*
A-Level / CHE / Foundation degree	15.9	2.2	16.0	*1543*	*1544*
Honours degree and higher	16.3	2.1	16.0	*1730*	*1633*
Household type					
Two parents	15.9	2.3	16.0	*4622*	*4564*
Lone parent	15.4	2.5	16.0	*1071*	*1132*
Household economic status					
Not working	15.1	2.6	15.0	*1222*	*1310*
Working (at least one parent works)	16.0	2.2	16.0	*4471*	*4386*

Note: statistics for those with unknown income or for mothers with 'other' qualifications only are not shown.

5.4   Major life changes

Respondents were asked if any of the following events happened since the birth of the selected child:

- Death of a close family member

- A close family member going to prison

- Someone in the household getting divorced or separating (including temporarily)

- Someone in the household losing their job.

These questions were included in the questionnaire as other studies had found that major life changes of this kind can have a significant impact on the child's life (Sylva et al. 2004).

Twenty-nine per cent of the parents said that (at least) one of the events listed had happened in their family since the selected child was born. A death of a family member was mentioned most

frequently (17%) and a family member going to prison was mentioned by the fewest number of parents (2%; see Table 5.9).

Table 5.9 Occurrence of major life changes since child's birth	
Base: All respondents	
	%
Death of a close family member	17
A close family member went to prison	2
Someone in the household got divorced or separated (including temporarily)	5
Someone in the household lost their job	9
None	71
Unweighted base	*5713*
Weighted base	*5707*

NB: More than one answer could be given.

5.5   Relationship with non-resident parent

Respondents in lone parent households (99% of whom were mothers[24]) were asked about the selected child's relationship with their non-resident natural parent (the father in most cases). They were asked whether the child had contact with their non-resident parent and how frequent that contact was. They were also asked about their own relationship with the child's non-resident parent.

Seventy-seven per cent of respondents said that their child currently had contact with their other natural parent. However, only 25% of children in lone parent households saw their non-resident parent every day (Table 5.10). Frequency of contact with non-resident parent did not vary by household income (results not shown).

Table 5.10 Frequency of selected child's contact with non-resident parent	
Base: Respondents in lone parent households	
	%
Every day	25
5-6 times a week	7
3-4 times a week	12
1-2 times a week	20
Less than once a week but at least once a month	8
Less often than once a month	5
Never	23
Unweighted base	*1123*
Weighted base	*1059*

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[24] Or female guardians.

When describing the respondent's relationship with their child's non-resident parent, 31% of respondents believed it to be very good and a further 29% believed it was fairly good. For 18% of respondents, their relationship with their child's non-resident parent was believed to be fairly or very bad (see Table 5.11).[25] Responses to this question did not vary by household income (results not shown).

Table 5.11 Quality of resident parent's relationship with non-resident parent	
Base: Respondents in lone parent households who were selected child's natural parents	
	%
Very good	31
Fairly good	29
Neither good nor bad	23
Fairly bad	5
Very bad	12
Unweighted base	*1105*
Weighted base	*1040*

5.6   Quality of relationship with partner

Evidence from other studies shows that parental relationships affect child outcomes (Jones 2010). The survey asked three questions about parental relationships (in two-parent households only):

- Satisfaction with the relationship with partner
- Level of criticism in the relationship
- Frequency of violence.

The questions about relationships were asked in a self-completion format, where respondents entered their answers onto the laptop themselves. The questionnaire was designed in this way in order to encourage maximum disclosure of potentially sensitive information.

The vast majority of parents (94%) said they were satisfied with their relationships (see Table 5.12). The level of satisfaction did not vary by family income (results not shown).

Table 5.12 Satisfaction with relationship with partner	
Base: Respondents in couple households	
	%
Very satisfied	72
Quite satisfied	22
Neither satisfied nor dissatisfied	4

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[25] The figure of 18% is the sum of 5% and 12% in Table 5.11.

Table 5.12 Satisfaction with relationship with partner	
Quite dissatisfied	2
Very dissatisfied	+
Unweighted base	*4372*
Weighted base	*4447*

There were two questions about criticism in the relationship: one about the respondent being critical of their partner, and the one about their partner's criticism.[26] The answers were measured on a 10-point scale, from 1 for 'never critical' to 10 for 'very critical'.

Overall, the levels of criticism appeared to be relatively low, with more than half of respondents choosing options from 1 to 3 for both questions (56% and 64% respectively), and the median value for both questions being equal 3 (see Table 5.13).

Table 5.13 Level of criticism in the relationship		
Base: Respondents in couple households		
	Respondent being critical of partner	Partner being critical of respondent
	%	%
1 – never critical	18	22
2	19	23
3	19	19
4	10	9
5	15	13
6	5	4
7	6	3
8	4	3
9	1	1
10 – very critical	3	3
Mean	3.7	3.3
Median	3.0	3.0
Unweighted bases	*4380*	*4384*
Weighted bases	*4450*	*4454*

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[26] These questions were previously asked in the Families, Children and Childcare study (http://www.familieschildrenchildcare.org/fccc_frames_home.html).

There was a small but statistically significant variation by family income in responses to the question about the respondent being critical: those in families with income under £10,000 were the least likely to be critical (mean value of 3.4) and those with income of £40,000 or more were the most likely to be critical (mean value of 4; table not shown). However, there were no differences by income with regard to the question about the partner being critical of the respondent (results not shown).

A very small proportion of respondents (2%) reported that their partner had been violent towards them (violence being described in the question as grabbing, pushing, shaking, hitting or kicking; see Table 5.14).

Table 5.14 Frequency of violence within the relationship	
Base: Respondents in couple households	
	%
Once a month or more often	+
Less often than once a month	2
Never	98
Unweighted base	*4356*
Weighted base	*4427*

Respondents in lower income families were more likely to experience violence in the relationship than those in higher income families. Four per cent of respondents in families with income under £10,000 said that their partner had been violent towards them, compared with 1% in families with income of £40,000 or more (see 0).

5.7   Fathers' involvement in child rearing

Many studies have shown the significance of fathers' involvement in bringing up their children [Flouri 2005; Lamb 2010; Sarkadi et al. 2008]. The parents' questionnaire included several questions about fathers' involvement in child rearing - these were only asked in two parent households. The questions were asked about the mother's male partner, who could be the selected child's biological, adoptive, step or foster father. The questions were part of a self-completion part of the questionnaire.

Respondents (95% of whom were mothers and 5% fathers[27]) were asked how often the child's father did the following things for the child:

- Looking after the child on their own;

- Playing with the child;

- Dressing the child; and

- Getting the child ready for bed in the evening.[28]

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[27] Or female or male guardians.

[28] These questions were previously asked in the Millennium Cohort Study and the National Evaluation of Sure Start.

Table 5.15 shows that of the four things asked about, playing with the child was the most common activity, with 77% of fathers playing with their children every day. Activities relating to *caring* for the child were less prevalent, with only 17-22% of fathers doing them every day, and 15-17% doing them less often than once a week or never (see Table 5.15).

Table 5.15	Fathers' involvement in child rearing			
Base: Respondents in couple households				
	How often father looks after child on his own	How often father plays with child	How often father dresses child	How often father gets child ready for bed
	%	%	%	%
Every day	22	77	20	17
Almost every day (5-6 times a week)	11	13	15	17
A few times a week (3-4 times a week)	20	6	29	32
Once or twice a week	29	3	21	17
Less than once a week	15	1	10	10
Never	3	+	5	8
Unweighted bases	*4361*	*4384*	*4368*	*4369*
Weighted bases	*4437*	*4459*	*4444*	*4437*

NB: the questions were asked about the mother's male partner, who could be the child's biological, adoptive, step or foster father.

From the four questions above, a father's involvement score was calculated, to which each question contributed from one point for 'every day' to six points for 'never'. The total score could take values from four to 24 points, with higher values indicating less involvement from the father in child rearing.[29]

The mean value for the father's involvement score was 10.6 and the median was 10 points (see Table 5.16). There were no statistically significant associations between family socio-demographic characteristics and the degree of father's involvement in child rearing.

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[29] Please note that the two other questions about fathers' involvement in child rearing – about father's closeness to the child and how often the father could be counted on – were not included in this scale as they would have reduced the scale's internal consistency as measured by Chronbach's alpha. Also, the question about mothers counting on fathers was asked of mothers only, while the rest of the questions in this section were asked of all respondents in couple households regardless of their sex.

Table 5.16   Father's involvement score, by family socio-demographic characteristics

Base: Respondents in couple households

	Mean	Standard deviation	Median	*Weighted base*	*Unweighted base*
All	10.6	3.9	10.0	*4409*	*4338*
Household income					
Under £10,000	10.5	4.5	10.0	*381*	*396*
£10,000-£19,999	10.3	3.9	10.0	*751*	*780*
£20,000-£29,000	11.0	3.9	11.0	*870*	*845*
£30,000-£39,999	10.6	3.5	10.0	*726*	*716*
£40,000+	10.5	3.7	10.0	*1373*	*1282*
Mother's highest qualification					
Lower or no qualifications	10.8	4.5	10.0	*474*	*502*
GCSE Grades A*-C or equivalent	10.8	4.0	11.0	*913*	*929*
A-Level / CHE / Foundation degree	10.7	3.7	10.0	*1254*	*1235*
Honours degree and higher	10.4	3.7	10.0	*1606*	*1499*
Household economic status					
Not working	10.2	4.2	10.0	*386*	*416*
Working (at least one parent works)	10.6	3.8	10.0	*4023*	*3922*

Note: statistics for those with unknown income or for mothers with 'other' qualifications only are not shown. The figures relate to the mother's male partner, who could be the child's biological, adoptive, step or foster father.

Where the respondent was the child's mother, they were asked how often they felt they could count on the father (male partner) if they needed him to take care of the child. Seventy per cent felt they could 'always' count on the child's father, and a further 16% could 'usually' count on them (see Table 5.17). Responses to this question did not vary by household income.

Table 5.17   How often mothers can count on fathers to take care of the child

Base: All mother-respondents in couple households

	%
Never	2
Sometimes	8
Usually	16
Rarely	3
Always	70
Unweighted base	*4166*
Weighted base	*4233*

NB: the questions were asked about the mother's male partner, who could be the child's biological, adoptive, step or foster father.

Almost all respondents believed that their child had a close relationship with their father (see Table 5.18).

Table 5.18 Father's closeness to child	
Base: Respondents in couple households	
	%
Not very close	+
Fairly close	3
Quite close	11
Extremely close	86
Unweighted base	*4372*
Weighted base	*4448*

5.8   Parenting stress index (PSI)

Parenting stress was measured using the short form of the Parenting Stress Index (Abidin 1995) questionnaire which includes the follows three sections or subscales:

- Parental distress subscale

- Parent-child dysfunctional interaction subscale

- Difficult child subscale.

The questions were asked of all respondents in a self-completion part of the questionnaire. Higher scores on the scales indicate lower parenting stress.

The mean Parental Distress subscore was 45.8 points and the median score was 46.0 points (see Table 5.19). The scores were higher for higher income families, those with two parents and where at least one parent worked, indicating that these types of families experienced a lesser degree of parental distress than those with more social disadvantage. With regard to mothers' educational attainment, mothers without qualifications or with qualifications below GCSE Grades A*-C level experienced a higher degree of parental distress than those with higher levels of educational attainment (see Table 5.19).

Table 5.19   Parenting Stress Index – Parental Distress subscore, by family socio-demographic characteristics

Base: All respondents	Mean	Standard deviation	Median	*Weighted base*	*Unweighted base*
All	45.8	8.0	46.0	*5475*	*5455*
Household income					
Under £10,000	44.1	8.6	45.0	*852*	*902*
£10,000-£19,999	44.9	8.4	46.0	*1084*	*1124*
£20,000-£29,000	45.7	8.0	47.0	*955*	*932*
£30,000-£39,999	47.0	7.2	47.0	*759*	*747*
£40,000+	46.9	7.4	47.0	*1410*	*1320*
Mother's highest qualification					
Lower or no qualifications	44.1	9.0	45.0	*750*	*802*
GCSE Grades A*-C or equivalent	46.3	7.8	47.0	*1302*	*1325*
A-Level / CHE / Foundation degree	46.0	8.3	47.0	*1522*	*1521*
Honours degree and higher	45.9	7.5	46.0	*1703*	*1601*
Household type					
Two parents	46.3	7.8	47.0	*4453*	*4375*
Lone parent	43.6	8.7	45.0	*1022*	*1080*
Household economic status					
Not working	43.3	9.0	44.0	*1147*	*1227*
Working (at least one parent works)	46.4	7.6	47.0	*4328*	*4228*

Note: statistics for those with unknown income or for mothers with 'other' qualifications only are not shown.

The mean value for the Parent-Child Dysfunctional Interaction (PCDI) subscore of the PSI was 54.1 and the median was 56.0 (see Table 5.20). There was a clear pattern in the relationship between family socio-demographic characteristics and their PCDI score, indicating higher levels of stress with regard to parent-child interaction (lower values on the score) for those in more disadvantaged circumstances (see Table 5.20).

Table 5.20   Parenting Stress Index – Parent-Child Dysfunctional Interaction subscore, by family socio-demographic characteristics

Base: All respondents

	Mean	Standard deviation	Median	*Weighted base*	*Unweighted base*
All	54.1	5.8	56.0	*5502*	*5479*
Household income					
Under £10,000	53.0	6.3	54.0	*857*	*905*
£10,000-£19,999	53.4	6.0	55.0	*1090*	*1132*
£20,000-£29,000	53.7	6.0	55.0	*959*	*938*
£30,000-£39,999	54.9	5.2	57.0	*761*	*750*
£40,000+	55.5	4.7	57.0	*1415*	*1325*
Mother's highest qualification					
Lower or no qualifications	52.1	6.9	53.0	*762*	*813*
GCSE Grades A*-C or equivalent	53.9	5.6	56.0	*1304*	*1327*
A-Level / CHE / Foundation degree	54.6	5.6	57.0	*1527*	*1523*
Honours degree and higher	55.0	5.0	57.0	*1703*	*1602*
Household type					
Two parents	54.3	5.7	56.0	*4477*	*4396*
Lone parent	53.3	6.0	55.0	*1025*	*1083*
Household economic status					
Not working	52.6	6.5	54.0	*1153*	*1234*
Working (at least one parent works)	54.5	5.5	56.0	*4349*	*4245*

Note: statistics for those with unknown income or for mothers with 'other' qualifications only are not shown.

The mean value for the Difficult Child (DC) subscore of the PSI was 50.1 and the median was 51.0 (see Table 5.21). As with the other PSI subscores there was a clear association in the relationship between family socio-demographic characteristics and their DC score such that more advantaged families reported lower levels of stress.

Table 5.21   Parenting Stress Index – Difficult Child subscore, by family socio-demographic characteristics

Base: All respondents

	Mean	Standard deviation	Median	*Weighted base*	*Unweighted base*
All	50.1	6.67	51.0	*5440*	*5425*
Household income					
Under £10,000	49.0	7.2	49.0	*851*	*898*
£10,000-£19,999	49.8	6.7	50.0	*1079*	*1121*
£20,000-£29,000	49.7	7.1	50.0	*952*	*931*
£30,000-£39,999	50.9	5.8	51.0	*750*	*742*
£40,000+	50.8	6.2	52.0	*1394*	*1308*
Mother's highest qualification					
Lower or no qualifications	48.7	7.7	49.0	*758*	*810*
GCSE Grades A*-C or equivalent	50.3	6.3	51.0	*1295*	*1316*
A-Level / CHE / Foundation degree	50.4	6.8	51.0	*1505*	*1506*
Honours degree and higher	50.3	6.2	51.0	*1680*	*1583*
Household type					
Two parents	50.3	6.5	51.0	*4419*	*4345*
Lone parent	49.0	7.2	49.0	*1021*	*1080*
Household economic status					
Not working	48.6	7.7	49.0	*1148*	*1228*
Working (at least one parent works)	50.4	6.3	51.0	*4292*	*4197*

Note: statistics for those with unknown income or for mothers with 'other' qualifications only are not shown.

5.9   Exploratory analysis of patterns in parenting and family functioning

To extend the description of parenting and family functioning that is provided by this chapter, additional analysis was undertaken to explore possible underlying patterns within the measures. Patterns of parenting and family function were then investigated to see whether they were significantly related to a number of socio-demographic measures. Explaining the associations between parenting, family functioning, and socio-demographics is a prelude to help develop future models of the factors that may influence child and family outcomes for the sample at age 3 years (the focus of impact analyses). Appendix C provides a full account of the statistical procedures that were carried out and the results that were obtained. A summary of the findings is presented below.

The analysis focused on two-parent families. Two broad groups of households were identified based on different patterns of parenting and family functioning:

1. Households that demonstrated *more favourable* parenting and family functioning (39%)

2. Households that demonstrated *less favourable* parenting and family functioning (61%)[30]

These two groups of households differed significantly from one another on several measures of parenting and family functioning including: Home Learning Environment (HLE), the Parenting Stress Index (PSI), the quality of a respondent's relationship with a partner, the extent of father involvement in child rearing, and the level of organisation within the home.

These two groups of households were compared according to four socio-demographic measures:

1. Household income
2. Highest qualification obtained by mother
3. Whether or not mothers were married and cohabiting
4. Household economic status – whether either the respondent or their partner was in employment

Results revealed just one robust association: households with lower total income were more likely to be characterised by less favourable parenting and family functioning.

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[30] All percentages from the exploratory analysis presented in 0 and summarised in this section are based on unweighted data because of the exploratory nature of these analyses.

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Appendix A: Socio-demographic Characteristics

Appendix Table A.1 Sex of respondent	
Base: All families	
	%
Male	4
Female	96
Unweighted base	*5717*
Weighted base	*5717*

Appendix Table A.2 Household type and work status	
Base: All families	
	%
Lone parents	**19**
Working	5
Non-working	14
Couples	**81**
Both working	41
One working	32
Neither working	8
Unweighted base	*5717*
Weighted base	*5717*

Appendix Table A.3 Respondent's marital status	
Base: All families	
	%
Never married	39
Married and living with partner	56
Married but separated	2
Divorced or widowed	2
Unweighted base	*5717*
Weighted base	*5717*

Appendix Table A.4 Number of children in the household	
Base: All families	
	%
1	47
2	33
3+	20
Unweighted base	*5717*
Weighted base	*5717*

Appendix Table A.5 Age of the selected child	
Base: All families	
	%
9 months	8
10 months	9
11 months	10
12 months	10
13 months	10
14 months	11
15 months	11
16 months	12
17 months	13
18 months	7
Unweighted base	*5708*
Weighted base	*5706*

Appendix Table A.6 Birth order of the selected child	
Base: All families	
	%
No younger or older siblings	48
Younger siblings only	1
Older siblings only	49
Younger and older siblings	1
Unweighted base	*5712*
Weighted base	*5711*

Appendix Table A.7 Ethnicity of the mother and selected child		
Base: All families		
	Child	**Mother**[31]
	%	*%*
White		
White British	70	70
White Irish	+	+
White other	6	8
Mixed		
White and Caribbean	2	1
White and Black African	1	+
White and Asian	1	+
Other mixed background	2	1
Asian		
Indian	3	3
Pakistani	4	4
Bangladeshi	2	2
Other Asian background	1	1
Black		
Black Caribbean	1	2
Black African	4	4
Other Black background	+	+
Other		
Chinese	+	+
Other	2	2
Unweighted base	*5708*	*5710*
Weighted base	*5707*	*5711*

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[31] Twenty three households contained no mother figure. In these household the respondent's ethnicity was collected instead.

Appendix Table A.8 Language spoken at home	
Base: All families	
	%
English speakers only in the household	**78**
Speakers of other languages in the household	**22**
Mainly speaks English	4
Mainly speaks another language	11
Speaks English and another language equally	7
Unweighted base	*5715*
Weighted base	*5714*

Appendix Table A.9 Tenure	
Base: All families	
	%
Own outright	4
Buying with a mortgage	43
Shared ownership	1
Rent	48
Rent free	4
Unweighted base	*5710*
Weighted base	*5709*

Appendix Table A.10 Number of smoke detectors	
Base: All families	
	%
At least as many smoke detectors as floors in home	79
More floors in home than smoke detectors	15
No smoke detectors	6
Unweighted base	*5692*
Weighted base	*5684*

Appendix Table A.11　Last time smoke detectors were tested

Base: All families who have smoke detectors

	%
Over two years ago	3
Over one year ago	7
Over six months ago	16
More recently than six months ago	69
Never	5
Unweighted base	*5307*
Weighted base	*5275*

Appendix Table A.12　Sources of income

Base: All families

	%
Earnings from employment	76
Child Benefit	95
Child Tax Credit	58
Working Tax Credit	22
Job Seeker's Allowance	5
Income Support	15
Housing Benefit/ Council Tax Benefit	23
Incapacity Benefit/ Employment and Support Allowance	2
Disability Living Allowance	5
Other state benefits	1
Interest from savings and investments	4
Pension	1
Child maintenance	4
Student grant	1
Other	1
None	+
Unweighted base	*5683*
Weighted base	*5682*

Appendix Table A.13	Level of income	
Base: All families		
		%
Less than £4,999		4
£5,000 - £9,999		14
£10,000 - £19,999		22
£20,000 - £29,999		19
£30,000 - £39,999		15
£40,000 - £49,999		12
£50,000+		15
Unweighted base		*5199*
Weighted base		*5215*

Appendix Table A.14	Father's socio-economic group[32]	
Base: All families where at least one parent was or had been employed		
		%
Employers in large organisations		+
Higher managerial occupations		3
Higher professional occupations		12
Lower professional & higher technical occupations		14
Lower managerial occupations		5
Higher supervisory occupations		3
Intermediate occupations		10
Small employers		2
Own account workers		10
Lower supervisory occupations		5
Lower technical occupations		6
Semi-routine occupations		17
Routine occupations		16
Unweighted base		*5153*
Weighted base		*5197*

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[32] Where possible this classification was based upon the father's current employment. Where the father was currently unemployed the classification was based upon the father's past employment. Where there was no father in the household (or the father had always been unemployed) the classification was based upon the mother's current employment or past employment as appropriate.

Appendix Table A.15 Mother's qualifications[33]	
Base: All families except those who reported that they had "other" qualifications only	
	%
No qualifications	9
NVQ level 1	7
NVQ level 2	25
NVQ level 3	18
NVQ level 4	6
NVQ level 5	4
NVQ level 6	19
NVQ level 7	11
NVQ level 8	1
Unweighted base	*5495*
Weighted base	*5504*

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[33] 23 households contained no mother figure. In these household the respondent's qualification level was collected instead.

Appendix B: Patterns in Use of Family Services

James Hall, Pamela Sammons and Jenny Goff

B.1 Background

As discussed in Chapter 1, 128 children's centres were sampled as part of this evaluation. From these 128 centres, families with a selected child currently aged between 9-18 months were sampled as respondents for this large-scale survey. These families were then asked to report on their use of family services at their named children's centre and elsewhere within a defined length of time (see below).

Following-on from the initial description of how respondents used family services in Chapter 2, this appendix goes on to consider that different patterns may also exist within the use of family services. Thus, Chapter 2 and 0 are mutually informative – while Chapter 2 *describes* the use of family services, 0 instead draws *inferences* that are based upon these descriptions. In order to draw these inferences, eighteen measures that detail the use of family services were analysed. These eighteen measures concentrated on the services that were provided directly by the 128 children's centres, rather than on the broader range of services that were provided by other agencies. Thus, the results reported by this appendix are more 'centre-focused' rather than 'service-focused'.

Throughout this appendix we commonly refer to two criteria: First, the family services that were provided by the children's centre where the family was registered (a family's 'named children's centre'). Second, those services that had been used within a period extending back to 3 months before the birth of the selected child who was aged 9-18 months at the time of Strand 2 Wave 1 fieldwork.

B.2 Exploring the use of family services

Eighteen measures are documented below that provided a summary record of the main family services that respondents reported they had used. These measures are grouped within seven "*themes*" that encompass similar questions while the measures themselves frequently refer to six "*types*" of family service.

Theme A. Types of service that are used at the named children's centre[34]

1. Has the respondent used any of the following _health services_? (a yes/no dichotomous measure; n:3128 replied "yes", 54.7%)
    a. Ante-natal classes
    b. Breastfeeding groups
    c. Midwife/health visitor drop-in session or clinic
    d. Speech and Language Therapy (SALT)
    e. Psychologist/Counsellor

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[34] Overall, it can be seen that health services (55%) and activities for parents and toddlers (53%) were by far the most commonly reported as used.

2. Has the respondent used any of the following *activities for parents and toddlers*? (a yes/no dichotomous measure; n:3013 replied "yes", 52.7%)
    a. 'Stay and Play', or 'play and learn' groups
    b. Organised sport or exercise for babies or children
    c. Toy Libraries
3. Has the respondent used any of the following services that offer *family and parenting support*? (a yes/no dichotomous measure; n:763 replied "yes", 13.3%)
    a. Peer support groups (parents supporting other parents)
    b. Parenting classes
    c. Organised activities, hobbies or sport for parents
    d. Relationship support
    e. Specialist family or parenting support
4. Has the respondent used any of the following services that provide *employment and/or benefits advice*? (a yes/no dichotomous measure; n:456 replied "yes", 8.0%)
    a. Benefits and tax credits advice
    b. Housing or debt advice
    c. Employment support
5. Has the respondent used any of the following *adult education services*? (a yes/no dichotomous measure; n:224 replied "yes", 3.9%)
    a. Basic IT or job skills course
    b. Further education or adult learning courses
    c. English classes for speakers of other languages
6. Has the respondent used any *other services*? (a yes/no dichotomous measure; n:632 replied "yes", 11.1%)
    a. Home safety advice or course
    b. First aid course
    c. Other Family Services

B. Percentage of services used at the named children's centre and elsewhere

7. Of all the family services that were used by the respondent (up to 21 listed in the survey), what percentage of these were used at *the named children's centre*? (a continuous measure; the mean percentage of family services used that were accessed through the named children's centre was 53%)
8. Of all the family services that were used by the respondent (up to 21 listed in the survey), what percentage were used at *any children's centre?*[35] (a continuous measure; the mean percentage of family services used that were accessed through children's centre was 69%)

C. Nature of the use of different types of service provided by the named children's centre

9. Of the six types of service possibly provided by *the* named children's centre, which has the respondent used *over the longest period*? (a

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[35] Including the named children's centre.

nominal/categorical measure, 7 options[36]; health services were used for longest, n: 3380, 59.1%)

10. Of the six types of service possibly provided by *the named* children's centre, which has the respondent used *the most frequently*? (a nominal/categorical measure, 7 options[1]; activities for parents and toddlers were used most frequently, n: 1885, 33.0%)

11. Of the six types of service possibly provided by *the named* children's centre, which has the respondent used *for the most hours in a typical week*? (a nominal/categorical measure, 7 options[1]; activities for parents and toddlers were used for the most hours in a typical week, n: 1885, 33.8%)

D. Helpfulness of each type of service provided by the named children's centre

12. Of the six types of service possibly provided by *the named* children's centre, which *type of service does the family feel has been most helpful*? (a nominal/categorical measure, 7 options[1]; n:3449 or 60.3% of respondents found more than one type of service to be equally helpful)

13. Of the six types of service possibly provided by *the* named children's centre, which *type of service does the family feel has been least helpful*? (a nominal/categorical measure, 7 options[1]; n:2428 or 42.5% of respondents found more than one type of service to be equally *un*helpful,

E. Over what period of time has the named children's centre been used

14. How long ago did the household start using services provided by *the* named children's centre? (a continuous measure, in months to September 2012; mean: 28 months ago). This average length of time is derived in reference to whether families had ever used their SSCC – with no reference period. Appendix Table B.1 presents the years and months that families reported first using their SSCC.

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[36] The seventh option/category records instances where more than one type of service (out of six) was given in reply to the question.

Appendix Table B.1 Dates provided by the ECCE sampled families for when they first started using the SSCC at which they were currently registered (provided by n: 4924 of n:5717 households)

		Year first went to named SSCC													Total
		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Month first went to named SSCC	Jan	7	1	2	3	4	6	7	13	25	34	80	316	26	**524**
	Feb	1	0	0	1	1	2	8	10	17	31	68	294	18	**451**
	Mar	0	1	2	2	1	6	5	12	22	38	97	294	8	**488**
	Apr	0	0	1	2	1	1	11	13	31	29	76	261	1	**427**
	May	0	1	2	2	3	6	12	14	22	33	79	277	4	**455**
	June	1	1	0	5	4	12	16	21	47	44	104	224	0	**479**
	July	0	0	2	0	2	3	8	13	23	20	109	133	0	**313**
	Aug	0	0	1	1	2	3	5	12	24	24	140	113	0	**325**
	Sep	1	0	1	1	5	6	12	31	29	40	227	143	0	**496**
	Oct	0	0	1	1	1	3	7	6	16	23	197	79	0	**334**
	Nov	0	0	0	2	1	6	5	8	23	22	213	60	0	**340**
	Dec	0	0	1	0	1	0	5	7	20	18	200	40	0	**292**
Total		**10**	**4**	**13**	**20**	**26**	**54**	**101**	**160**	**299**	**356**	**1590**	**2234**	**57**	**4924**

Note: The earliest possible starting date has been capped at January 2000 and the latest was capped at May 2012. Seven families reported start date outside this range, but SSCCs did not exist prior to 2000 and Strand 2 Wave 1 fieldwork finished before June 2012.

F. Satisfaction with the named children's centre

15. How satisfied is the respondent with the services and activities available at *the named* children's centre? (a 5-point ordinal measure; from "very dissatisfied" to ""very satisfied"; n:2772 or 48.5% of respondents replied "very satisfied")

G. Childcare and other family services provided by the named children's centre

16. Has the respondent received a home visit from *the* named children's centre? (a yes/no dichotomous measure; n:2226, 38.9% replied "yes")
17. Of the services not run by *the named children's centre*, what percentage were accessed after advertising or conversations held at the named children's centre? (a continuous measure; mean percentage: 27.2% of the family services that were used but not run by the children's centre were due to children's centre advertising or conversations)
18. Who is the provider of the respondent's formal childcare – the named children's centre, another children's centre, or another organisation? (a nominal/categorical measure, 4 options, in reference to all children aged under 5 years in the household; n:3448 respondents *did not use formal childcare at all*, 60.3%)

Appendix Table B.2 provides full descriptive statistics for all eighteen measures that are analysed in this appendix. Chapter 2 provides a fuller account of what specific family services were being used and how. Of course, a family's use of services was also likely to have been affected by the 'offer' that was provided by the individual children's centre that they are registered with. As discussed in the Baseline Strand 1

report about provision, which was based on responses to the centre manager interviews (Tanner *et al*., 2012), there was considerable variation between centres in the patterns of service provision that were offered. This appendix does not explore this issue but it will be studied in future reports. In the vast majority of cases the respondent was the child's natural mother.

Appendix Table B.2 Descriptive statistics of the eighteen measures that were analysed in Appendix B and that detailed how families used the family services provided by children's centres			
		Respondents (max. n: 5717; listwise n:1000)	
Measure	Valid n	Valid % or mean ± SD	"Missing"* n
1. Has the respondent used any *health services*? (yes/no dichotomous measure)	5716		1
Yes	3128	54.7%	
No	2588	45.3%	
2. Has the respondent used any *activities for parents and toddlers*? (a yes/no dichotomous measure)	5717		0
Yes	3013	52.7%	
No	2704	47.3%	
3. Has the respondent used any services that offer *family and parenting support*? (a yes/no dichotomous measure)	5715		2
Yes	763	13.3%	
No	4952	86.6%	
4. Has the respondent used any services that provide *employment and/or benefits advice*? (a yes/no dichotomous measure)	5714		3
Yes	456	92.0%	
No	5258	8.0%	
5. Has the respondent used any *adult education services*? (a yes/no dichotomous measure)	5717		0
Yes	224	3.9%	
No	5493	96.1%	
6. Has the respondent used any *other service*? (a yes/no dichotomous measure)	5715		2
Yes	632	11.1%	
No	5083	88.9%	
7. Of all the family services that were used by a respondent (up to 21), what percentage were used at *the named children's centre*? (a continuous measure)	5515	52.75 ± 37.65	2
8. Of all the family services that were used by a respondent (up to 21), what percentage were used at *any children's centre*? (a continuous measure)	5515	69.12 ± 32.92	2
9. Of the six types of service possibly provided by the named children's centre, which has the respondent used for the *longest period*? (a nominal/categorical measure, 7 options)	5476		241
a. Health Services	3380	61.7%	
b. Activities for Parents and Toddlers	978	17.9%	

	c. Family and Parenting Support	145	2.6%	
	d. Employment and/or Benefits Advice	253	4.6%	
	e. Adult Education Services	155	2.8%	
	f. Other Service	83	1.5%	
	g. More than one Type of Service	482	8.8%	
10. Of the six types of service possibly provided by *the* named children's centre, which has the respondent used *the most frequently*? (a nominal/categorical measure, 7 options)		5510		207
	a. Health Services	1495	27.1%	
	b. Activities for Parents and Toddlers	1885	34.2%	
	c. Family and Parenting Support	157	2.8%	
	d. Employment and/or Benefits Advice	77	1.4%	
	e. Adult Education Services	222	4.0%	
	f. Other Service	35	0.6%	
	g. More than one Type of Service	1639	29.7%	
11. Of the six types of service possibly provided by *the named* children's centre, which has the respondent used *for the most hours in a typical week*? (a nominal/categorical measure, 7 options)		4023		1694
	a. Health Services	834	20.7%	
	b. Activities for Parents and Toddlers	1931	48.0%	
	c. Family and Parenting Support	219	5.4%	
	d. Employment and/or Benefits Advice	37	0.9%	
	e. Adult Education Services	305	7.6%	
	f. Other Service	29	0.7%	
	g. More than one Type of Service	668	16.6%	
12. Of the six types of service possibly provided by *the named* children's centre, which *type of service has proven most helpful*? (a nominal/categorical measure, 7 options)		5508		209
	a. Health Services	1199	21.8%	
	b. Activities for Parents and Toddlers	592	10.4%	
	c. Family and Parenting Support	68	1.2%	
	d. Employment and/or Benefits Advice	84	1.5%	
	e. Adult Education Services	68	1.2%	
	f. Other Service	48	0.8%	
	g. More than one Type of Service	3449	60.3%	
13. Of the six types of service possibly provided by *the named* children's centre, which *type of service has proven least helpful*? (a nominal/categorical measure, 7 options)		5508		209
	a. Health Services	1748	31.7%	
	b. Activities for Parents and Toddlers	734	13.3%	
	c. Family and Parenting Support	124	2.3%	
	d. Employment and/or Benefits Advice	323	5.9%	
	e. Adult Education Services	66	1.2%	
	f. Other Service	85	1.5%	
	g. More than one Type of Service	2428	44.1%	
14. How long ago did the household start using services provided by *the named* children's centre? (a continuous measure, in months to September 2012)		1664	24.88 ± 12.19	4053

15. How satisfied is the respondent with the services and activities available at *the named* children's centre? (a 5-point ordinal measure)		5522		195
	a. Very Dissatisfied	77	1.3%	
	b. Fairly Dissatisfied	132	2.3%	
	c. Neither Dissatisfied nor satisfied	947	16.6%	
	d. Fairly Satisfied	1594	27.9%	
	e. Very Satisfied	2772	48.5%	
16. Has the respondent received a home visit from *the named* children's centre? (a yes/no dichotomous measure)		5702		15
	Yes	2226	38.9%	
	No	3476	60.8%	
17. Of the services not run by a children's centre, what percentage was used due to advertising or conversations held at the children's centre? (a continuous measure)		3260	27.18 ± 39.71	2457
18. Who is the provider of the respondent's formal childcare? (a nominal/categorical measure, 4 options)		5715		2
	a. The named children's centre	267	4.7%	
	b. Did not use at named children's centre - but was signposted by them	180	3.1%	
	c. Did not use at named children's centre & was not signposted by children's centre & did not use at another children's centre - but used somewhere else	1820	31.8%	
	d. Did not use formal childcare	3448	60.3.%	

Note: 'Missing' is a term used to capture questions that respondents refused to answer or did not know an answer to, as well as questions that were not applicable to certain respondents and/or households.

Further initial analysis was conducted to summarise overall patterns of service use. The majority of respondents only used two *types* of family service at their registered named children's centre: *health services* (55% of 5716 families) and *activities for parents and children* (53% of all 5717 families). This is in sharp contrast with the least used category of family service: *adult education* (only 4%). Further, *health services* had been used for the longest period of time (likely reflecting ante-natal care in part) while *activities for parents and children* were used the most frequently and also for the most hours in a typical week. Of all the family services that were accessed by respondents, over half (53 %) were provided by the named children's centre while a further 16% were provided by *another* children's centre (thus, a total of 69% of the services used were provided by Sure Start Children's Centres).

When respondents were asked to consider how helpful they found the family services that they used, the majority could not distinguish any one particular type of service as being either 'the most' helpful (60% of 5508 replies) or 'the least' (40% of 5508 replies). As one might expect, given that no one type of service stood out as particularly helpful or unhelpful, the majority of respondents also reported that they were either, 'fairly satisfied' (28% of 5522 replies) or, 'very satisfied' (49% of 5522 replies) with the services and activities that were provided by their named children's centre.[37].

Respondents were also asked a series of questions about one type of family service in particular: whether they used any *childcare* for either the 'selected' child, or any of their siblings aged 0-5 within the household - including which *type* of childcare was

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[37] Further, only 3.6% of respondents were either, "fairly" or, "very disappointed".

used. These types of childcare provision were then classified as either "*formal*"[38] or "*informal*". Chapter 2 provides a full account of these questions as well as the replies that were given. As a type of family service however, childcare was a particular focus for children's centres because it may be important in supporting parents who want to work. It has been reported to have possibly mixed effects on the psychological and education outcomes of children (e.g. Belsky, 2001; Sylva *et al.*, 2010).

Surprisingly, a high percentage of respondents reported that they did not use any *formal* childcare for any of their household's children aged 0-5 years (60% of 5715 replies).   Although this figure approaches the equivalent per cent reported by the '*Childcare and early years survey of parents 2010*'[39] *(61%)*, this 2010 value was only produced in reference to 0-2 year olds. In comparison, the ECCE question on childcare also included 3-4 year-old children who were entitled to limited free formal childcare via Universal Entitlement; some of the children's centres in the ECCE sample also offered free early education places for disadvantaged two year olds. A more detailed exploration of the low take-up of formal childcare will be undertaken for future reports.[40]

B.3 Determining patterns within the use of family services

With the use of family services explored in Chapter 2, this appendix now reports on the results of a multivariate procedure (termed a 'Two-Step Cluster Analysis'[41]). The analysis aimed to determine whether respondents could be classified into distinct groups based upon similarities in how they used family services. The cluster analysis reported in this appendix considered only 15 of the 18 measures that were presented in Chapter 2 – the three remaining measures were excluded due to particularly high levels of either refused responses, or due to being questions that respondents found to be not applicable.[42] In total, the Two-Step Cluster Analysis

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[38] 'Formal Childcare' excludes: Grandparents, ex-partners, older siblings, other relatives, friends, and neighbours.

[39] The Childcare and early years survey of parents 2010 is available from: https://www.education.gov.uk/publications/eOrderingDownload/DFE-RR221.pdf

[40] For example, it is possible that the low levels of reported formal childcare were in-part due to the combination of low levels of employment combined with high take-up of activities for parents and children (such as Stay-and-Play) – perhaps used as an alternative to formal childcare.   Lower than expected levels of reported childcare were also possible because 46% of families only had one child – a child who would have been 9-18 months of age when respondents were interviewed. The limited age range of the lone children within these families meant that these families were less likely to be in formal childcare compared to the 52% of families who also had one or more additional older children.

[41] Cluster Analysis is a general statistical tool for data reduction. The "Two-Step" method of cluster analysis used in this appendix differs to that used in 0 as this cluster analysis had to consider both categorical and continuous measures. Two-Step Cluster Analysis permits both types of data to be included at the same time via use of a log-likelihood criterion as a measure of 'distance' between clusters (unlike in the Hierarchical Cluster Analysis reported in 0).

[42] The three measures with the higher level of refused and/or not applicable responses were: one. "Of the six types of service possibly provided by the named children's centre, which has the respondent used for the most hours in a typical week?" (n: 1694, 30%); 2." How long ago did the household start using services provided by the named children's centre?" (n: 4053, 71%); 3. "Of the services not run by an Children's Centre, what percentage was used due to advertising or conversations held at the Children's Centre?" (n: 2457, 43%)

considered the responses given by 93% of all respondents who replied to the 15 measures that have been considered here (n: 5287).[43]

The cluster analysis distinguished two main groups of families[44] based on their use of family services; these are described by the statistics shown in Appendix Table B.3. Each of the 15 measures was compared across the two groups to describe the main characteristics of each cluster. Of the 5287 respondents whose data were analysed, 1013 (19%) were grouped into one cluster and 2016 (38%) were grouped into a second. The remaining 2258 respondents (43%) did not show any strong commonalities in how they used family services. In other words, there was no clear pattern in service use among 43% of respondents when considering the extent to which they; accessed family services through children's centres, used various types of family service for various durations, and in how they perceived the helpfulness of services. This finding indicates that there is a great deal of variation between households in how they used the family services provided by children's centres. This might be expected given that children's centres are known to vary greatly from one another in both setup and delivery.[45]

Appendix Table B.3 Statistically significant differences between the two clusters of households that grouped 57 per cent of respondents according to two trends in their use of family services (n: 5286 households)				
	n (adj. sta. res.) or mean ± SD		Statistical Cluster Comparison	
Measure	Cluster 1 (n:1013):	Cluster 2 (n:2016):	Statistic (X^2 for categorical measures, Mann-Whitey U for continuous)	p
Has the respondent used any _health services_? (dichotomous measure)			X^2=11.98; df=1	p<0.01
Yes	673 (+3.5)	1209(-3.5)		
No	340(-3.5)	807(+3.5)		
Has the respondent used any _activities for parents and toddlers_? (dichotomous measure)			X^2=1835.15; df=1	p<0.001
Yes	57(-42.8)	1746(+42.8)		
No	956(+42.8)	270(-42.8)		
Has the respondent used any services that offer _family and parenting support_? (dichotomous measure)			X^2=42.00; df=1	p<0.001
Yes	3(-6.5)	95(+6.5)		
No	1010(+6.5)	1921(-6.5)		
Has the respondent used any services that provide _employment and/or benefits advice_? (dichotomous measure)			X^2=8.94; df=1	p<0.01
Yes	12(-3.0)	59(+3.0)		

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43 If all 18 measures of the use of family services had been analysed, only 17% of the total respondents would have been considered in the resulting Cluster Analysis (n: 1000) – note that this low percentage reflects the patterns of response in terms of questions reported as "not applicable".

[44] This two-cluster solution was considered as 'fair' quality according to the "Silhouette measure of cohesion and separation" ~0.22.

[45] Such variations between children's centres will be explored in greater detail in the 2013 ECCE Baseline Report on Strand 3 (Delivery).

	No	1001(+3.0)	1957(-3.0)		
Has the respondent used any _adult education services_? (dichotomous measure)				X^2=9.10; df=1	p<0.01
	Yes	0(-3.0)	18(+3.0)		
	No	1013(+3.0)	1998(-3.0)		
Has the respondent used any _other service_? (dichotomous measure)				X^2=29.58; df=1	p<0.001
	Yes	8(-5.4)	91(+5.4)		
	No	1005(+5.4)	1925(-5.4)		
Of all the family services that were used by a respondent (up to 21), what percentage were used at _the named_ children's centre? (continuous measure)		52±43	62±33	U=897716.5	p<0.001
Of all the family services that were used by a respondent (up to 21), what percentage were used at _any_ children's centre? (continuous measure)		68±39	77±26	U=948417.5	p<0.01
Of the six types of service possibly provided by the named children's centre, which has the respondent used for the _longest period_? (nominal/categorical measure)				X^2=460.13; df=6	p<0.001
	a. Health Services	985(+21.2)	1233(-21.2)		
	b. Activities for Parents and Toddlers	10(-18.5)	595(+18.5)		
	c. Family and Parenting Support	0(-2.1)	9(+2.1)		
	d. Employment and/or Benefits Advice	13(-1.2)	38(+1.2)		
	e. Adult Education Services	0(-2.2)	10(+2.2)		
	f. Other Service	1(-0.9)	5(+0.9)		
	g. More than one Type of Service	4(-7.5)	126(+7.5)		
Of the six types of service possibly provided by _the named_ children's centre, which has the respondent used _the most frequently_? (nominal/categorical measure)				X^2=2063.80; df=6	p<0.001
	a. Health Services	919(+45.2)	152(-45.2)		
	b. Activities for Parents and Toddlers	38(-32.9)	1350(+32.9)		
	c. Family and Parenting Support	3(-1.2)	13(+1.2)		
	d. Employment and/or Benefits Advice	6(+1.8)	4(-1.8)		
	e. Adult Education Services	4(-1.5)	18(+1.5)		
	f. Other Service	1(-0.4)	3(+0.4)		
	g. More than one Type of Service	42(-13.4)	476(+13.4)		
Of the six types of service possibly provided by _the named_ children's centre, which _type of service has proven most helpful_? (nominal/categorical measure)				X^2=1837.60; df=6	p<0.001
	a. Health Services	822(+42.4)	114(-42.4)		
	b. Activities for Parents and Toddlers	41(-10.6)	360(+10.6)		
	c. Family and Parenting Support	1(-0.9)	5(+0.9)		
	d. Employment and/or Benefits Advice	10(+2.0)	8(-2.0)		
	e. Adult Education Services	4(+1.7)	2(-1.7)		
	f. Other Service	5(+1.7)	3(-1.7)		
	g. More than one Type of Service	130(-32.7)	1524(+32.7)		
Of the six types of service possibly provided by _the named_ children's centre, which _type of service has proven least helpful_? (nominal/categorical measure)				X^2=1420.82; df=6	p<0.001

a. Health Services	849(+36.4)	314(-36.4)		
b. Activities for Parents and Toddlers	49(-11.5)	420(+11.5)		
c. Family and Parenting Support	2(-1.4)	11(+1.4)		
d. Employment and/or Benefits Advice	50(+4.0)	45(-4.0)		
e. Adult Education Services	0(1.0)	2(+1.0)		
f. Other Service	3(-0.8)	10(+0.8)		
g. More than one Type of Service	60(-28.6)	1214(+28.6)		
How satisfied is the respondent with the services and activities available at *the named* children's centre? (ordinal measure)			X^2=168.09; df=4	p<0.001
a. Very Dissatisfied	16(+2.0)	16(-2.0)		
b. Fairly Dissatisfied	22(-0.4)	48(+0.4)		
c. Neither Dissatisfied nor satisfied	270(+11.8)	205(-11.8)		
d. Fairly Satisfied	316(+1.0)	595(-1.0)		
e. Very Satisfied	389(-9.7)	1152(+9.7)		
Has the respondent received a home visit from *the named* children's centre? (dichotomous measure)			X^2=57.67; df=1	p<0.001
Yes	411(+7.6)	544(-7.6)		
No	602(-7.6)	1472(+7.6)		
Who is the provider of the respondent's formal childcare? (nominal/categorical measure)			X^2=25.24; df=1	p<0.001
a. The named children's centre	32(+0.2)	61(-0.2)		
b. Did not use at named children's centre - but was signposted by them	7(-2.7)	40(+2.7)		
c. Did not use at named children's centre & was not signposted by children's centre & did not use at another children's centre - but used somewhere else	264(-3.0)	632(+3.0)		
d. Did not use formal childcare	710(+3.5)	1283(-3.5)		

Note: "adj. sta. res." means "Adjusted Standardised Residual" for which values greater than ± 1.96 indicate a statistically significant cell count (to at least p<0.05).

In summary of the results shown in Appendix Table B.3, the cluster analysis identified two common ways in which the family services offered by children's centres were being used by certain households:

- Usage Group 1 (demonstrated by 19% of n: 5287 respondents): Limited users of family services, mainly accessing only health.

  - These households were:

    - Significantly more likely to use health services (p<0.01)

    - Significantly more likely to report having used health services for the longest period of time (p<0.001)

    - Significantly more likely to report having used health services most frequently (p<0.001)

- Significantly more likely to report health services as both the most and least helpful type of service (p<0.001; likely reflecting the limited use of other types of service)

- Significantly more likely to have received a home visit from the children's centre (p<0.001)

- Significantly more likely to have reported no use of formal childcare for any child in the household aged 0-5 years (p<0.001)

- Significantly more likely to have either a neutral satisfaction with the family services provided by the children's centre, or be "very dissatisfied" (p<0.001; both likely reflect the generally limited use of family services as provided by the children's centre)

- Usage Group 2 (demonstrated by 38% of n: 5287 respondents): Heavy users of multiple family services with an emphasis on activities for parents and toddlers.

  - These households were:

    - Significantly more likely to use

      i. Activities for parents and toddlers (p<0.001)
      ii. Family and parenting support (p<0.001)
      iii. Employment and/or benefits advice (p<0.01)
      iv. Adult Education Services (p<0.01)

    - Significantly more likely to use the family services that are provided by the named children's centre (p<0.001) or indeed any children's centre (p<0.001) rather than elsewhere

    - Significantly more likely to report having used the following types of service for the longest period of time:

      i. Activities for parents and toddlers (p<0.001)
      ii. Family and parenting support (p<0.001)
      iii. Adult Education Services (p<0.001)

    - Significantly more likely to report having used activities for parents and toddlers the most frequently (p<0.001)

    - Significantly more likely to report the following types of service as most helpful:

      i. Activities for parents and toddlers (p<0.001)
      ii. Employment and/or benefits advice (p<0.001)

    - Significantly more likely to report activities for parents and toddlers as the least helpful type of service (p<0.001; likely reflecting this being the type of service reported as used most frequently)

- Significantly more likely to use formal childcare that is provided outside the children's centre for any child in the household aged 0-5 years (p<0.001)

- Significantly more likely to report being 'very satisfied' with the family services that were provided by the children's centre(p<0.001)

The two groups of service usage that are detailed above[46] could be explained in part by the family services that were accessed. For 'Limited use' respondents attending mainly health services, a lower use of other family services might be due to 1) health issues preventing their further participation at the centre itself; 2) visiting a children's centre health service off-site; or possibly 3) visiting a set clinic within the centre (which may require appointments) for a specific medical/health need only, or with an independent health professional who they might get to know, but with this not being integrated into other family services. Comparatively, 'Heavier use' respondents attended a mix of services at the named children's centre (including family services with their child). They may have been more likely to be immersed within the culture of the centre, and so were more likely to be made aware of similar activities that they could attend that were led by familiar-centre staff. This could in part account for why 'Heavier use' respondents accessed multiple family services; it is possible that there could be an escalating 'snow-balling' of service use once certain family services are accessed. Of course, further research is necessary to determine how far such potential explanations account for patterns of service use.

B.4 Exploring links between the use of family services and the demographic characteristics of families

With households grouped into two clusters (based upon two distinct trends in how they used family services), the final section of this appendix considers how these two groups differed from one another according to five demographic measures - four socio-demographic[47] and one related to the child:[48]

1. Household income (measured on a seven-point ordinal scale)
2. Mother qualification level (highest academic or vocational; "mothers" include non-biological; measured on a nine-point ordinal scale)
3. Mother married and living with a partner - or not (a dichotomous measure)

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[46] Usage Group 1: Limited users of family services, mainly accessing only health. Usage Group 2: Heavy users of multiple family services with an emphasis on activities for parents and toddlers

[47] An excellent introduction to such socio-demographic measures and their relationship to the concepts of 'disadvantage', 'poverty', and 'exclusion' is provided by Sauders, Naidoo, and Megan (2007).

[48] Note: Of the two appendices written from the perspective of the impact strand of ECCE that are included within this report, the age of the selected child is explored as a demographic only here in 0 and not in 0. Child age is included only in 0 because it was hypothesised to influence how families used the family services provided by children's centre.

4. Household Economic Status - whether either the respondent or partner is in employment (a dichotomous measure with "someone" rather than "no-one" coded high)
5. Age of selected child (in months; a continuous measure)

Appendix Table B.4 describes the five measures that were examined in this section and reveals a broad range of values for all measures. In total, 4997 respondents (87% of the maximum n: 5717 respondents sampled at baseline) found all five questions both appropriate and returned valid responses. Considering only those 3029 respondents who were grouped into the two clusters identified earlier (based upon patterns of family service use), 88 per cent (n: 2673) also returned data on the five demographics presented in Appendix Table B.4. This means that only 12% of the respondents who were grouped by common use of family services could not be linked to the above five demographics because data were unavailable.[49] Out of the 2673 respondents (those who all five demographic measures were available and who were found to be in one of the groups of service use) a very small number of one-parent solely-father families (for whom the two demographic measures about mother would not have been applicable) were excluded from the following analysis. This exclusion means that the following results only apply to households in which mothers were present (be these biological, adopted, step, or foster) and which showed an identified pattern in their use of children's centre services. Subsequent analyses undertaken by the impact strand of ECCE (Strand 4) will give a greater account of such non-responses – both due to "not applicable" responses and to question refusals.[50]

Appendix Table B.4 Descriptive statistics of the five demographic measures considered in Section B.4 (n: 4997 respondents provided full valid data for all five measures where applicable; 87% of n: 5717)			
	Respondents (max. n: 5717)		
Measure	Valid n	Valid %	"Missing"* n
Household Income Bands	5199	90.9%	518
1. less than £4,999	191	3.7%	
2. £5,000-£9,999	757	14.6%	
3. £10,000-£19,999	1198	23.0%	
4. £20,000-£29,999	957	18.4%	
5. £30,000-£39,999	761	14.6%	
6. £40,000-£49,999	589	11.3%	
7. £50,000 or more	746	14.3%	
Mothers' (biological, adopted, step, foster) Highest Qualification - Academic or Vocational	5474	95.70%	243
0. No qualifications - vocational or academic	520	9.5%	
1. GCSE Grades D-F/ NVQ1/ BTEC1	408	7.5%	

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[49] Either because at least one of the measures presented in Appendix Table B.4 was "not applicable" to the respondent or the respondent did not provide an answer.

[50] For question refusals in particular, as of September 2012 'multi-level (as respondents are nested within children's centres) multiple imputation' is being considered as the technique most suitable for statistical estimation of the answers that respondents were likely to have given to applicable questions. Further, appropriate sub-group analyses are being considered for those respondents and households for whom demographic questions were not applicable.

	2. GCSE Grades A*-C/ NVQ2/ BTEC2	1366	25.0%	
	3. A-Level (etc)/ NVQ3/ BTEC3	1001	18.3%	
	4. Certification of Higher Education/ NVQ4/ BTEC4	342	6.2%	
	5. Foundation Degree/ NVQ4*/ BTEC5	202	5.7%	
	6. Honours Degree/ NVQ4*/ BTEC 6	997	18.2%	
	7. Masters Degree/ NVQ5/ BTEC 7	571	10.4%	
	8. Doctorate/ NVQ5*/ BTEC 8	67	1.2%	
Mothers' (biological, adopted, step, foster) Marital Status		5694	99.6%	23
	0. Married mother living with partner	3110	54.6%	
	1. Single mother never married/civil-partnered, or separated/divorced/widowed mother	2584	45.4%	
Household Economic Status - does either respondent or partner (if there is one) work?		5717	100%	0
	0. no	1318	23.0%	
	1. yes	4399	77.0%	
Selected child's age (in months; min.=9 months, max.=18)		5708	13.62 ± 2.73	9

Note: "Missing" is a term used to capture both questions that respondents "refused to answer" combined as well as questions that were deemed "not applicable" by certain respondents and/or households.

The descriptive statistics that are shown in Appendix Table B.5 link the three sets of households that were differentiated by their use of family services to the five demographic measures that are considered in this section (see Section B.3). Full data on all five demographics and the sets of households (*limited, heavy, neither*) identified from the initial cluster analysis reported in Section B.3 were available for 4660 households (82% of n: 5717). Various differences can be observed between the three sets of households although the differences between the two groups that were identified from the cluster analysis are explored further below. Non-grouped households can be seen to have demographics that broadly lay in-between the two groups that were identified from the cluster analysis.

Appendix Table B.5 Variation of five demographic measures across the three sets of respondents who were differentiated by their use of the family services provided at children's' centres (for n: 4660; 82% of n: 5717)			
	The three sets of ECCE households differentiated by their use of family services provided by children's centres		
Demographic Measure	Group 1: Limited users of family services, mainly accessing only health (n:876)	Group 2:Heavy users of multiple family services with an emphasis on activities for parents and toddlers (n:1797)	Additional non-group: Households with no clear pattern to their use of family services (n: 1987)
Household Income Bands			
1. less than £4,999	39 (4%)	50 (3%)	76 (4%)
2. £5,000-£9,999	146 (17%)	201 (11%)	312 (16%)
3. £10,000-£19,999	206 (24%)	347 (19%)	498 (25%)
4. £20,000-£29,999	148 (17%)	332 (18%)	370 (19%)
5. £30,000-£39,999	143 (16%)	300 (17%)	253 (13%)
6. £40,000-£49,999	105 (12%)	247 (14%)	202 (10%)
7. £50,000 or more	89 (10%)	320 (18%)	276 (14%)
Mothers' (biological, adopted, step, foster) Highest Qualification - Academic or Vocational			

	0. No qualifications - vocational or academic	88 (10%)	94 (5%)	172 (9%)
	1. GCSE Grades D-F/ NVQ1/ BTEC1	90 (10%)	107 (6%)	131 (7%)
	2. GCSE Grades A*-C/ NVQ2/ BTEC2	273 (31%)	369 (21%)	501 (25%)
	3. A-Level (etc)/ NVQ3/ BTEC3	154 (18%)	369 (21%)	371 (19%)
	4. Certification of Higher Education/ NVQ4/ BTEC4	55 (6%)	120 (7%)	129 (6%)
	5. Foundation Degree/ NVQ4*/ BTEC5	33 (4%)	78 (4%)	66 (3%)
	6. Honours Degree/ NVQ4*/ BTEC 6	114 (13%)	407 (23%)	372 (19%)
	7. Masters Degree/ NVQ5/ BTEC 7	61 (7%)	225 (13%)	220 (11%)
	8. Doctorate/ NVQ5*/ BTEC 8	8 (1%)	28 (2%)	25 (1%)
Mothers' (biological, adopted, step, foster) Marital Status				
	0. Married mother living with partner	440 (50%)	1039 (58%)	1033 (52%)
	1. Mothers never married/civil-partnered, separated, divorced, or widowed	436 (50%)	758 (42%)	954 (48%)
Household Economic Status - does either respondent or partner (if there is one) work?				
	0. no	226 (26%)	263 (15%)	528 (27%)
	1. yes	650 (74%)	1534 (85%)	1459 (73%)
Selected child's age (in months)				
9 months		69 (8%)	133 (7%)	149 (7%)
10		99 (11%)	154 (9%)	158 (8%)
11		99 (11%)	154 (9%)	187 (9%)
12		89 (10%)	191 (11%)	211 (11%)
13		91 (10%)	199 (11%)	202 (10%)
14		94 (11%)	163 (9%)	219 (11%)
15		94 (11%)	163 (9%)	239 (12%)
16		98 (11%)	217 (12%)	232 (12%)
17		97 (11%)	226 (13%)	228 (11%)
18 months		52 (6%)	130 (7%)	162 (8%)

The statistical associations evident between the five demographic measures (4 socio- and 1 child) and the two groups who demonstrated similar patterns of family service use are suggested by the results presented in Appendix Table B.6. Considered together, the five demographic measures were able to account for the group membership ('heavy' versus 'limited' use of services) of more than two thirds (68 %) of households. Considered individually, only three of the five demographic measures were statistically significant predictors of which of the two groups (heavy or limited service use) a household was likely to belong to. Households were more likely to be "*heavy users of multiple family services with an emphasis on activities for parents and toddlers*" if:

- Mothers were relatively more qualified ($p < 0.001$)

- Either the respondent or their partner (if there was one) were in employment ($p < 0.01$)

- The selected child was older rather than younger ($p < 0.05$) with this suggesting that the use of services increased with child age.

A number of tentative conclusions can be drawn from these results. First, there is some evidence that socially disadvantaged families tend to make lesser use of the

family services that are provided by children's centres. Second, families with a selected child closer to the age of 18 months (as opposed to 9 months) are more likely to make a fuller use of the range of family services provided by children's centres. Both of these findings also make intuitive sense: more disadvantaged families are often known to be "harder to reach" and families with younger children are more likely to use health services such as breastfeeding groups and health visitor drop-in sessions.

Appendix Table B.6 Binomial logistic regression model revealing the statistical association between five demographic measures and a household's membership of the two groups who were differentiated by their use of family services			
Predicting membership of the group of respondents who were heavy users of multiple family services with an emphasis on activities for parents and toddlers rather than the group who were limited users of family services, mainly accessing only health	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	probability
'Goodness of model fit' via 'Nagelkerke R^2' (values closer to one suggest a fuller explanation of the two-group memberships)			0.06
Overall percentage of respondents successfully predicted as belonging to the correct group differentiated by their use of family services			68.1%
Individual Statistical Associations:			
1. Household Income Bands	0.02	1.02	0.531
2. Mothers' (biological, adopted, step, foster) Highest Qualification - Academic or Vocational	0.17	1.18	<0.001
3. Mothers' (biological, adopted, step, foster) Marital Status	0.05	1.05	0.625
4. Household Economic Status - does either respondent or partner (if there is one) work?	0.40	1.49	0.001
5. ECCE Target child's age (in months)	0.03	1.03	0.037

Note: Carried out on n: 2673, or 89% of the respondents who both:
1. belonged to either group of households that were differentiated by their use of family services and
2. provided full data for all five demographic measures.

Although the results presented in Appendix Table B.6 estimated the extent to which the five considered demographics could predict the likelihood of a household belonging to the group who were "heavy" users of multiple family services (with an emphasis on activities for parents and toddlers), these relationships did not take into account the nesting of respondents within their 128 children's centres. The results shown in Appendix Table B.6 may be unreliable if the 128 children's centres vary in either one of two ways: (1) if the number of households within each service-use group varies between across the 128 sampled children's centres, (2) if the statistical associations presented in Appendix Table B.6 vary across the sampled households. The final analyses reported in this appendix considered both these possibilities.

Beginning first with the possibility that the number of households grouped within each of the two service-use clusters might vary between children's centres, Appendix Figure B.1 shows considerable such variation. Eight (of the 128 children's centres) had significantly more respondents who were 'heavy users' of multiple family services; while 11 centres had significantly more respondents who were 'Limited users' accessing mainly health services. As with the results presented in Appendix Table B.6, this makes intuitive sense: the family services that children's

centres offer are well known to vary[51] and this means that there will also be variation in the possible patterns of use that can be reported. Also, some centres may be better at attracting or meeting the needs of 'hard to reach' families. This 'between-centre variation' was then examined statistically[52]. Around 12% of the variation (different proportions of respondents who were clustered within the two groups - heavier or more limited users of family services) was linked to differences between the individual children's centres that the families had attended (p<0.001[53])

Appendix Figure B.1   Caterpillar plot illustrating the variation between ECCE children's centres in their users' membership of the two groups of households that were differentiated by their use of family services (for n:3029 of n:5717)
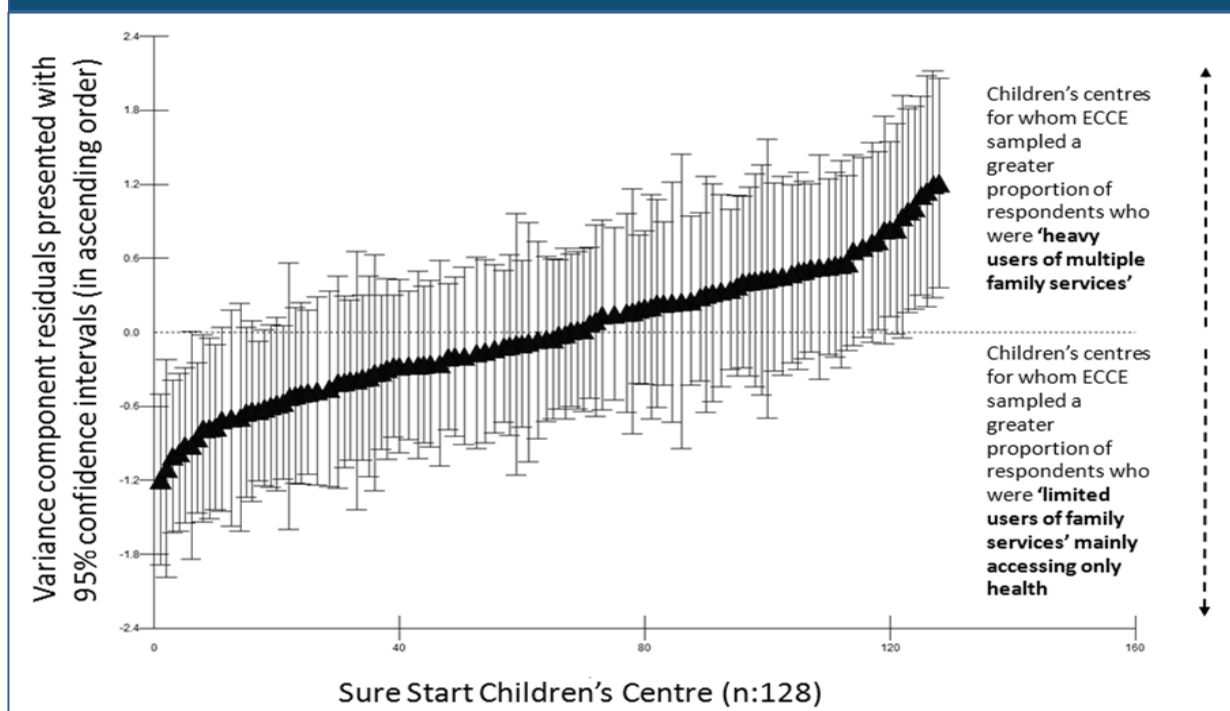
The possibility of the statistical associations shown in Appendix Table B.6 varying across children's centres was increased after the discovery of the variations between children's centres that are shown in Figure B.1. As such, the statistical analyses that produced the results shown in Appendix Table B.6 were re-run – only this time also taking into account the important differences between children's centres. These extended results are detailed in Appendix Table B.6 and .

[51] As mentioned earlier, such variations between children's centres will be explored in greater detail in the 2013 ECCE Baseline Report on Strand 3 (Delivery).

[52] Via a statistical Variance Components Model returning a Variance Partition Coefficient (VPC).

[53] Using a Wald test (estimate of between-centre variance ($\sigma 2u0$)/(Standard Error, SE)2) on $\sigma 2u0$=0.435 (SE=0.082) produced a value that was then compared to the critical values from a 2 distribution with 1 degree of freedom

with two findings standing out:

1. Before taking into consideration the differences between children's centres, the measure most strongly associated with a respondent's membership of the *heavy users of multiple family services* group was a Household's Economic Status. After re-running the analyses to consider the differences between centres, the measure that was most strongly associated changed to the highest qualifications held by the maternal figure in the household. However, both of these demographic measures remained statistically associated with the likelihood of being a *heavier* rather than *more limited* user; this change shows which of the two measures of disadvantage is a better individual predictor of how families are likely to use children's centres.

2. The previously significant relationship between the age of the selected child and a family's likely use of family services also changed once the differences between children's centres were taken into account. More specifically, this relationship was no longer statistically significant. This may be due to variations in the types of services that are offered by different children's centres – an issue that is the focus of ECCE Strand 3.

In summary, the associations between the five demographic measures and the likelihood that households were heavy rather than more limited users of family services remained broadly consistent when the differences between children's centres were taken into account. The highest qualifications obtained by mothers and whether either the respondent or their partner was in employment remained the strongest predictors of a household's use of the family services. These factors were more influential than a household's income, whether a mother was single rather living with a partner/spouse, or the age of the 9-18 month old children who were present in each of the households at this baseline stage of ECCE.

B.5 Conclusions

In conclusion, 57% of the respondents whose data were analysed (n:5287) were found to demonstrate one of just two main patterns in how they used the family services that were provided by their named children's centre. This means that 43% of the respondents did not show any consistent overall pattern (no additional distinctive clusters were identified). Further, the demographic profile of this *heterogeneous* 43% was found to lie in-between those of the two groups characterised by *homogenous* patterns in their use of family services. The two patterns evident within the 57% of respondents differentiated them as:

1. **Limited users of family services, mainly accessing only health services** (19%)
2. **Heavy users of multiple family services with an emphasis on activities for parents and toddlers** (38%)

This appendix also reported the results of a series of analyses which revealed that just two socio-demographic measures distinguished which of the two patterns of service-use a family was more likely to demonstrate. If either a respondent or their partner worked then these households were also more likely to be 'heavy' rather than 'limited' use of family services. Similarly, households in which mothers held higher qualifications were also more likely to be 'heavy' users. However, neither being a single parent nor having a lower household income seem to act as *barriers* to making greater use of the family services that are provided through children's centres. Finally, it is important to remember that there remained considerable variation in both (1) how respondents used family services (where there was no strong pattern evident for 43% of respondents), and (2) how respondents used the family services that were provided by each individual children's centre.

As well as providing an immediate descriptive summary of patterns in the use of family services, these results will also be of use in future ECCE analyses of the impact of children's centres for both families and children.

Appendix Table B.7 **Multilevel binomial logistic regression models in which an ECCE household's membership of the group who were heavy users of multiple family services rather than limited users, mainly accessing only health was estimated from five demographics (on a consistent n:2673 of n: 5717)**

Predicting membership of the group of respondents who were heavy users of multiple family services with an emphasis on activities for parents and toddlers rather than the group who were limited users of family services, mainly accessing only health (via 2nd order PQL estimation on a consistent n:2673)	Model 1: No predictors included; Initial estimates		Model 2: With a random intercept and all predictors entered		Model 3:With a random intercept and all predictors having random slopes	
	Estimated Coefficient	Standard Error (SE)	Estimated Coefficient	Standard Error (SE)	Estimated Coefficient	Standard Error (SE)
children's centre level variance; σ^2_{u0}	0.382	0.079	0.304	0.070	0.308	0.072
Variance Partition Coefficient (VPC). *Percentage of the unexplained variation in the likelihood of belonging to the group who were 'heavy users of multiple family services' that is due to between-centre variation*; $\sigma^2_{u0}/(\sigma^2_{u0}+3.29)$	10.40%		8.46%		8.56%	

<u>Fixed Effects: Statistical Predictors of belonging to the group who were '*heavy users of multiple family services*' (*all measures were mean-centred via z-scoring apriori*):</u>

	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	Standard Error (SE)	z (B/SE)	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	Standard Error (SE)	z (B/SE)	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	Standard Error (SE)	z (B/SE)
1. Household Income Bands					0.01	1.01	0.06	0.11	0.02	1.02	0.06	0.34
2. Mothers (biological, adopted, step, foster) Highest Qualification – Academic or Vocational					**0.35**	**1.41**	**0.05**	**6.65**	**0.34**	**1.40**	**0.05**	**6.34**
3. Mothers' (biological, adopted, step, foster) Marital Status					0.01	1.01	0.05	0.18	0.03	1.03	0.05	0.61
4. Household Economic Status - does either respondent or partner (if there is one) work?					**0.17**	**1.18**	**0.05**	**3.34**	**0.16**	**1.18**	**0.05**	**3.18**
5. Selected child's age (in months)					**0.09**	**1.09**	**0.04**	**2.02**	0.08	1.09	0.05	1.67

Notes: The Variance Partition Coefficient (VPC) estimates the percentage of the unexplained variation in the likelihood of a household belonging to the group who were 'heavy users of multiple family services' *that is due to differences between centres, $\sigma^2_{u0}/(\sigma^2_{u0}+3.29)$;*
Z values>±1.96 indicate p<0.05; Z values>±2.58 indicate p<0.01; Z values>±3.30 indicate p<0.001;
The random slope effects from Model 3 (all statistically insignificant) are reported in Appendix Table B.8

Appendix Table B.8   A variance-covariance table displaying the random slope effects that were obtained from a multilevel binomial logistic regression model (with a random intercept and random slopes) in which an ECCE household's membership of the group who were heavy users of multiple family services rather than limited users, mainly accessing only health was estimated from five demographics (on a consistent n:2673 of n: 5717)

Coefficient (Standard Error)	0	1	2	3	4	5
0. Children's centre level residual variance	**<u>0.308 (0.072)</u>*****					
1. Household Income Bands	-0.048 (0.037)	0.025 (0.038)				
2. Mothers (biological, adopted, step, foster) Highest Qualification - Academic or Vocational	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)			
3. Mothers' (biological, adopted, step, foster) Marital Status	0.043 (0.038)	0.026 (0.030)	0.000 (0.000)	0.046 (0.040)		
4. Household Economic Status - does either respondent or partner (if there is one) work?	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	
5. Selected child's age (in months)	-0.054 (0.036)	0.067 (0.027)	0.000 (0.000)	0.040 (0.027)	0.000 (0.000)	0.048 (0.036)

Notes: Z=Coefficient/Standard Error;
Because variances cannot be negative, so the critical values of Z indicating statistically significant variance (the six values on the diagonal) are as follows:
Z values>1.65 are significant at p<0.05;
Z values>2.33 are significant at p<0.01;
Z values>3.08 are significant at p<0.001;
***p<0.001

Appendix C: Patterns in Parenting and Family Functioning

James Hall, Pamela Sammons and Jenny Goff

C.1 Background

The families recruited into the ECCE study were those with a 9-18 month old child and who were registered at one of the 128 children's centres included in the ECCE evaluation. This appendix (along with Chapter 5) focuses upon the parenting and family functioning that was displayed by this sample of families. Following on from the description of how respondents reported their household's parenting and the family functioning in Chapter 5, 0 considers whether patterns may exist within these self-reports. Thus, Chapter 5 and 0 are mutually informative – while Chapter 5 *describes* parenting and family functioning, 0 moves on to draw *inferences* that are based upon these descriptions. In order to draw these inferences, twelve measures that detail parenting and family functioning were analysed. However, it should be noted that the nature of the survey design and the questions asked meant that some questions applied to all users and some only to specific subgroups (e.g. respondents in couples).

C.2 Exploring Parenting and Family Functioning

Twelve measures are considered in this appendix and these summarise much of the parenting and family functioning information reported by respondents:
1. The Home Learning Environment (HLE) – measured via a composite score
2. The Confusion, Hubbub, and Order Scale (CHAOS) – measured via a composite score
3. The occurrence of major life changes in the family
4. How satisfied the respondent is with their relationship with partner
5. How critical is respondent of partner
6. How critical is partner of respondent
7. How often partner is violent towards respondent
8. The extent of a biological father's involvement in child rearing – measured via a composite score
9. The Parenting Stress Index (PSI) - *Parental Distress* subscore
10. The Parenting Stress Index (PSI) - *Parent-Child Dysfunctional Interaction* subscore
11. The Parenting Stress Index (PSI) - *Difficult Child* subscore
12. The Parenting Stress Index (PSI) - *Total stress* composite score

Appendix Table C.1 describes all 12 measures while Chapter 5 provides a more detailed account of the various aspects of parenting and family functioning that were asked about. Chapter 5 also describes how 11 of these 12 measures were derived from the questions that were put to ECCE respondents. However, a twelfth measure was especially created for the analyses reported by this appendix: respondents were asked whether anyone in their household had experienced any major life changes

(from a list of four: see Chapter 5). For this appendix, the responses to these questions were summed to produce a single measure reflecting the cumulative number of major life changes that had been reported.[54]

Appendix Table C.1									
Descriptive statistics of the 12 measures of parenting and family functioning considered in Appendix C									
Base: All respondents									
	Valid Responses		Responses either *'refused'* or *'not applicable'*		Descriptive Statistics				
	N	%	N	%	Mean	Median	Min.	Max.	SD
1. Home Learning Environment (HLE) score *(better HLE coded high)*	5696	99.6	21	0.4	42.74	44	8	57	7.71
2. Confusion, Hubbub, and Order Scale (CHAOS) score *(less CHAOS coded high)*	5696	99.6	21	0.4	15.79	16	4	20	2.35
3. Occurrence of major life changes in the family/household *(greater changes coded high)**	5713	99.9	4	0.1	0.33	0	0	4	0.55
4. Respondent's satisfaction with their relationship with their partner *(less satisfaction coded high)**	4372	76.5	1345	23.5	1.37	1	1	5	0.69
5. How critical is respondent of partner *(more critical coded high)*	4380	76.6	1337	23.4	3.69	3	1	10	2.30
6. How critical is partner of respondent *(more critical coded high)*	4384	76.7	1333	23.3	3.35	3	1	10	2.25
7. How often partner is violent towards respondent *(low frequency of violence coded high)**	4356	76.2	1361	23.8	4.97	5	1	5	0.26
8. Father's involvement score *(less involvement coded high)*	4338	75.9	1379	24.1	10.58	10	4	24	3.85
9. Parenting Stress Index-Parental Distress Subscore *(low parenting stress coded high)*	5455	95.4	262	4.6	45.70	46	13	60	8.09
10. Parenting Stress Index- Parent-Child Dysfunctional Interaction Subscore *(low parenting stress coded high)*	5479	95.8	238	4.2	53.99	56	16	60	5.84
11. Parenting Stress Index- Difficult Child Subscore *(low parenting stress coded high)*	5425	94.9	292	5.1	49.99	51	12	60	6.69
12. Parenting Stress Index- Total Stress Score *(low parenting stress coded high)*	5379	94.1	338	5.9	149.7	151	47	180	17.20

Notes: SD: Standard Deviation;
*Those measures that displayed particular non-normality in their distribution

The descriptive statistics presented in Appendix Table C.1 provide a broad outline of the sample that is considered in this appendix, according to their parenting characteristics. The majority of respondents reported no major life changes in their household (71%) and high satisfaction in their relationship with their partner (only 1.7% reported being "quite" or "very" dissatisfied). Similarly, 75% of respondents reported no history of violence from their partner while an additional 23% found it to be an inapplicable question (e.g. because they were a lone parent). Only the remaining 2% of respondents reported that their partner had been violent towards them at any time in the past (n:89 of n:5717 total respondents).

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[54] These scores ranged from zero (no major life changes) to four (or more).

In total, 73% of users provided responses to all 12 measures detailed in Appendix Table C.1. The remaining 27% were largely composed of two groups of respondents: (1) those for whom the questions about their relationship with a partner were not applicable (lone parents), and (2) those for whom the question about a child's relationships with their biological father was deemed inappropriate. Thus, the 73% for whom all 12 questions were applicable comprised of only two-adult couple households in which the child had contact with their biological father. Future impact strand (Strand 4) analyses will examine different household setups (including the lone parent category) in more detail than the initial examinations that are reported here.

The simple associations between each of the 12 measures that are considered in this appendix were estimated via correlation coefficients and these are shown in Appendix Table C.2 and Appendix Table C.3 The strongest associations were found between those measures that were more closely related conceptually: first, between the four Parenting Stress Index (PSI) measures, and second, between the two measures of respondent-partner criticism. By contrast, the weakest associations were found between the number of major life changes that had been experienced by families and:

- Their Home Learning Environment (HLE)

- How critical respondents found their partners

- The extent of biological fathers' involvement in child-rearing

One possible interpretation of this second set of findings is that the relationships that are shared between members of a household (including the HLE provided for children) can be relatively stable even when other major life changes occur.

Appendix Table C.2 Pearson's Correlations between the twelve measures of parenting and family functioning analysed in Appendix C													
Pearson's Correlations		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Home Learning Environment (HLE) score, *better HLE coded high*	Correlation	1	.18	.01	-.05	.03	-.04	.05	-.12	.15	.24	.15	.21
	Sig.		.000	.293	.001	.034	.015	.001	.000	.000	.000	.000	.000
	N	5696	5680	5694	4363	4372	4376	4348	4330	5444	5469	5414	5370
2. Confusion, Hubbub, and Order Scale (CHAOS) score, *less CHAOS coded high*	Correlation	.18	1	-.06	-.17	-.13	-.17	.06	-.13	.33	.29	.31	.37
	Sig.	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	5680	5696	5695	4367	4375	4379	4351	4333	5451	5475	5421	5376
3. Occurrence of major life changes in the family (0-4), *greater changes coded high*	Correlation	.01	-.06	1	.05	.01	.04	-.06	-.01	-.07	-.03	-.06	-.07
	Sig.	.293	.000		.001	.423	.005	.000	.644	.000	.034	.000	.000
	N	5694	5695	5713	4371	4379	4383	4355	4337	5454	5478	5424	5378
4. Satisfaction of respondent with partner relationship, *less satisfaction coded high*	Correlation	-.05	-.171	.05	1	.33	.33	-.13	.23	-.38	-.10	-.16	-.28
	Sig.	.001	.000	.001		.000	.000	.000	.000	.000	.000	.000	.000
	N	4363	4367	4371	4372	4361	4365	4335	4312	4341	4359	4310	4284
5. How critical is respondent of partner, *more critical coded high*	Correlation	.03	-.13	.01	.33	1	.73	-.02	.11	-.26	-.06	-.13	-.19
	Sig.	.034	.000	.423	.000		.000	.148	.000	.000	.000	.000	.000
	N	4372	4375	4379	4361	4380	4380	4343	4323	4352	4367	4318	4295
6. How critical is partner of respondent, *more critical coded high*	Correlation	-.04	-.17	.04	.33	.73	1	-.06	.13	-.26	-.09	-.14	-.21
	Sig.	.015	.000	.005	.000	.000		.000	.000	.000	.000	.000	.000
	N	4376	4379	4383	4365	4380	4384	4347	4326	4356	4371	4322	4299
7. How often partner is violent towards respondent, *low frequency coded high*	Correlation	.05	.06	-.06	-.13	-.02	-.06	1	-.02	.12	.14	.09	.14
	Sig.	.001	.000	.000	.000	.148	.000		.246	.000	.000	.000	.000
	N	4348	4351	4355	4335	4343	4347	4356	4297	4326	4344	4294	4268
8. Father's involvement score, *less involvement coded high*	Correlation	-.12	-.13	-.01	.23	.11	.13	-.02	1	-.19	-.04	-.10	-.14
	Sig.	.000	.000	.644	.000	.000	.000	.246		.000	.004	.000	.000
	N	4330	4333	4337	4312	4323	4326	4297	4338	4306	4324	4275	4249
9. Parenting Stress Index-Parental Distress Subscore, *low stress coded high*	Correlation	.15	.33	-.07	-.38	-.26	-.26	.12	-.19	1	.49	.52	.84
	Sig.	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	5444	5451	5454	4341	4352	4356	4326	4306	5455	5439	5387	5379
10. Parenting Stress Index- Parent-Child Dysfunctional Interaction Subscore,	Correlation	.24	.29	-.03	-.10	-.06	-.09	.14	-.04	.49	1	.64	.82
	Sig.	.000	.000	.034	.000	.000	.000	.000	.004	.000		.000	.000
	N	5469	5475	5478	4359	4367	4371	4344	4324	5439	5479	5412	5379
11. Parenting Stress Index- Difficult Child Subscore,	Correlation	.15	.31	-.06	-.16	-.13	-.14	.09	-.10	.52	.64	1	.85
	Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	5414	5421	5424	4310	4318	4322	4294	4275	5387	5412	5425	5379
12. Parenting Stress Index- Total Stress Score	Correlation	.21	.37	-.07	-.28	-.19	-.21	.14	-.14	.84	.82	.85	1
	Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	5370	5376	5378	4284	4295	4299	4268	4249	5379	5379	5379	5379

Appendix Table C.3	Spearman's Correlations between the twelve measures of parenting and family functioning analysed in Appendix C												
Spearman's Correlations		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Home Learning Environment (HLE) score, *better HLE coded high*	Correlation	1	.17	.01	-.05	.06	.010	.05	-.12	.16	.24	.14	.21
	Sig.		.000	.302	.000	.000	.702	.001	.000	.000	.000	.000	.000
	N	5696	5680	5694	4363	4372	4376	4348	4330	5444	5469	5414	5370
2. Confusion, Hubbub, and Order Scale (CHAOS) score, *less CHAOS coded high*	Correlation	.17	1	-.06	-.16	-.14	-.17	.07	-.13	.32	.31	.30	.37
	Sig.	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	5680	5696	5695	4367	4375	4379	4351	4333	5451	5475	5421	5376
3. Occurrence of major life changes in the family (0-4), *greater changes coded high*	Correlation	.01	-.06	1	.03	.01	.04	-.05	-	-.07	-.03	-.05	-.06
	Sig.	.302	.000		.033	.398	.004	.000	.536	.000	.052	.000	.000
	N	5694	5695	5713	4371	4379	4383	4355	4337	5454	5478	5424	5378
4. Satisfaction of respondent with partner relationship, *less satisfaction coded high*	Correlation	-.05	-.16	.03	1	.36	.34	-.15	.21	-.37	-.13	-.16	-.28
	Sig.	.000	.000	.033		.000	.000	.000	.000	.000	.000	.000	.000
	N	4363	4367	4371	4372	4361	4365	4335	4312	4341	4359	4310	4284
5. How critical is respondent of partner, *more critical coded high*	Correlation	.06	-.14	.01	.36	1	.76	-.05	.15	-.28	-.09	-.15	-.22
	Sig.	.000	.000	.398	.000		.000	.001	.000	.000	.000	.000	.000
	N	4372	4375	4379	4361	4380	4380	4343	4323	4352	4367	4318	4295
6. How critical is partner of respondent, *more critical coded high*	Correlation	.01	-.17	.04	.34	.76	1	-.09	.16	-.27	-.10	-.16	-.22
	Sig.	.702	.000	.004	.000	.000		.000	.000	.000	.000	.000	.000
	N	4376	4379	4383	4365	4380	4384	4347	4326	4356	4371	4322	4299
7. How often partner is violent towards respondent, *low frequency coded high*	Correlation	.05	.07	-.05	-.15	-.05	-.09	1	-.05	.14	.10	.08	.12
	Sig.	.001	.000	.000	.000	.001	.000		.001	.000	.000	.000	.000
	N	4348	4351	4355	4335	4343	4347	4356	4297	4326	4344	4294	4268
8. Father's involvement score, *less involvement coded high*	Correlation	-.12	-.13	-.01	.21	.15	.16	-.05	1	-.18	-.07	-.10	-.14
	Sig.	.000	.000	.536	.000	.000	.000	.001		.000	.000	.000	.000
	N	4330	4333	4337	4312	4323	4326	4297	4338	4306	4324	4275	4249
9. Parenting Stress Index-Parental Distress Subscore, *low stress coded high*	Correlation	.16	.32	-.07	-.37	-.28	-.27	.14	-.18	1	.50	.51	.83
	Sig.	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	5444	5451	5454	4341	4352	4356	4326	4306	5455	5439	5387	5379
10. Parenting Stress Index- Parent-Child Dysfunctional Interaction Subscore,	Correlation	.24	.31	-.03	-.13	-.09	-.10	.10	-.07	.50	1	.65	.82
	Sig.	.000	.000	.052	.000	.000	.000	.000	.000	.000		.000	.000
	N	5469	5475	5478	4359	4367	4371	4344	4324	5439	5479	5412	5379
11. Parenting Stress Index- Difficult Child Subscore,	Correlation	.14	.30	-.05	-.16	-.15	-.16	.08	-.10	.51	.65	1	.84
	Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	5414	5421	5424	4310	4318	4322	4294	4275	5387	5412	5425	5379
12. Parenting Stress Index- Total Stress Score	Correlation	.21	.37	-.06	-.28	-.22	-.22	.12	-.14	.83	.82	.84	1
	Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	5370	5376	5378	4284	4295	4299	4268	4249	5379	5379	5379	5379

C.3 Determining Patterns within Parenting and Family Functioning

With an initial description of parenting and family functioning explored in both Chapter 5 and Section C.2 in this appendix, this section now reports on the results of

a multivariate procedure (termed a 'Hierarchical Cluster Analysis'[55]) that aimed to determine whether groups of respondents could be identified based upon similar trends in self-reported parenting and family functioning. However, the cluster analysis reported here considered only eleven of the twelve measures documented earlier in this appendix. The single measure not used in this cluster analysis was the PSI *total score* which was dropped in favour of the PSI *subscores* because these provided more detailed information. In total, the Hierarchical Cluster Analysis considered the responses given by 73% of all Wave 1, Strand 2 respondents who answered all the questions based on the 11 measures that were here considered (n: 4177). As a result, the cluster analysis of this appendix considered only two-adult couple households where the child had contact with their biological father.

The Hierarchical Cluster Analysis distinguished two groups of families based on trends in their parenting and family functioning. This two group solution was suggested by comparing the size of the changes in the 'Agglomeration Coefficients' that were returned from the analysis as increasing numbers of clusters were estimated (see Appendix Table C.4). A two cluster solution was determined to be optimal as estimating a greater number of clusters made increasingly less difference when it came to distinguishing respondents based upon shared patterns of response. Of the 4177 respondents whose data were analysed, 1609 (39%) were grouped into one cluster and 2568 (61%) were grouped into a second.

Appendix Table C.4   Changes in agglomeration coefficients as increasing numbers of clusters were estimated within eleven measures of parenting and family functioning (on n: 4177 of n: 5717, 73%)

Number of clusters	Agglomeration Coefficients		Change
	last step	this step	
2	**2060996**	**1098846**	**962150**
3	1098846	867552	231294
4	867552	742337	125215
5	742337	680010	62327
6	680010	625876	54134
7	625876	581728	44148

The two groups of families suggested from the cluster analysis were then compared to describe their main characteristics. Appendix Table C.5 differentiates the two groups (clusters) of two-adult couple households according to the average levels of each of the 11 measures that were considered in this exploratory statistical procedure. The two groups significantly differed on 10 out of the 11 measures of parenting and family functioning; the only measure on which they did not differ was an equally low number encountered major life changes.

In summary, the cluster analysis identified two common trends in the parenting and family functioning of two-adult couple households where the child had contact with their biological father:

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[55] This method of cluster analysis differs to that used in 0 as the cluster analysis reported in 0 also considered categorical/nominal data.

1. Households demonstrating **more favourable** parenting and family functioning (n: 1609; 39% of n:4177 households)
2. Households demonstrating **less favourable** parenting and family functioning (n: 2568; 61% of n:4177 households)

The 39% of two-adult couple households who exhibited *more favourable* parenting and family functioning demonstrated the following significant differences in comparison to households demonstrating less favourable parenting (61%) (all p<0.001):

- Higher Home Learning Environment (HLE) scores

- Less chaotic homes (CHAOS score)

- Greater satisfaction reported by respondent s in the relationships shared with partners

- Less criticism believed either received or given by respondents to and from partners

- Less violence reported by respondents as received from partners

- Greater biological father involvement in child rearing

- Less parental stress, parent-child dysfunction, and difficulty with the child (PSI subscores)

Appendix Table C.5 Means (and mean differences) of the two groups of users identified from the Hierarchical Cluster Analysis of eleven measures of Parenting and Family Functioning (for n: 4177; 73% n: 5717)						
	Cluster	N	Mean	Standard Deviation	Statistical Cluster Comparison	
					Statistic (parametric *or,* non-parametric)	p
1. Home Learning Environment (HLE) score, *better HLE coded high*	1	1609	44.72	6.31	t(3930)=8.87	p<0.001
	2	2568	42.66	7.86	*or,* U=1794547	p<0.001
2. Confusion, Hubbub, and Order Scale (CHAOS) score, *less CHAOS coded high*	1	1609	16.72	2.01	t(3737)=19.16	p<0.001
	2	2568	15.39	2.29	*or,* U=1367206	p<0.001
3. Occurrence of major life changes in the family (0-4), *greater changes coded high*	1	1609	0.27	0.50	t(4175)=-0.69	0.49
	2	2568	0.29	0.51	*or,* U=2043435	0.44
4. Satisfaction of respondent with partner relationship, *less satisfaction coded high*	1	1609	1.16	0.44	t(4146)=-17.37	p<0.001
	2	2568	1.49	0.77	*or,* U=1594995	p<0.001
5. How critical is respondent of partner, *more critical coded high*	1	1609	3.10	2.06	t(3750)=-13.80	p<0.001
	2	2568	4.06	2.35	*or,* U=1552880	p<0.001
6. How critical is partner of respondent, *more critical coded high*	1	1609	2.79	1.95	t(3841)=-13.40	p<0.001
	2	2568	3.68	2.32	*or,* U=1575910	p<0.001

7. How often partner is violent towards respondent, *low frequency coded high*	1	1609	4.99	0.19	t(4110)=3.85	p<0.001
	2	2568	4.96	0.27	*or*, U=2015999	p<0.001
8. Father's involvement score, *less involvement coded high*	1	1609	9.72	3.52	t(3686)=-11.43	p<0.001
	2	2568	11.06	3.93	*or*, U=1638330	p<0.001
9. Parenting Stress Index (PSI)-Parental Distress Subscore, *low stress coded high*	1	1609	53.21	4.03	t(4170)=70.51	p<0.001
	2	2568	42.05	6.20	*or*, U=173038	p<0.001
10. Parenting Stress Index- Parent-Child Dysfunctional Interaction Subscore, *low stress coded high*	1	1609	58.20	2.27	t(3626)=49.85	p<0.001
	2	2568	51.83	5.81	*or*, U=606475	p<0.001
11. Parenting Stress Index- Difficult Child Subscore, *low stress coded high*	1	1609	54.58	3.80	t(4166)=44.05	p<0.001
	2	2568	47.66	6.36	*or*, U=709987	p<0.001

Notes: t: independent samples t-test; U: Mann-Whitney U-test

C.4 Exploring links between parenting and family functioning and the femographic characteristics of families

With households grouped into two clusters based upon two distinct trends in parenting and family functioning, the final section of this appendix considers how these two groups differed from one another according to four socio-demographic measures :[56]

1. Household income (measured on a 7-point ordinal scale)
2. Mother qualification level (highest academic or vocational; "mothers" include non-biological; measured on a 9-point ordinal scale)
3. Mother married and living with a partner - or not (a dichotomous measure)
4. Household Economic Status - whether either the respondent or partner is in employment (a dichotomous measure with 'someone' rather than 'no-one' coded high)

Appendix Table C.6 describes the four socio-demographic measures that were examined in the analyses reported upon in this section and reveals a broad range of values for all measures. In total, 5002 respondents (87% of the maximum n: 5717 respondents sampled at baseline) found all four questions both appropriate to their circumstances and returned valid responses. Considering only those 4177 respondents who were grouped into the two clusters identified earlier in this appendix (based upon patterns of parenting and family functioning): 90 per cent (n: 3754) also returned data on all four socio-demographics. This means that only 10% of the respondents who were grouped by parenting and family functioning could not be linked to the above socio-demographic measures because data were unavailable.[57]

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[56] An excellent introduction to such socio-demographic measures and how they relate to concepts of 'disadvantage', 'poverty', and 'exclusion' can be found in Sauders, Naidoo, and Megan (2007).

[57] Either because at least one of the measures presented in Table Y.6 was deemed by a respondent to "not be applicable" or because the respondent found the question to be applicable but did not then provide an answer.

		Respondents (max. n: 5717)		
Measure		Valid n	Valid %	"Missing"* n
Household Income Bands		5199	90.9%	518
	1. less than £4,999	191	3.7%	
	2. £5,000-£9,999	757	14.6%	
	3. £10,000-£19,999	1198	23.0%	
	4. £20,000-£29,999	957	18.4%	
	5. £30,000-£39,999	761	14.6%	
	6. £40,000-£49,999	589	11.3%	
	7. £50,000 or more	746	14.3%	
Mothers' (biological, adopted, step, foster) Highest Qualification - Academic or Vocational		5474	95.70%	243
	0. No qualifications - vocational or academic	520	9.5%	
	1. GCSE Grades D-F/ NVQ1/ BTEC1	408	7.5%	
	2. GCSE Grades A*-C/ NVQ2/ BTEC2	1366	25.0%	
	3. A-Level (etc)/ NVQ3/ BTEC3	1001	18.3%	
	4. Certification of Higher Education/ NVQ4/ BTEC4	342	6.2%	
	5. Foundation Degree/ NVQ4*/ BTEC5	202	5.7%	
	6. Honours Degree/ NVQ4*/ BTEC 6	997	18.2%	
	7. Masters Degree/ NVQ5/ BTEC 7	571	10.4%	
	8. Doctorate/ NVQ5*/ BTEC 8	67	1.2%	
Mothers' (biological, adopted, step, foster) Marital Status		5694	99.6%	23
	0. Married mother living with partner	3110	54.6%	
	1. Mothers never married/civil-partnered, separated, divorced, or widowed	2584	45.4%	
Household Economic Status - does either respondent or partner (if there is one) work?		5717	100%	0
	0. no	1318	23.0%	
	1. yes	4399	77.0%	

Appendix Table C.6 caption: **Appendix Table C.6   Descriptive statistics of the four socio-demographic measures considered in Section C.4 (n: 5002 respondents provided full valid data for all four measures where applicable; 87% of n: 5717)**

Note: "Missing" is a term used to capture both questions that respondents "refused to answer" combined as well as questions that were deemed "not applicable" by certain respondents and/or households

Out of the 3754 respondents for whom all four socio-demographic measures were available and who were grouped by parenting and family functioning, a very small number of one-parent and solely-father families were excluded from the following analysis. This was because the two demographic measures concerning mothers would not have been applicable questions. This means that the following results that link patterns in parenting to socio-demographics only apply to households for which the following are accurate descriptions:
1. Two-adult couple households in which;
    a. a selected child has contact with their biological father; or
    b. a mother was present (biological, adopted, step, or foster)

The future analyses undertaken by Strand 4 will give a greater account of households other than those described above and will use additional statistical approaches to study the 'not applicable' and 'missing' categories.[58]

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[58] For question refusals, as of September 2012 'multi-level (as respondents are nested within children's centres) multiple imputation' is being considered as the technique most suitable for

Various statistical associations between the four socio-demographic measures and the two groups who were differentiated by parenting and family functioning are revealed by the results presented in Appendix Table C.7. Considered together, the four socio-demographic measures were able to account for the group membership of 61% of all households. Considered individually, only two of the four socio-demographic measures were statistically significant predictors of which of the two groups differentiated by parenting and family functioning (less favourable rather than more) a household was likely to belong to. Further, only one of the four socio-demographic measures had both a *consistently significant* and also *sizeable* statistical relationship with whether a household was likely to demonstrate less favourable parenting and family functioning. This was household income, with a lower income related to less favourable parenting (p<0.001).[59] A cautious conclusion that can be drawn from these findings is that the broad division of the ECCE households according to more and less favourable parenting and family functioning (respectively: 39% versus 61%) was only weakly associated with socio-demographic indicators.

Although the results presented in Appendix Table C.7 estimated the extent to which the four considered socio-demographic measures could predict the likelihood of a household demonstrating less favourable parenting and family functioning, these relationships did not take into account the nesting of respondents within their 128 children's centres. The results shown in Appendix Table C.7 may be unreliable if the 128 children's centres vary in either one of two ways: 1. if the number of households grouped within each parenting cluster varies between children's centre, or 2. if the statistical associations presented in Appendix Table C.7 vary across the sampled households. The final analyses reported in this appendix considered both these possibilities.

Beginning first with the possibility that the number of households grouped within each of the two parenting clusters may vary between children's centres, shows *very little* such variation. Although children's centres differed from one another in the proportion of households who demonstrated either more or less favourable parenting and family functioning, no individual centre was significantly different from the rest. Further, this 'between-centre variation' was also examined statistically[60] and less than 1 per cent of the different proportions of households who exhibited either more or less favourable parenting and family functioning was estimated as likely to be due to differences between children's centres.

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statistical estimation of the answers that respondents were likely to have given to applicable questions. Furthermore, appropriate sub-group analyses are being considered for those respondents and households for whom demographic questions were not applicable.

[59] The counter-intuitive statistical association suggested between mothers' qualifications and parenting and family functioning as shown in Appendix Table C.7 can be seen to be a statistical artefact originating from multiple socio-demographics being considered at the same time. Not only is this relationship the smallest in size out of all four considered socio-demographics but it only appears significant when considered alongside the marital status of mothers and a household's economic status. Such statistical artefacts will be dealt with in future Strand 4 analyses by the construction of a single index that shows the overall level of multiple disadvantage that is experienced by families. For an introduction to the concept of Multiple Disadvantage and its measurement via Indices, see Speight et al. (2010).

[60] Via a statistical Variance Components Model returning a Variance Partition Coefficient (VPC).

Appendix Table C.7 Binomial logistic regression model with block entry revealing the statistical associations shared between the four socio-demographic measures and a household's membership of the two groups who were differentiated by parenting and family functioning												
Predicting membership of the group of households who demonstrated **less favourable** parenting and family functioning	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	Probability (p)	B	e^B	p	B	e^B	p	B	e^B	p
'Goodness of model fit' via 'Nagelkerke R^{2}' *(values closer to one suggest a fuller explanation of the two-group memberships)*	0.01			0.01			0.01			0.01		
Overall percentage of respondents successfully predicted as belonging to the correct group of parenting and family functioning	60.8%			60.8%			60.8%			60.8%		
Individual Statistical Associations:	**Block 1**			**Block 2**			**Block 3**			**Block 4**		
1. Household Income Bands	-0.11	0.90	<0.000	-0.13	0.88	<0.000	-0.13	0.88	<0.000	-0.11	0.89	<0.000
2. Mothers' (biological, adopted, step, foster) Highest Qualification - Academic or Vocational				0.03	1.03	0.062	0.04	1.038	0.036	0.04	1.04	0.028
3. Mothers' (biological, adopted, step, foster) Marital Status							0.11	1.11	0.150	0.10	1.10	0.196
4. Household Economic Status - does either respondent or partner (if there is one) work?										-0.25	0.78	0.065

Note: Carried out on n: 3754, or 90% of the respondents who both:
1. belonged to either group of households that were differentiated by parenting and family functioning and
2. provided full data for all four socio-demographic measures

Appendix Figure C.1   Caterpillar plot illustrating the lack of variation between ECCE children's centres in their users' membership of the two groups of households that were differentiated by parenting and family functioning (for n:4177 of n:5717)
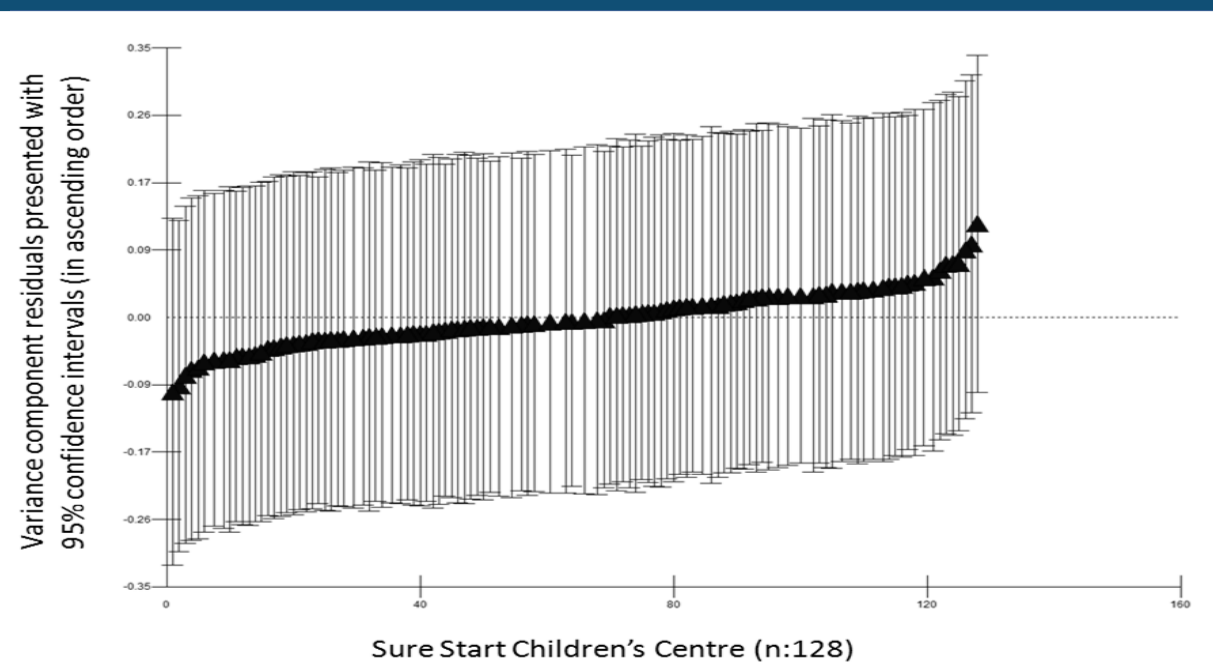
The possibility that the statistical associations shown in Appendix Table C.7 might vary across children's centres was examined by re-running the analyses that produced the original results – only this time also taking into account the potential for differences to exist between children's centres. These extended results are detailed in Appendix Table C.8 and Appendix Table C.9 and these broadly match those which were concluded from the results shown in Table C.7. Household income remained both the largest and most significant predictor of whether a household was likely to be characterised by less favourable or more favourable parenting and family functioning (p<0.001; see Appendix Table C.8). Further, this relationship was found despite children's centres significantly differing from one another in the number of registered mothers who were married and living with a partner (p<0.05; see Appendix Table C.9).

C.5 Conclusions

In conclusion, two broad patterns of parenting and family functioning were identified from analyses of the measures considered in this appendix. These were applicable only to two-adult couple households in which the child had contact with their biological father and there was a mother present (biological, adopted, step, or foster). The two groups of households identified in this appendix were:
1. Households demonstrating **more favourable** parenting and family functioning (39%)
2. Households demonstrating **less favourable** parenting and family functioning (61%)

119

A household's membership of one of these two groups was most strongly related to household income, with lower income households being linked to less favourable parenting and family functioning. As well as providing an immediate descriptive summary of broad patterns in parenting and family functioning and how this is differentiated by household income, these results will also be of use in future ECCE analyses when looking at the impact of children's centres for both families and children. For example, future analyses will bring together different socio-demographic measures within a single index that shows the overall level of multiple disadvantage that is experienced by families. This index will better allow the differences between households to be taken into account when determining the impact of children's centres and the services that they offer.

Appendix Table C.8 Multilevel binomial logistic regression models in which an ECCE household's membership of the group who demonstrated less favourable parenting and family functioning was estimated from four socio-demographics (on a consistent n:3754 of n: 5717)						

Predicting membership of the group of households who demonstrated **less favourable** parenting and family functioning (via 2nd order PQL estimation on a consistent n:3754)	Model 1: No predictors included; Initial estimates		Model 2: With a random intercept and all predictors entered		Model 3:With a random intercept and all predictors having random slopes	
	Estimated Coefficient	Standard Error (SE)	Estimated Coefficient	Standard Error (SE)	Estimated Coefficient	Standard Error (SE)
children's centre level variance; σ^2_{u0}	0.022	0.020	0.024	0.020	0.024	0.021
Variance Partition Coefficient (VPC). *Percentage of the unexplained variation in the likelihood of belonging to the group who demonstrated less favourable parenting and family functioning that is due to between-centre variation*; $\sigma^2_{u0}/(\sigma^2_{u0}+3.29)$		0.7%		0.7%		0.7%

Fixed Effects: Statistical Predictors of belonging to the group who 'demonstrated less favourable parenting and family functioning ' (*all measures were mean-centred via z-scoring apriori*):

	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	Standard Error (SE)	z (B/SE)	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	Standard Error (SE)	z (B/SE)	Unstandardised Logistic Regression Coefficient (B)	Odds-Ratio (e^B)	Standard Error (SE)	z (B/SE)
1. Household Income Bands					-0.20	0.82	0.04	-4.53	-0.19	0.83	0.04	-4.40
2. Mothers (biological, adopted, step, foster) Highest Qualification - Academic or Vocational					0.09	1.09	0.04	2.13	0.09	1.09	0.04	2.13
3. Mothers' (biological, adopted, step, foster) Marital Status					0.05	1.05	0.04	1.38	0.04	1.04	0.04	1.05
4. Household Economic Status - does either respondent or partner (if there is one) work?					-0.11	0.90	0.06	-1.83	-0.11	0.90	0.06	-1.90

Notes: The Variance Partition Coefficient (VPC) estimates the percentage of the unexplained variation in the likelihood of a household belonging to the group who 'demonstrated less favourable parenting and family functioning' that is due to differences between centres, $\sigma^2_{u0}/(\sigma^2_{u0}+3.29)$;

Z values>±1.96 indicate p<0.05; Z values>±2.58 indicate p<0.01; Z values>±3.30 indicate p<0.001;

The random slope effects from Model 3 can be found reported in Appendix Table C.9

Appendix Table C.9   A variance-covariance table displaying the random slope effects that were obtained from a multilevel binomial logistic regression model (with a random intercept and random slopes) in which an ECCE household's membership of the group who demonstrated less favourable parenting and family functioning was estimated from four socio-demographics (on a consistent n:3754 of n: 5717)

Coefficient(Standard Error)	0	1	2	3	4
0. children's centre level residual variance	0.024 (0.021)				
1. Household Income Bands	0.000 (0.000)	0.000 (0.000)			
2. Mothers (biological, adopted, step, foster) Highest Qualification - Academic or Vocational	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)		
3. Mothers' (biological, adopted, step, foster) Marital Status	-0.19 (0.016)	0.000 (0.000)	0.000 (0.000)	***0.042 (0.025)****	
4. Household Economic Status - does either respondent or partner (if there is one) work?	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)

Notes: Z=Coefficient/Standard Error;

Because variances cannot be negative: so the critical values of Z indicating statistically significant variance (the five values on the diagonal) are as follows:

Z values>1.65 are significant at $p<0.05$;

Z values>2.33 are significant at $p<0.01$;

Z values>3.08 are significant at $p<0.001$;

*$p<0.05$.

Appendix D: Weighting Strategy

Prior weighting for centre manager survey

Cells weights were previously calculated for analysis of the 509 centres responding to the survey of children's centre managers (Tanner et al. 2012). These were designed to adjust for: over-sampling of health-led centres; over-sampling of larger centres (where catchment area was used as a proxy for size); and for survey non-response. The cells were lead organisation by catchment area quintile (5x5 cells). The targets were based on the population of 1,721 children's centres.

These weights were used to obtain population estimates for the following variables:

1) Lead organisation type
2) Whether there had been any cuts to children's centre services in 2010/11
3) Whether the centre ran evidence based programmes
4) Whether the centre manager led single or multiple centres

Parents' survey weighting

There were two main stages to the parents' survey weighting:

Stage 1: Weighting for centres taking part in parents' survey (to make them representative of the population of centres).

Stage 2: Weighting for parents responding to parents' survey (to make them representative of parents within the centres taking part).

These are now discussed in turn.

Stage 1 - Weighting for centres taking part in parents' survey

A total of 179 centres provided a sample of parents for the user survey before the recruitment deadline.[61] A total of 167 of these were considered to be "in scope" by virtue of having provided details of 30 or more parents. Of these centres 128 were sampled for the survey.

1) The first step was to calculate grossing factors for each lead organisation type to gross the 179 centres that provided a sample of parents up to the 509 centres from which they were originally sampled. These grossing weights were then multiplied by the centre cells weights (discussed above).

2) The resulting weights were calibrated to population estimates obtained from the 509 centres responding to the survey of children's centre managers (see above).

3) The 12 centres that were out of scope for the parents' survey (because they had fewer than 30 parents) were removed in order to derive new population estimates for centres with 30 or more parents.

4) Selection weights were calculated for the 128 centres sampled for parents' survey to adjust for over-sampling of health-led centres. These were multiplied by the weights derived in (1) above.

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[61] See section 1.3.1 for more details about the survey's sampling approach. NB It is not possible to identify that 179 provided details before the deadline from Figure 1.1 because some centres provided details of too few parents and provided details late.

5) The resulting weights were re-calibrated to population estimates derived at (3) to create weights for the 128 centres that took part. These weights made them representative of the population of centres with 30 or more parents.

Stage 2 - Weighting for parents responding to parents' survey

A maximum of 90 parents were issued within each centre. In centres with more than 90 parents, parents were sampled from the lists provided.

1) The first stage was to calculate selection weights for parents within centres based on the ratio of the number of parents in the list provided to the number that were issued. This weight was equal to one in centres with fewer than 90 parents and was trimmed at 2.66.

2) Non-response weights were then calculated for each lead organisation type (as opposed to each individual centre) based on the ratio of eligible parents to responding parents. For the purposes of constructing these weights, centres were split into two types: centres that provided at least some information on age of children and centres that provided no information at all on child age.

   For centres with at least some information on age of children, three separate weights were calculated for each organisation type to reflect the differential response rates of families with children in different age groups (less than 1 year old / more than 1 year old / age unknown):

$nrwt1$ = sum (eligible parents with child < 1) / sum (responding parents with child <1)
$nrwt2$ = sum (eligible parents with child > 1) / sum (responding parents with child >1)
$nrwt3$ = sum (eligible parents with child age unknown) / sum (responding parents with child age unknown)

   For centres with no information on age of children, weights were calculated across all children i.e. one weight was calculated for each lead organisation type:

$nrwt$ = sum (eligible parents) / sum (responding parents)

3) The non-response weights were then multiplied by the parent selection weights to create weights for parents within centres. These weights made the responding parents representative of all parents within the 128 centres that took part.

Final step

The final weights for the parents' survey were calculated as the product of the centre weights derived at stage 1 and the parent weights derived at Stage 2. These weights make the responding parents representative of parents within all centres with 30 or more parents.

Appendix E: Additional Tables

| Appendix Table E.1 | Percentage of people who agree or disagree that it takes | | | | too long to prepare meals from fresh ingredients, by household income | |

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Strongly agree	3	3	1	1	1	2
Agree	12	9	11	8	7	9
Neither agree nor disagree	9	9	9	9	7	9
Disagree	51	49	48	46	43	47
Disagree strongly	24	31	31	36	42	33
Unweighted bases	*948*	*1198*	*956*	*761*	*1335*	*5714*
Weighted bases	*899*	*1145*	*975*	*772*	*1423*	*5715*

| Appendix Table E.2 | Percentage of people who agree or disagree that it is too expensive to prepare meals from fresh ingredients, by household income | | | | | |

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Strongly agree	4	3	2	2	1	2
Agree	19	17	14	9	5	13
Neither agree nor disagree	12	12	14	10	6	10
Disagree	47	44	44	49	47	46
Disagree strongly	19	24	26	30	42	29
Unweighted bases	*948*	*1198*	*956*	*761*	*1335*	*5712*
Weighted bases	*899*	*1145*	*975*	*772*	*1423*	*5713*

Appendix Table E.3 household income	How often respondent or partner cook meals from fresh ingredients, by					

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Every day	42	42	44	49	53	46
Most days	30	32	35	33	34	33
A few times a week	18	17	16	14	10	15
Once or twice a week	6	7	4	3	3	5
Less often	3	3	1	1	+	1
Never	1	+	+	+	0	+
Unweighted bases	*948*	*1198*	*957*	*761*	*1335*	*5716*
Weighted bases	*899*	*1145*	*976*	*772*	*1423*	*5716*

Appendix Table E.4 household income	Percentage of people who have a long-standing illness or disability, by					

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Yes	16	14	12	8	7	11
No	84	86	88	92	93	89
Unweighted bases	*923*	*1156*	*948*	*753*	*1334*	*5574*
Weighted bases	*873*	*1110*	*967*	*762*	*1423*	*5586*

Appendix Table E.5   How often respondent usually drinks alcohol, by household income

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Every day	+	1	+	+	1	1
5-6 times per week	1	+	+	1	2	1
3-4 times per week	1	2	4	4	10	5
1-2 times per week	9	12	17	24	27	18
1-2 times per month	18	18	19	20	21	19
Less than once a month	27	28	27	26	20	24
Never	44	39	32	24	20	33
Unweighted bases	*916*	*1156*	*944*	*752*	*1333*	*5557*
Weighted bases	*863*	*1110*	*961*	*760*	*1422*	*5562*

Appendix Table E.6   How often selected child's mother smoked cigarettes or roll-ups when they were pregnant, by household income

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Every day	18	17	9	2	2	9
At least once a week	5	4	1	1	1	2
Less than once a week	4	4	2	2	1	3
Never	73	76	87	94	96	86
Unweighted bases	*889*	*1113*	*916*	*738*	*1294*	*5392*
Weighted bases	*843*	*1072*	*939*	*749*	*1378*	*5416*

Appendix Table E.7   Percentage of respondents born with a low (1500g-2499g) or very low (<1500g) birth weight, by household income

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Not low birth weight (>2499g)	86	90	92	93	93	91
Low birth Weight (1500g-2499g)	13	9	8	6	6	8
Very low Birth Weight (<1500g)	1	1	+	1	1	1
Unweighted bases	*945*	*1193*	*955*	*760*	*1333*	*5687*
Weighted bases	*897*	*1141*	*974*	*768*	*1421*	*5681*

Appendix Table E.8   Concerns about child development, by household income

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
No concerns about child's development	89	90	92	93	92	92
Minor concerns about child's development	10	9	7	6	7	8
Major concerns about child's development	1	1	1	+	+	1
Unweighted bases	*948*	*1198*	*957*	*761*	*1334*	*5714*
Weighted bases	*899*	*1145*	*976*	*772*	*1422*	*5711*

Appendix Table E.9	Breastfeeding, by household income					

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Never tried	37	28	26	16	9	23
Wouldn't take	4	4	2	1	1	2
1 week	8	10	8	10	6	8
2 weeks	4	4	3	5	4	4
2 weeks to 1 month	6	5	8	6	6	6
1 month to 3 months	11	11	10	12	14	12
3 months to 6 months	9	10	12	14	19	13
6 months to 1 year	8	12	16	16	22	15
Older than 1 year	1	2	2	5	4	3
Still breastfeeding	11	13	13	14	15	14
Unweighted bases	*944*	*1189*	*951*	*758*	*1326*	*5674*
Weighted bases	*896*	*1135*	*970*	*769*	*1416*	*5676*

Appendix Table E.10	How often child eats fruit, by household income					

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Never	5	6	3	3	1	4
Once a week or less often	15	13	11	6	5	10
A few times a week	17	14	16	12	11	14
Most days	52	53	52	56	52	53
Every day	8	11	16	22	30	18
More than once a day	3	3	2	1	+	2
Unweighted bases	*941*	*1190*	*954*	*759*	*1334*	*5686*
Weighted bases	*894*	*1137*	*973*	*770*	*1423*	*5686*

Appendix Table E.11	How often child eats vegetables or salad, by household income					

Base: All respondents

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Never	3	4	3	1	1	3
Once a week or less often	15	13	10	5	4	10
A few times a week	25	19	20	16	13	18
Most days	50	54	57	63	61	56
Every day	6	9	9	15	21	12
More than once a day	2	2	1	1	1	1
Unweighted bases	*940*	*1190*	*954*	*759*	*1334*	*5685*
Weighted bases	*893*	*1137*	*973*	*770*	*1423*	*5685*

Appendix Table E.12	Violence within the relationship, by household income					

Base: Respondents in couple households

	Under £10,000	£10,000-£19,999	£20,000-£29,999	£30,000-£39,999	£40,000+	Total
Partner has been violent	4	3	2	1	1	2
No violence	96	97	98	99	99	98
Unweighted bases	*401*	*784*	*851*	*713*	*1287*	*4356*
Weighted bases	*386*	*757*	*875*	*722*	*1378*	*4427*